

Enabling Community-Based Water Management Systems: Governance and Sustainability of Rural Point-water Facilities in Uganda

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Declaration

I hereby certify that this material, which I now submit for assessment on the programme of study leading to the award of Doctor of Philosophy is entirely my own work, that I have exercised reasonable care to ensure that the work is original, and does not to the best of my knowledge breach any law of copyright, and has not been taken from the work of others save and to the extent that such work has been cited and acknowledged within the text of my work.



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Dedication

To the memory of my father, the Late Martin Kabuzaranwa who left this World very early, and to my mother, Geraldine Kabuzaranwa for her unwavering and constant love and prayer for our family.

List of Abbreviations

CDA	-	Community Development Officer
CDO	-	Community Development Assistant
CBM	-	Community Based Management
CG	-	Central Government
CM	-	Community Management
CBMS	-	Community Based Management System
CBWS	-	Community Based Water Systems
CBOs	-	Community Based Organizations
DEGs	-	District Equalisation Grants
DRA	-	Demand Responsive Approach
DPs	-	Development Partners
DWD	-	Directorate of Water Development
DWO	-	District Water Officer
DWSCG	-	District Water and Sanitation Conditional Grants
Epi-Info	-	Epidemiological Information
FGDs	-	Focus Group Discussions
FGIs	-	Focus Group Interviews
GPS	-	Global Positioning System
GIS	-	Geographical Information System
GOU	-	Government of Uganda
HPM(s)	-	Hand Pump Mechanic(s)
ICWP	-	Improved Community Water Point
IDWSSD	-	International Drinking Water supply and Sanitation Decade
IMF	-	International Monetary Fund
KIIs	-	Key Informant Interviews
LC(s)	-	Local Council(s)
LGs	-	Local Governments
MMM	-	Medical Missionaries of Mary
MFPED	-	Ministry of Finance, Planning and Economic Development
MGLSD	-	Ministry of Gender and Social Development
MLG	-	Ministry of Local Government
MPS	-	Ministry of Public Service
MDGs	-	Millennium Development Goals
MWE	-	Ministry of Water and Environment
NDP	-	National Development Plan
NGOs	-	Non Government Organizations
NPM	-	New Public Management
O&M	-	Operation and Maintenance
PAF	-	Poverty Action Fund
PEAP	-	Poverty Eradication Action Plan
RWS	-	Rural Water Supply
RWSS	-	Rural Water Supply and Sanitation
SAPs	-	Structural Adjustment Programs
SPDs	-	Spare Parts Dealers

SPSS	-	Statistical Package for Social Scientists
SSA	-	sub-Saharan Africa
SWAP	-	Sector-wide Approach
Triple-S	-	Sustainable Services at Scale
TSUs	-	Technical Support Units
UN	-	United Nations
UNDP	-	United Nations Development Program
UNICEF	-	United Nations Children Fund
UPE	-	Universal Primary Education
UWASNET	-	Uganda Water and Sanitation NGO Network
VECs	-	Village Executive Councils
WSS	-	Water Supply and Sanitation
WSC	-	Water and Sanitation Committee
WSSWG	-	Water and Sanitation Sector Working Group
WSDD	-	Water and Sanitation Development Department
WUA	-	Water User Association
WUC	-	Water User Committee

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Last and most importantly, I wish to end by thanking the Almighty God for the many blessings I have enjoyed throughout my life. I cannot mention all of them, for indeed, the list is inexhaustible. However, I wish to thank Almighty God for the most wonderful blessing of my dear wife Carolyn Mugumya, our dear children Ariho Elsie, Ethan Mugumya, Emma Maria Ahwera, and our niece Florence Ayebare. None other than the Almighty God provided us with the graces to positively endure the long periods we were not together as a family while I was away pursuing this PhD. May the same graces and many blessings be abundantly extended to all of you our relatives and friends, especially our dear uncle, friend and father, Msgr. Lazarus Kabasharira, the family’s most special gift. Prof. Fr. Max Ngabirano, Fr. Deus Byomuhangi, Immy Kitambo, Asaph Kabali, Marion Mugisha, Anthony Begumisa, Gilbert Sendugwa and Joseph Kiwanuka; you have all supported us in many ways up to this day. May the Good Lord richly bless everyone of you.

Abstract

This study examines the key governance dynamics in Uganda's rural safe water supply service systems. It aims to unravel policy and contextual issues that undermine effectiveness of the currently dominant community-based management (CBM) model of water supply and sustainability. Broadly, CBM is founded within the neoliberal and post-welfare policy regimes that promote the philosophy of a 'reduced state'. More specifically, CBM forms part of the new public management (NPM) and governance frameworks that promote decentralised and multi-actor approaches to 'efficient' and more 'responsive' public service delivery that include networks or partnerships between public and private (for profit and not-for-profit) actors, and service beneficiaries. Whereas evidence has shown that effective CBM translates into high levels of equity, efficiency and overall sustainability of services, policy proposals and institutional frameworks promoting it continue to show varying results across and within countries. Uganda provides a case study of contexts where CBM has not produced good results despite its promotion and inclusion within the policy and institutional framework for rural safe water supply. Using a single case and mixed methods research design, this study undertook an extensive review of Uganda's national water sector policy and programme documents, in addition to interviews with key water sector actors from the public, private and civil society sectors, and the water user community. The results of the study indicate that whereas CBM is well-known in Uganda's rural water sector and policy framework to be a desirable approach for achieving the much needed sustainability of rural point-water supply, service authorities especially from government are not consciously taking the necessary actions to leverage its effectiveness. This failure is at the very heart of the weaknesses within the post welfare policy agenda which embraces policies such as decentralisation, 'marketisation', participatory and demand responsive approaches as well as networks or partnerships in the provision of public goods and services. The study suggests an enabling framework for CBM systems for rural point water facilities, which does not completely reject the idea of government withdrawal from public service delivery as proposed in the neoliberal framework. The framework rather argues for the need for public authorities in democratic states to pay deliberate attention to context specific circumstances and conditions that tend to disable good policy and programme proposals such as those embedded within the CBM model of rural water supply and sustainability in developing contexts similar to Uganda. The study therefore advocates an effective central and local government authority that consciously and creatively fulfills its 'new roles' conceived within the frameworks of NPM and good governance, and reflected in popular views of government as an 'enabler', thereby extending the debates on the role of government in the post-welfare, neoliberal and good governance agenda.

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Thesis Introduction

This thesis is based on a case study of Uganda examining how governance dynamics in policy and institutional frameworks designed to devolve or entrust responsibility for overall operation and maintenance (O&M) of rural point-water facilities may serve to disable community capacity to manage and ultimately sustain established infrastructure and services. The global quest for answers to the ‘growing water and environment problem’, and earlier proposals for addressing an ‘inefficient public sector’ especially in developing countries have combined to shape the trajectory of policies around water and the environment. Community-based management (CBM) is now a dominant approach in rural domestic water supply projects envisaged to address the sustainability question. Informed by ideologies that advocate a significant reduction in public expenditure, increased decentralisation and private sector participation in the delivery of public goods, CBM primarily demands that beneficiaries of water projects take full ownership and responsibility for the O&M of the service infrastructure, while ensuring equitable use of the water supply services.

With growing evidence that CBM is failing to deliver its anticipated results on equity and sustainability of rural water supply projects especially in sub-Saharan Africa, it becomes imperative that further research on the different environments and context-specific issues impacting on it is conducted. This study critically examines governance dynamics present in Uganda’s rural water supply sub-sector in order to further the understanding of specific factors that undermine the potential for CBM to leverage functional sustainability of improved point-water facilities. Given that rural point-water facilities tend to target the majority of developing country populations that have remained largely rural, it is expected that more sound and conscious mechanisms for ensuring that CBM enhances its contribution to the provision of equitable and sustainable rural water services are identified and consciously enforced by service authorities in their respective countries. But is this happening? Using the case of Uganda, what contextual dynamics at different levels of rural domestic water supply tend to undermine CBM but remain either ignored, unknown or taken for granted by key actors and decision makers? What theoretical and empirical arguments are helpful in explaining all this?

The thesis is organised in seven chapters. Chapter One discusses the background, context and justification for this study. It traces global and international developments and events that have led to the emergence and popularisation of CBM as a promising approach towards delivering sustainable water and sanitation services. A brief description of the research problem, broad and specific research questions, the focus of the study and the study's anticipated contribution to the academia and development practice are among the key themes the chapter prioritises.

Chapter Two examines Uganda's current legal, policy and institutional framework for the rural safe water supply sub-sector. It aims to illuminate the enabling potential of these frameworks in ensuring that CBM systems positively impact on functional sustainability of rural water supply. The chapter begins by presenting a brief and general historical context to the current institutional framework for service delivery in Uganda and of the water sector in particular, along with broad and specific water sector performance trends. The chapter then examines in some detail, policy prescribed roles and responsibilities of the key sector actors, the emerging relationships among these actors, and how these relationships directly or indirectly have the potential to impact (positively or negatively) on the effectiveness of CBM.

Chapter Three is divided into two parts. Part One examines the dominant development paradigms and theoretical foundations that have shaped policies around CBM. Part Two examines the literature on the key concepts informing this study. It begins by examining the literature on the conceptual relationship between community based management (CBM) and community participation (CP). It then goes on to examine the literature on CBM and functional sustainability of water supply systems based on past studies. Finally, the chapter examines literature on the concept of 'an enabling local authority' and the concept's applicability in informing the present investigation.

Chapter Four presents the methodology and methods utilised in the study. The researcher's reflexivity and the epistemological and ontological stances on the choice of the study design and methods are also discussed. The strengths, challenges and limitations of the overall research strategy are also discussed jointly with strategies adopted to minimise the effect of the challenges

on the validity, strengths and authenticity of results.

Chapter Five discusses results from the analysis of study findings on key macro and meso level governance dynamics affecting community managed point-water facilities in Uganda. The chapter is based on the review and analysis of the water sector policy and programme documents, and on interviews conducted with key sector actors at the national (macro) and meso (district and sub-county local governments) levels.

Chapter Six discusses findings from the detailed case study of Makondo Parish, a community purposively selected for the analysis of micro-level dynamics affecting the performance of CBM. The chapter utilises data collected using a mix of qualitative and quantitative methods, including a survey of 547 households. It examines in detail, the contextual dynamics at the community level which continue to affect the performance of CBM systems, but which are either unknown, ignored or taken for granted by ‘frontline’ service providers, particularly local governments.

Chapter Seven draws together the key study findings, the main thesis conclusions based on the study findings, and on the dominant paradigms and concepts around new public management and governance. The chapter examines the implications of the study’s main findings on policy and practice, and points towards an enabling framework for CBM and functional sustainability of rural point-water facilities for settings or contexts similar to Uganda.

Chapter One

Community-Based Water Management Systems as a 'Remedy' to the Rural Domestic Water Supply and Sustainability Problem

Introduction

The global quest for answers to the 'growing water and environment problem', and earlier debates and arguments about the 'increasingly inefficient' public sector, continue to shape the trajectory of policies and programmes around water and the environment. Community-based management (CBM) is now a dominant policy and programme approach envisaged to address the sustainability question that faces water supply projects in many countries of the world. This chapter traces global and international developments and events that have led to the emergence and popularisation of CBM as an 'indispensable' approach necessary for delivering sustainable water and sanitation services. A brief description of the research problem, broad and specific research questions, the focus of the study and the study's anticipated contribution to the academia and development practice are among the key themes prioritised in this chapter.

The Global Discourses and Responses to the Water Problem

Well known vital water benefits have led to the long-established and widely reverberated phrase - 'Water is life'. Undeniably, to have access to safe drinking water, water for domestic use, agricultural and industrial production or water to aid the provision of basic, emergency or relief services is to have 'an insurance' to life. However, global and local experiences continue to demonstrate that access to water in all these dimensions is not simply a given, but an up-hill task requiring deliberate and concerted strategic actions at local and international levels. In line with this predicament, the United Nations Human Development Programme (UNDP) notes:

Throughout history, human progress has depended on access to clean water and on the ability of societies to harness the potential of water as a productive resource. Water for life in the household and water for livelihoods through production are two of the foundations for human development. Yet for a large section of humanity these foundations are not in place (UNDP 2006: p.v).

By 2000, it was estimated that one third of the world's population lived in countries that experience medium to high levels of water stress¹. It was projected in 2000 that this ratio would grow to two thirds by 2025, if no action was taken to avert the situation (Agarwal et al. 2000). In 2006, The UNDP also indicated that the global water problem was growing into a crisis, which if left unchecked would derail progress towards attainment of the Millennium Development Goals (MDGs) by holding back advances in other areas of human development (UNDP 2006 p. 23). Initial efforts to address the global water challenge started around the 1970s with the United Nations Conference on the Human Environment held in Stockholm in 1972, followed by the United Nations Water Conference (UNWC) in Mar del Plata, Argentina in 1977. By the early 1990s, water scarcity² and its attendant problems had firmly gained a place within the international development discourse. In January 1992 the World Meteorological Organisation (WMO) convened the International Conference on Water and the Environment (ICWE) in Dublin resulting into the famous Dublin Statement, in which, management of global freshwater resources became a key development question of the 21st Century calling for immediate action. The ICWE set out recommendations for action at local, national and international levels based on four guiding principles³ that embrace issues of governance and sustainability, namely: (i) fresh water is a finite and vulnerable resource, essential to sustain life, development and the environment (ii) water development and management should be based on a participatory approach, involving users, planners and policy-makers at all levels (iii) women play a central part in the provision, management and safeguarding of water, and (iv) water has an economic value in all its competing uses and should be recognized as an economic good (UN 1992b).

¹ A country or region is said to experience water stress when annual water supplies drop below 1,700 cubic metres per person per year. When annual water supplies drop below 1,000 cubic metres per person, the population faces water scarcity, and below 500 cubic metres "absolute scarcity (UN-Water 2012) .

² Water scarcity is the point at which the aggregate impact of all users impinges on the supply or quality of water under prevailing institutional arrangements to the extent that the demand by all sectors, including the environment, cannot be satisfied fully (UN-Water 2012)

³ In the water development and academic discourses, these principles are commonly referred to as the 'Dublin Principles'

Regarded as the most significant global conference on water since the 1977 UNWC in Mar del Plata, the Dublin conference also provided major inputs on fresh water problems to the June 1992 United Nations Conference on Environment and Development (UNCED) in Rio de Janeiro, Brazil. At this Conference⁴, 108 Governments represented by heads of State or Government adopted three major agreements namely: Agenda 21, a comprehensive programme of action in all areas of sustainable development globally; The Rio Declaration on Environment and Development, and the Statement of Forest Principles to underlie the sustainable management of forests worldwide. All these agreements were aimed at altering the development trajectory from one characterised, among others, by massive production and top to bottom management styles to one that was largely participatory and sustainable (Mulwa 2010). Related to good governance and embedded within its 27 principles, the Rio Declaration stresses *inter alia*, the importance of citizen participation, access to information and partnerships in development and environment management (UN 1992c). These principles have since become germane to global, regional and local water resources management policy and programmes.

It is clear that in the past three decades, water and environment related deliberations, decisions and policies at international, regional and national levels have fundamentally been influenced by the conclusions of these international conferences. The Millennium Declaration (UN 2000), target 7 (c) of the MDGs, i.e., reducing by half the proportion of people without sustainable access to safe drinking water and basic sanitation by 2015; the 2003 UN proclamation of the period 2005-2015 as the ‘International Decade for Action - Water for Life’ launched on the World Water Day March 22nd, 2005, constitute some of the examples of global efforts and commitments to address problems associated with water scarcity. The goals of the water decade put greater attention on ensuring implementation of water-related programmes and projects in a participatory manner in order to facilitate attainment of internationally agreed-upon water-related goals (UN 2003). Many other related initiatives to follow up on global commitments to respond to the water crisis have been undertaken. The latest of these is the October 2nd-5th, 2011 UN-Water Conference in Zaragoza, Spain which was part of the preparation process for the United Nations Conference on Sustainable Development, twenty years after Rio de Janeiro, named ‘The Rio+20’ (UN - Water 2012) . All these global initiatives portray the extent to which contextual

⁴ Also popularly known as the Rio Summit, Rio Conference or Earth Summit.

factors at local and international levels continue to significantly undermine efforts to address development challenges including access to safe water. Indeed, the Rio+20 held between 20th-22nd June 2012 in Rio de Janeiro came out again, with a renewed global leadership commitment to uphold to the principles and address the challenges of attaining sustainable development goals set out 20 years earlier.

While the MDG report of 2009 indicated that the world was on track to achieve the safe water target, it also cautioned that 884 million people worldwide still used unimproved water sources mainly surface water such as lakes, rivers, dams or from unprotected dug wells or springs for their drinking, cooking, bathing and other domestic activities. Of these people, 84 percent (746 million) were estimated to be living in rural areas. The report further emphasized that access to clean drinking water sources was predominantly a rural problem and that even using an improved water source was no guarantee that the water was safe, as test results from water samples obtained from many improved water sources did not meet the microbiological standards set by the World Health Organization (UN 2009).

Latest evidence from figures shows that global efforts towards meeting the millennium development target 7 (c) may be yielding positive results, particularly in reducing the number of people without access to safe drinking water, but these figures fall short of the socio-economic and spatial disparities in regions, countries and within countries. Only 61 percent of the people in sub-Saharan Africa have access to improved water supply sources compared to 90 percent or more in Latin America and the Caribbean, Northern Africa, and large parts of Asia (UNICEF and WHO 2012). In addition, due to cost and other logistical difficulties in most countries, a proxy indicator, i.e., the proportion of people using ‘improved’⁵ water sources is being used rather than actual testing of microbial and chemical quality of water (UNICEF and WHO 2012 p.4). About 187 million (3% of the global population) still use surface water for drinking and cooking, and most, i.e. 94 percent are rural inhabitants constituting 19 percent of the rural population in Sub-Saharan Africa and 39 percent in Oceania (UNICEF and WHO 2012 p.6). Thus, despite ‘global improvements’, many rural dwellers and the poor continue to miss out, and the burden of poor access to safe water still falls more on them and most heavily on girls and

⁵ Water sources which, by the nature of their construction are protected from outside contamination, particularly faecal matter. They include for example bore holes, protected springs and shallow wells.

women (UNICEF and WHO 2012, UN-Water 2006a).

The problems of access to adequate water for domestic, industrial or agricultural production have now been widely considered problems of governance and not just the differences in climatic zones, natural resource endowments, or the lack of financing and appropriate technology as the UN has consistently observed:

The water crisis that humankind is facing today is largely of our own making. It has resulted chiefly not from the natural limitations of the water supply or the lack of financing and appropriate technologies (though these are serious constraints), but rather from profound failures in water governance, i.e., the ways in which individuals and societies have assigned value to, made decisions about, and managed the water resources available to them (UNDP 2004 p.2)

...the scarcity at the heart of the global water crisis is rooted in power, poverty and inequality, not in physical availability (UNDP 2006 p.2)

Underscored in the above quotations is the significance of socio-economic, political, ecological, and technical capacity obstacles to addressing the water crisis, with focus directed more towards effective water governance, improved water management, enhanced capacity at the macro, meso and micro levels, and greater empowerment of the poor as key strategic means of accelerating progress towards meeting the Millennium targets (UNDP 2004, UNDP 2006, Rogers 2006, Jacobs and Nienaber 2011, Bleser and Nelson 2011). While it is acknowledged that more financing for the water sector is crucial for meeting the 2015 millennium targets, this is not to be seen in terms of more aid flows to the developing world, but much more in terms of ensuring that there is effective cost recovery from the investments made. However, in stressing the need for further investment, the 2006 UNDP Human Development Report indicated that if funding gaps are covered through cost recovery alone it 'would put water and sanitation services beyond the reach of precisely the people who need to be served to meet the 2015 targets' (UNDP 2006 p. 67). Hence, combining financing with more serious attention to the wider governance and public management issues in the water and sanitation sector become a crucial strategy for meeting water development and service delivery goals at both national and global levels.

Community-Based Management (CBM) as a Policy Response to the Rural Safe Water Supply and Sustainability Problem

Among the many interventions designed to address the rural domestic water supply and sustainability problem, CBM or Community Management (CM) has gained considerable prominence since the late 1980s. Essentially CBM owes much of its origin from the neo-liberal traditions of a reduced role of the state, human rights and empowerment approaches to development. However, in the water sector, it can be traced in the publication of a concept paper derived from a symposium organised jointly by the UNDP-World Bank water and sanitation programme, and the United States Agency for International Development (USAID)-WASH (Water, Sanitation and Health) in Washington in December 1998. The paper provided the definition of CBM to suit the water and sanitation context and accentuates the importance of enhancing the capacity of local communities to assume a leading role in planning, construction, financing, and management of new water supplies as the ‘enabling environment’ necessary for the sustainability of water facilities (McCommon, Warner and Yohalem 1990). Earlier, the 1980 International Drinking Water Supply and Sanitation Decade (IDWSSD) had also stressed the importance of the shift in the way safe water services were provided emphasising approaches that deepened community participation in the management of water and sanitation infrastructure (UN 1992a, UN 1992c).

It may not be incorrect to state that the community-managed model of service delivery in the rural water sub-sector is now the single most important of strategies envisaged by policy and development actors to deliver greater access, equity and sustainability in service delivery including the sub-Saharan African region where the slowest progress towards meeting the MDG targets in rural domestic water supply has so far been registered (UNICEF and WHO 2012). It is imperative to note that while CBM may be working well in some developing country contexts such as in Latin America and Asia, the results in sub-Saharan Africa are still poorly promising (Lockwood and Smits Stef 2011).

In Uganda, CBM was first introduced in the rural domestic water supply sector in 1986 by the United Nations Children’s Emergency Fund (UNICEF), in its then national emergency

programme (MWE 2011a). It later in 1999 became part of the official national water policy prescription and related legislations. While UNICEF is known to have championed the CBM model in rural safe water service delivery in Uganda, policy roots for CBM in Uganda are clearly embedded in the 1980 International Drinking Water Supply and Sanitation Decade (IDWSSD), and the subsequent international resolutions, declarations and guidelines particularly the Rio Summit's Agenda 21, and its chapter 18 on fresh water resources (UN 1992a, UN 1992c), which Uganda as a UN member country, had to embrace. In addition, the economic and public sector reforms of the 1980s and 1990s were instrumental in shaping the final outlook of public policy and service delivery frameworks and models of most developing countries including Uganda.

The reduction in public expenditure, market liberalisation, inter-governmental and market decentralisation, all led to a new set of policy actors and players. There may have been arguments that the current post-welfare development policy is western oriented and cannot be applicable in developing contexts of the south, however, it is also right to question why the same policies when applied in countries of the south produce different results. While there may be improvements registered in rural safe water supply since the mid-1980s, studies at the national level in Uganda continue to demonstrate that the performance would be much better if the CBM model of service delivery in the rural water sub-sector was more effective than it currently is (Mwebaza 2010, Quin, Balfors and Kjellén 2010, Lockwood and Smits Stef 2011, MWE 2011a, Asingwire 2008).

CBM and Functional Sustainability of Point-Water Facilities in Uganda

In Uganda, rural water supply covers those communities that have a population less than 5000. These include villages constituting populations below 2000, and Rural Growth Centres (RGCs) with populations between 2000 and 5,000 (MWE 2012). RGCs are typically served by mechanised water supply systems, which may include pumped supply from one or more sources, treatment, storage and limited distribution, and management of the RGC system is through private operators or community formed associations accountable to the District or Sub-county Governments. Water supply in villages with populations below 2000, which constitute the present study's focus, is typically done by *point-water* source technologies. These include deep

and shallow wells fitted with hand-pumps, protected springs, public taps from gravity flow schemes, and rainwater harvesting tanks. The systems are community managed with support from district and sub-county local governments.

To fit the context of this study, *Functional Sustainability* as a concept is defined to mean a continuation in water supply services over a long period of time after the initial investment, or the ability of the water source to continuously yield adequate clean and safe water for the users at any particular time (Carter and Rwamwanja 2006, Lockwood and Smits Stef 2011). It includes capacity and efficiency in operation and maintenance (O&M), including regular preventive maintenance and major rehabilitation of the water supply infrastructure, regardless of whether government or non-governmental agencies did provide the water facility.

Operation and maintenance of rural point-water facilities in Uganda is based on the CBM model supported by a system of local governance and decentralised service delivery. Essentially, as part of the implementation process for CBM, neighbourhood households of water users are mobilised, sensitised and supported to form Water and Sanitation Committees (WSCs), or sometimes referred to as Water User Committees (WUCs). These committees become responsible for O&M of their respective water systems. Hand Pump Mechanics (HPMs) and Plumbers ‘where necessary and possible’ support communities through their WSCs to carry out regular repairs, servicing or preventive maintenance of the water systems under the supervision and facilitation of District Water Officers (DWO) with guidance from the Directorate of Water Development (DWD). Central and Local Governments, according to the policy framework are responsible for maintenance of sources ‘beyond the capacity’ of the communities (GOU 2011a, GOU 2007, GOU 1999).

As illustrated in figure 1 below, the CBM model in Uganda operates on the idea that when WSCs are functional, i.e. when they meet regularly, collect funds for O&M, ensure proper sanitation and hygiene at water sources, have a signed contract with a HPM, report or handle hand pump breakdowns, formulate and enforce bye-laws, then high levels of functional sustainability of water sources that meet high access, equity and efficiency standards are realised. In addition, such levels of performance can be replicable in similar conditions elsewhere (Lockwood and Smits Stef 2011, MWE 2011a, Schouten and Moriarty 2003).

Figure 1: Operational relationship between effective CBM and functional sustainability of rural point water facilities



Source: Author's Diagram

A recent country study commissioned by the Ministry of Water and Environment to assess the functionality levels of community management systems indicates that WSCs performed at below 50% on most of their designated roles. The study further assessed levels of functionality of rural water sources and established that just over half (53%) of the water sources were fully functional i.e. working normally and yielding an adequate volume of water. Others were partly functional i.e., functional but with some faults (24%); functional only during the rainy season (5%) or non-functional i.e. broken down for a long time e.g. one year or over [(18%) (MWE 2011a)]. Indeed, the findings of this study underpin the fact that if WSCs are fully functional, there is a high potential for them to impact positively on functional sustainability of rural point water facilities.

Statement of the Research Problem

Policy support for CBM of water facilities presumes that service authorities (mainly central and local government) must to facilitate or enable the community (through its elected representatives) to control, or at least influence the development, operation and maintenance of its water systems. As an authority, it owns and attends to system obligations, legitimately makes and controls decisions and their outcomes. However, while this seemingly ideal situation may be attainable in principle, in the context of rural communities in sub-Saharan Africa and the Ugandan case in particular, it seems to depend almost entirely on the governance dynamics

present at meso and macro levels of service delivery. One of the most compelling questions to which this study seeks to contribute answers is; why, despite the seemingly well-known potential for community-managed point water facilities to yield high levels of service delivery and sustainability, service authorities in Uganda's rural domestic water supply are not consciously taking the necessary actions to leverage its effectiveness. Given that rural point water facilities target over 85 percent of Uganda's 34 million people, it is expected that more sound and conscious mechanisms for ensuring that CBM enhances its contribution to equitable and sustainable rural water services are put in place. But how is this being given attention by policy and programme actors? What contextual dynamics might serve to undermine CBM but remain ignored, unknown or taken for granted by key sector actors and decision makers? To answer these questions, this study examined key governance dynamics at macro meso and micro levels of rural safe water supply in Uganda and how they affect and are affected by dynamics at the micro-level to shape outcomes of CBM systems in rural domestic water supply and sustainability.

The Research Questions

The broad research question that guided this investigation was: What governance dynamics at the macro, meso and micro levels of public service delivery disable CBM systems from yielding desired levels of functional sustainability of rural point-water facilities in Uganda? The specific questions were:

- (i) In what ways do policy prescribed relationships between and among macro and meso level water sector actors and public service systems impact on CBM and sustainability rural point-water facilities in Uganda?
- (ii) What community-level dynamics and contexts are working against the goals of CBM systems in leveraging sustainability of improved point-water facilities?

Significance of the Present Study

Broadly, this study contributes to the current debates on governance and to the critical debates on new public management and citizen participation. More specifically, the study contributes to

critical debates on water governance and sustainable rural safe water supply in Africa. It has been argued for instance that even when financial resources are leveraged, the lack of deliberate commitment by development actors to consciously work as drivers of change will curtail prospects for the pursued change (Nyalunga 2006b, McNamara and Morse 2004), and more so in the water sector (Plummer and Slaymaker 2007, Winpenny 2003). This study thus adds to existing scholarship on the fundamentals that need to be adhered to by policy actors wishing to build effective synergies between them and the service beneficiaries, particularly those living in rural contexts such as those in sub-Saharan Africa. The study generates more evidence to demonstrate why participation in planning and implementation of rural water supplies in developing countries may not achieve its intended goals if targeted consumers (water users) and their communities are not deliberately supported by their immediate public service authorities. At policy and practice level, the study uses evidence generated in a single case and mixed-methods study design to argue for innovative strategies within the CBM model for rural water supply, which ensure that beneficiary communities remain active rather than passive service delivery partners. In particular, the study pinpoints the significant role of lower local government actors in stimulating and sustaining the energies of water user communities to effectively play their service delivery mandates. By so doing, the study questions the credibility of policies that value the significant role of communities (service beneficiaries/users) in service delivery but which at implementation appear to be taking the same communities for granted.

Chapter Two

Legal, Policy and Institutional Frameworks 'Potentially Enabling' CBM Systems for Rural Water Supply in Uganda

Introduction

One of the questions whose answer this study seeks to address is why, despite having an elaborate legal, regulatory and institutional framework that supports CBM models of service delivery, Uganda's rural water sector continues to experience low levels of functionality of point-water sources, and stagnation in levels of access to water for domestic use in rural areas. This chapter examines Uganda's current legal, policy and institutional framework for the rural safe water supply sub-sector in order to illuminate the enabling potential of these frameworks in ensuring that CBM systems positively impact on functional sustainability of rural water supply. The chapter begins by presenting a brief and general historical context to the current institutional framework for service delivery in Uganda and of the water sector in particular. The chapter then examines in some detail, policy prescribed roles and responsibilities of the key sector actors, emerging relationships among these actors, and how these relationships impact directly or indirectly on the effectiveness of CBM for rural safe water supply and sustainability.

Background to the current Legal, Policy and Institutional Framework for Rural Water Supply in Uganda

The service delivery trajectory in Uganda has gone through various systems and regimes. Prior to the advent of colonial rule, traditional communities organised along clan leaders or elders, chiefdoms or kingdoms were able to provide for basic needs of the people particularly through collective self-help efforts that combined participatory and partnership dynamics. During this

pre-colonial period⁶, traditional/clan leaders and elders successfully mobilized community members to participate in community self-help projects (Asingwire 2008 p. 7). Trust and high levels of social cohesion and unity characterised and motivated communities to support each other. However, these important dynamics significantly changed during the colonial and post-colonial era until the present time when more formal and bureaucratic service systems shaped by modern development paradigms such as NPM predominate.

During the colonial period, safe water service delivery was mainly under local administration and kingdoms. Before and immediately after independence in 1962, the British colonial government operated two systems of central-local government relations existing alongside each other. The first was a system of devolution to federal and semi-federal systems (in kingdom areas) and the second was a system of district councils, operating in areas without kingdoms⁷. The major difference between the two systems of local government was that, whereas the kingdoms were allowed to collect their own taxes, the district councils only relied on revenue from central administration (Muhangi 1996). Using their tax revenues, kingdoms could finance the delivery of services to their subjects. These forms of local governments were constitutionally maintained after independence in 1962 until 1967 when the Prime Minister Milton Obote abolished kingdoms and subdivided them into districts. Subsequently, the local administration act was enacted essentially centralising powers of local administration, making district councils more as agents of the central government which in principle utilised a top-down approach to service delivery.

By independence in 1962, about 18% of the rural area, and more than 80% in urban areas had access to safe water, with greater prospects for greater improvement due to good governance, stable economics and the new spirit of nationalism (Muhangi 1996). In the post-independence period after 1967, the supply-driven model of service delivery inherited from the colonial administration dominated the water sector (Asingwire 2008). The Water Development Department constructed many boreholes and set up 15 borehole maintenance units (BMUs) based on regions to take care of the maintenance of bore holes in those specific regions, with an

⁶ Events that led Uganda to become a British Protectorate (1896-1962) began when two British explorers - Speke and Stanley visited in 1862 and 1875 respectively.

⁷ The kingdoms were largely based on dominant tribal groupings especially among the Bantu tribal groups in central, west and Southern Uganda

almost absent role of the community. However, it did not take too long for these BMUs to become very inefficient by failing to respond to breakdowns in time (Muhangi 1996). From 1971 to early 1980s, political turmoil led to a significant collapse in most public services including rural safe water supply. Poor maintenance of water sources resulted into a drastic reduction in safe water coverage in both rural and urban areas. Over 70% of the boreholes broken down by the early 1970s with no hope for them being repaired (Muhangi 1996). By the early 1980s, rural safe water coverage had fallen to less than 5% from 18%. Efforts of NGOs such as UNICEF to fill some of the service delivery gaps were also frustrated by war and political instability which, in addition to brutal, short-lived and highly centralised regimes overturned the economy and the country's planning and service delivery capacity for nearly two decades (1971-1986).

When the current NRM government came into power in 1986, it put in place a strong system⁸ of participatory democracy and decentralised government administration, allowing people from each geopolitically defined electoral area to elect their own leaders from village level up to district level (Asiimwe and Musisi 2007). From this period, a quicker response to improve the delivery of safe water through decentralised arrangements to local governments especially in rural areas was realised. New concepts such as *village level operations and maintenance* of water facilities emerged. Together with the emergence and popularization of the structural adjustment programmes (SAPS) and public sector reforms of the 1980s and 1990s, a new set of actors 'coordinated and regulated by the central government also emerged. Consequently, in the 1990s, a comprehensive legal, policy and institutional framework for guiding all sector actors and their activities was developed.

The improvement in safe water coverage since 1986 is as a result of a combination of efforts from both the NGOs and government. Initially, the sector was largely supported by NGOs notably UNICEF and its nation-wide emergency programme. Government recovery programmes were also initiated countrywide with donor support. However, until the early 1990s, sector coordination, funding as well as human and technical capacity were still very weak, particularly at the local government level, which significantly affected progress in the sector. In 1990, an

⁸ The system was later formalised in the 1995 constitution and the 1997 local government Act.

estimated 60% of the population in rural areas lacked access to safe drinking water, mainly because of fragmented project support (O'Meally 2011).

Since the early 1990s there have been efforts to improve sector coordination. These efforts have seen a policy developed in 1999 with supportive legal and institutional frameworks. These frameworks together with increased sector funding coordination have seen improvements in coverage of rural safe water services, but with challenges to a more desirable progress (O'Meally 2011). According to the Joint Monitoring Programme (JMP), access to an improved water source in Uganda increased from 39% in 1990 to 68% in 2010 (WHO/UNICEF 2012). There are arguments that current performance levels in increasing access to safe water in Uganda would have been much better if the CBM model of service delivery was given appropriate attention by sector actors (Lockwood and Smits Stef 2011, Quin, Balfors and Kjellén 2011, MWE 2011a, Asingwire 2008, Mwebaza 2010). The rest of this chapter is devoted to a discussion of the legal and regulatory framework for the provision of rural safe water services in Uganda. The discussion mainly highlights key aspects of the frameworks that are relevant to CBM and rural safe water supply. It also illuminates the relationships between and among actors supporting rural safe water supply and CBM in particular.

Laws and Regulations Supporting Safe Water Supply and the CBM Model for Rural Point Water Facilities

In broad and specific terms, Uganda's Constitution provides a legal framework for addressing citizen's access to safe and clean water. Under its social and economic objectives, access to clean water is stated as a constitutional right for all Ugandans to enjoy:

The state shall endeavour to fulfill the fundamental rights of all Ugandans to social justice and economic development and shall, in particular, ensure that... all Ugandans enjoy rights and opportunities and access to education, health services, clean and safe water....' (GOU 1995 p. xxxiii)

In its clean and safe water objective, the constitution states; 'the state shall take all practical measures to promote a good water management system at all levels'. While in its objective on the environment which is crucial for the attainment of clean and safe water, it states that; 'the state shall promote development and public awareness of the need to manage land, air and water

resources in a balanced and sustainable manner for the present and future generations, and that; ‘the utilization of the natural resources of Uganda shall be managed in such a way as to meet the development and environmental needs of present and future generations of Ugandans, and take all possible measures to prevent or minimise damage and destruction to land, air and water resources resulting from pollution or other causes (GOU 1995 p. xxxiv-xxxv). These are by far, important commitments that potentially support CBM. The constitutional commitment is further reflected in more specific legislations and regulations as summarised in table 3 below (See also GOU 1999).

Table 1 Laws and regulations promoting CBM of water supply facilities in Uganda

Laws and Regulations	Purpose
Water Statute of 1995	The Statute provides the framework for the use, protection, supply and management of water resources including the institution of water user associations or WSCs and devolution of water supply undertakings.
The 1997 Water Act	The Act gives details on access rights and regulations pertaining to public and private sector investments in water services. When well regulated, HPMs are key private sector actors that support CBM.
The 1997 Local Government Act	Stipulates powers, roles and functions to decentralised government units. In Essence, the Act empowers, but also gives responsibility to local authorities to oversee central government service delivery and policy implementation strategies including CBM.
The Land Act 1998	Any location of a water supply project must respect the property rights of the land owner or occupier. In relation to this a formal written consent is usually sought before construction of a water source.
The Public Health Act of 1935	The Act consolidates the law regarding the preservation of Public Health. In CBM WSCs are also responsible for ensuring Health and hygiene at the water source as well as sensitise water users on safe water handling practices. Bye-laws related to hygiene could be enacted at the community level.
The Public Finance and Accountability Act 2003	Sets legal procedures and guidelines for the financing and accountability in respect to water projects in rural decentralised settings. It therefore takes care of the need for transparency, efficiency and good governance in support of CBM functions for rural water supply and sustainability.
The Public Procurement and Disposal of Public Assets Act 2003	Sets legal standards and procedures for the procurement of supplies and works for various public water works and investments. Ideally, this Act should guide the institution of a more enabling approach to supply of spare-parts for pumps.

The constitutional commitment and the supportive legal and regulatory framework clearly reflect national readiness for the delivery of sustainable rural safe water services. In particular, the legal framework targets all providers and users of water, who according to the CBM approach work in close collaboration. The framework indeed acknowledges that rural safe water supply and CBM models are a shared responsibility between government and other water sector stakeholders including the community, based on rights and responsibilities. But have these commitments been effectively translated into concrete choices, mechanisms or actions meant to leverage CBM at the different levels of decentralised service delivery? It is one thing to have these legislations in place and another to utilise such legal resources to deliver intended outcomes. When such legislations are adhered to, they ought to be reflected, for example, in actions that ensure the existence of functional community bye-laws and effectiveness of evoking sanctions to non-compliance on aspects such as operation and maintenance of water facilities or health and hygiene at water sources. But have such bye-laws been effectively enabled in Uganda's CBM and functional sustainability of rural point water facilities? What governance dynamics are disabling this important aspect of the CBM strategy for functional sustainability of rural point water facilities in Uganda?

The Policy Framework for CBM in Uganda's Rural Water Sector

The policy and planning framework for rural safe water supply in Uganda underscores the importance of CBM. The overall, national policy goal for the water sector focuses at managing and developing the water resources of Uganda in an integrated and sustainable manner, so as to secure and provide water of adequate quantity and quality for all social and economic needs of the present and future generations 'with the full participation of all stakeholders' (GOU 1999 p. 8). With regard to safe water and sanitation, the specific objectives and strategies of the policy focus on:

Sustainable provision of safe water within easy reach and hygienic sanitation facilities, based on management responsibility and ownership by the users, to 77% of the population in rural areas and 100% of the urban population by the year 2015 with an 80%-90% effective use and functionality of facilities (MWE 2009c p. 2).

Both the wider water sector goal and the specific objective and strategy for the water and sanitation sub-sector emphasise participation of stakeholders in a manner that propels

sustainability of the water resources, and the services these resources provide. The water policy highlights who the key actors are, as well as their roles and relationships recognising among other principles that the management of water resources and facilities ought to take place at the lowest level of authority in a framework of deepened decentralisation (GOU 1999 p. 9). The policy also emphasises the role of government as primarily that of ‘an enabler’ in a participatory, demand responsive and integrated approach to development. In its objective to increase access to rural safe water supply from 63% in 2010 to 77% by 2015, the government through its National Development Plan (NDP) [2010/11-2014/15] specifically prioritises construction, operation and maintenance of new water facilities, and improving functionality of water supply systems. It states very elaborately, the actions and strategies for the sustainability of rural safe water supply sub-sector to include: (i) strengthening CBM systems through formation of functional water user committees and boards; (ii) improving the spare parts supply chain through public private partnership arrangements to increase accessibility to spare parts of point water sources, targeting to have a spare parts store in each district; (iii) mobilising and increasing equal participation of men and women in the management of water systems, and (iv) training and certifying borehole mechanics, and ensuring that they are equitably distributed around the country, with at least each district having more than two certified borehole mechanics (GOU 2010 p 271-272). From these actions and strategies, effective community organisation and leadership, private sector effectiveness, equity and equality in decision making stand out as important ‘building blocks’ effective CBM and functional sustainability of point-water facilities. But are these visible at the community level?

The other key policies supporting CBM framework include policies on gender, health and environment with specific aspects related to CBM as a service delivery model. Based on the *National Gender Policy (1999)* which recognises that women constitute the category of the population most affected by water problems, water policy guidelines provide as a minimum, that half of the members of the WSCs at village level should be women (GOU 1999 p. 19). The main justification is that the involvement of women in the management of water facilities would more positively contribute to issues of equity and sustainability of rural water supply. Hence gender participation, is in Uganda’s case, a measure of the extent to which CBM could be considered

effective in leveraging the sustainability of rural point-water facilities. How has this requirement been strictly adhered to?

The *National Health Policy (1999)* and the *Environmental Health policy (2005)* also recognise low access to safe water and poor sanitation coverage as major contributors to the burden of disease in the country with special emphasis in rural areas. Consequently, promotion of personal hygiene and maintenance of appropriate hygiene and sanitation standards at household, within institutions (e.g. schools and markets etc.) and the general community are key of the strategic spots they address (GOU 1999 p.10). The environmental health policy views attainment of a clean and healthy living environment for all citizens as a key priority goal through community mobilisation, education and sensitisation which are fundamental aspects for successful CBM. It also advocates for inter-sector collaborations in health, environment, water and sanitation, viewing such strategies as pre-requisites for progress in addressing national water and environmental health challenges. Interventions that promote community participation as a means to empower and enable people to take responsibility for environmental health matters under their direct control are clearly emphasised by the policy. Hence, the policies complement and legitimise all efforts and decisions taken at national and local levels to enhance functionality levels of rural safe water infrastructure including, for instance, development and enforcement of bye laws concerning proper hygiene and sanitation around improved point-water sources as well as within households. Indeed, roles and mandates of water and sanitation committees (WSCs) include aspects related to health promotion in their respective communities. The assumption is that safe water cycle is not complete unless water related hygiene practices are effectively adhered to by the water users. This study examines in Chapter Six whether and how these good and supportive policy principles have been enabled; whether and how the WSCs under the CBM mechanism in Makondo Parish demonstrate the capability to address hygiene and sanitation concerns around their point-water facilities as well as the wider water safety issues in households and the entire community.

The Institutional Framework: Actors, Roles and Responsibilities

The rural water supply sub-sector in Uganda operates within the decentralised service delivery framework instated in the early 1990s. The decentralisation framework takes the traditional inter-

governmental decentralisation of authority described by Conyers (1983), and decentralisation to the market in the form of private sector participation (Hambleton, Hoggett and Tolan 1989). In this study, levels of safe water service delivery and the actors within those levels have been categorised under macro, meso and micro levels as summarised in table 2 below

Table 2 Levels of safe water service delivery and major actors involved

Macro-Level	<ul style="list-style-type: none"> ➤ Central Government Institutions (Ministries and Directorates) ➤ National NGOs ➤ Large and medium size private companies/enterprises that deal directly with central government water sector institutions, but also occasionally with sub-national actors ➤ Donors/Development Partners
Meso-Level	<ul style="list-style-type: none"> ➤ Technical Support Units (TSUs) ➤ District and Sub-County Local Governments ➤ Small private sector firms and individual service providers (e.g. HPMs and Spare parts dealers) ➤ Regional/local NGOs and Community-Based Organisations (CBOs)
Micro-Level	<ul style="list-style-type: none"> ➤ The community of water users ➤ Water and Sanitation Committees (WSCs) ➤ Village Executive Council

Source: Author's Illustration

Central Government Actors and their Major Roles and Functions

Through the Ministry of Water and Environment (MWE) the central government (CG) as an actor is responsible for ensuring that there are appropriate legislations and regulatory controls to support water policy implementation. It is responsible for building adequate institutional capacity, coordinate planning, financing, implementation and monitoring of water programmes. It also guarantees that domestic water supply demands are given priority over other water demands such as industry, agriculture and hydro-power production. How is this prioritisation reflected in various planning and coordination aspects aimed at enhancing CBM through improved community contribution to repair, operation and maintenance of point-water facilities? Based on the integrated planning and development approach, the MWE does not work in isolation. It takes leadership in coordinating roles, functions and responsibilities of other relevant

sector ministries and departments. In a decentralised service delivery framework, the Ministry of Local Government (MLG) ensures that sound decentralized government systems are in place. By this function, it is directly responsible for spearheading the goals of good governance, demand driven, participatory and integrated social and economic development through sub-national governments. In terms of human resourcing of LGs, the MLG works closely with the Ministry of Public Service (MPS) to streamline staff structures, job descriptions and salaries among other human resource planning functions that are crucial both at the macro, meso and micro levels of public service delivery. Similarly, the Ministry of Gender, Labour, and Social Development (MGLSD) is a close partner with the MLG and MWE in executing water sector programmes especially through its staff in the community development department who take responsibility for community mobilisation and sensitisation.

The MGLSD is also responsible for supporting sub-national governments to build system capacity for gender responsive decision making, while the Ministry of Health (MH) and the Ministry of Education and Sports (MES) are together responsible for hygiene education in communities and institutions such as schools. In the CBM framework, these functions are expected to be played by the WSCs with support from the district water related officers in the Health and Community Development Departments. This study examines how these institutions and their respective departments at district and sub-county local government level relate especially in promoting CBM and functional sustainability of rural point-water facilities. Is there any deliberate and conscious collaboration by these departments to promote community participation or contribution to repair, operation and maintenance of water facilities, or collaboration in the general issues of hygiene and sanitation in households? What is the nature of relationship these institutions and departments have with other non-state actors in promoting CBM?

Under the decentralised service delivery framework, CG is responsible for leveraging technical and financial capacities of LGs to deliver water and sanitation services in rural areas, including new constructions, maintenance and rehabilitation of water supply facilities. The central government can delegate powers and functions to other units of government or non-governmental actors both for-profit and not-for-profit. It can organise training for personnel in LG units as a capacity building function for a more effective decentralized service delivery.

According to the legal and policy framework, CG is also mandated to provide technical assistance by seconding staff with specialized skills to LGs that demonstrate a lack of such skills. In 2002, the MWE established eight (8) Technical Support Units (TSUs) each composed of specialists in Civil Engineering, Public Health and Community Mobilisation and Training. These provide technical support to a cluster of districts and report directly to the MWE/DWD on key rural water supply issues from these districts. Ideally, their work in the districts should help to enhance the effectiveness of CBM. But how come their impact is still yet to be felt at the district and community level?

The Ministry of Finance, Planning and Economic Development (MFPED) has the role of mobilising and allocating funds as well as co-ordination of donor inputs. It also reviews sector plans and actor compliance with water sector specific objectives as well as the wider policy and legal framework in the sector right from the lowest level of government. Release of funds to implementation units is always based on the ministry's satisfaction with compliance to financial guidelines. Following efforts initiated in 2002 to enhance aid effectiveness in recipient countries, a sector-wide approach (SWAP)⁹ to planning, financing and monitoring water and sanitation programmes was adopted in September 2002. Importantly, the SWAP meant that aid to the water sector should significantly shift from the conventional project based funding to national budget support in form of a 'basket fund', in which all donors to the sector channeled their support. In the same vein, government institutionalised the Water Policy Committee (WPC)¹⁰ and the Water and Sanitation Sector Working Group (WSSWG)¹¹, for overall policy and technical guidance to the sector respectively with the Directorate of Water Development (DWD) as its secretariat. This

⁹ SWAP was initiated in 2000 and adopted in 2002. It means that within a decentralised delivery system all significant public sector funding follows a common approach, is within a framework of a single sector expenditure plan and relies on government procedures for disbursement, accounting, monitoring and reporting on progress.

¹⁰ The WPC is composed of the MWE, MLG and representatives from the private sector, NGOs and district LGs. It coordinates the formulation of national policies, liaises with international and regional water resources organizations and coordinates the preparation and review of plans and projects which may affect international water resources. The WPC also initiates and coordinates the preparation, implementation and revision of national water resources policy and national priorities for the use of water and related land resources.

¹¹ The Water and Sanitation Sector Working Group (WSSWG) on the other hand is responsible for sector co-ordination and approval of agreed minutes from the Annual Joint Government of Uganda – Donor Sector Review. The WSSWG is chaired by the Permanent Secretary MWE and comprises representatives from MWE/DWD, the National Water and Sewerage Corporation (NWSC), MH, MES, MFPED, the Ministry of Agriculture Animal Industry and Fisheries (MAIF), MGLSD, Donor representatives and NGOs (UWASNET as representative). The WSSWG provides policy and technical guidance for sector development in the country and meets at least every quarter. Two sub working groups, one responsible for Water for Production and another Sanitation report to the WSSWG (GOU 2007).

institutional and funding mechanism is indeed an enabling strategy for ensuring more efficiency and effectiveness. However, the extent to which these funding mechanisms are effective in supporting decentralised public programmes including water and sanitation remains contentious particularly with regard to timely allocation of funds as well as controlling financial leakages. In 2007, the MWE also established a Good Governance Working Group (GGWG) tasked to identify and recommend measures to promote and monitor transparency, accountability and good governance in the water sector. The initial activities of the GGWG included studies that informed the first joint action plan intended mainly to address corruption and public resource mismanagement in the water sector. But how have these efforts served to specifically impact on CBM and functional sustainability of rural-point water supply facilities? What governance issues might be disabling such good intentions and their desired levels of effectiveness?

LG Actors, Roles and Functions potentially supporting CBM

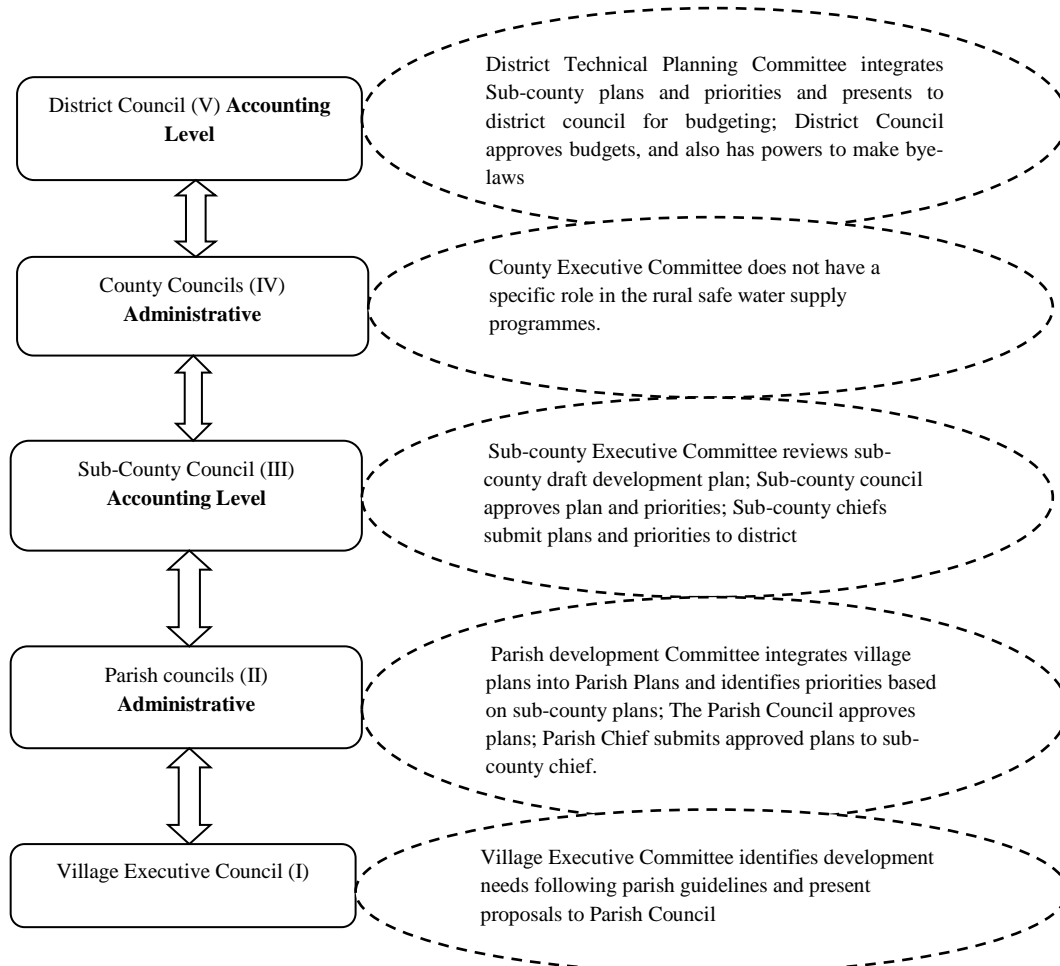
The structure of the decentralised LG system in Uganda is based on districts with both rural and urban jurisdictions (figure 2). Under the districts are lower local governments and administrative units in form of Counties, Sub-counties, Parishes and Villages¹². Local Government Councils (LGCs) [elected politicians] constitute the planning authority of LGs. All LGCs are assisted by the Technical Planning Committees (TPC) [LG employees/technical personnel] at both the district and sub-county (for rural LGs) in overall planning and implementation of service delivery in their respective LGs under the national planning framework. TPCs are constituted by all heads of sector departments including the water sector, and are employed and supervised by the district and Sub-county LGCs. Hence, the nature of relationships between TPCs and LGCs and the dynamics that shape these relationships are critical in determining the effectiveness of service delivery programmes and strategies such as CBM.

According to the Local Government Act (GOU 1997 p. 597-598), every local government council (LGC) should appoint an *Executive Committee* (EC) whose roles and functions include among others monitoring and coordination of activities of NGOs operating within their jurisdiction, initiating self-help projects and mobilising people, material and technical assistance

¹² The geographical sizes, settlement patterns and population density may sometimes vary significantly depending on many geographical and socio-economic conditions, including creation of new local government councils through sub-division of old ones as has recently been the case.

for such projects. The governance and service delivery roles and functions of LGCs run from the village level through to the parish, sub-county, county and district council, making five levels of planning, implementation and supervision of service delivery programmes. By carrying out these roles, the LGCs and their ECs are therefore indispensable actors supporting the effectiveness of CBM systems for rural safe water supply regardless of whether services are provided by government or NGOs. This study examines the extent to which these roles are being played in support of CBM and how the relationships between the relevant LG actors in partnership with other actors from the private for-profit and not-for-profit sectors impact on CBM systems for rural water supply sustainability.

Figure 2 Decentralised local government structure and planning functions for rural local governments in Uganda



Source: Based on the Local Government Act (GOU 1997), and Quin, Balfors and Kjellén (2011)

With support from the Health Office (HO) and the Community Development Office (CDO) of the district, District Water Officers (DWOs) are responsible for the provision and sustainability of water supply services in districts and sub-counties. Support staff to the District Water Office includes; a Hygiene Officer, an Assistant District Water Officer responsible for community mobilization, a Technical Officer per county in the district and a Borehole Maintenance Supervisor. Although they are regarded as support staff, Health officers (HOs) and community development officers (CDOs) are in essence part of the technical team directly responsible for rural safe water and sanitation. Health Assistants (HAs) and Community Development Assistants, who form part of the sub-county extension services work-force, and who are part of the sub-county TPC are responsible for identifying community needs using participatory planning methods. But how are these sector departments working in order to leverage CBM and functional sustainability of improved point-water facilities to desired levels in the rural communities? At regional and district level, water sector stakeholder coordination meetings are supposed to be convened at least once every year. These meetings are expected to bring together political leaders, technical officers, NGOs and private sector representatives to discuss and share district specific water and sanitation experiences and challenges. In addition, the meetings allow TSU staff an opportunity to deepen understanding of sector policy issues among all meso-level actors particularly in rural water and sanitation sub-sector on behalf of the MWE. It is also at such meetings that any issues to do with the effectiveness and functionality of CBM would be raised as a matter of priority. This study also examines whether and how this is happening to impact on CBM.

The private-for-profit Actors

Private companies, individual technicians/ mechanics and spare parts dealers constitute the main actors in the private sector that support rural safe water supply. The services they provide for CBM and generally rural water supply range from undertaking studies, to training services, construction or repair of water supply facilities as well as supply of spare parts. The private sector thus operates at all levels of service delivery (micro, meso and macro) and embraces small local firms and large international ones. With regard to CBM, hand pump mechanics (HPMs) and spare parts dealers are the primary actors from the private sector on whom this study places much emphasis in examining the extent to which their roles and responsibilities as private sector

actors are supportive of CBM, and whether and how factors from the external environment impacts on their capacity to leverage CBM effectiveness.

NGOs and Donors/Development Partners

All NGOs involved in water and sanitation activities in Uganda are coordinated by Uganda Water and Sanitation NGO Network (UWASNET), a national umbrella organisation for civil society organisations (CSOs) in the Water sector in Uganda. UWASNET works closely with Government sector institutions at the macro-level on policy and collaboration with other non-governmental agencies supporting the sector. This was specifically interested in understanding national level coordination efforts and collaborations that impact on CBM in rural domestic water supply. Given that non-profit agencies are traditionally known to be closer to communities they serve, the network provides an opportunity for civil society organisations to engage in many ways with other actors on issues that would enhance service delivery to rural communities including those that impact on the effectiveness of CBM. NGOs working in rural jurisdictions are expected to work closely with the local authorities in those areas in planning coordination and implementation of rural water supply activities following the national policy guidelines. It was therefore important that this study examines working relationships of the NGOs and other actors at the macro and meso levels in their effort to address disablers of the CBM of rural safe water supply.

International development agencies such as the World Bank, Department for International Development (DFID) and the Danish International Development Agency (DANIDA) also provide funding to the rural safe water supply sector especially through budget support frameworks embedded in the SWAP discussed earlier. Apart from budget support, they also provide direct technical assistance in form of studies whose results routinely inform strategies for improved sector performance. Financing and technical capacity are clearly very significant issues that directly impact on policy implementation in the rural water sector. This study examines issues related to budgeting and financing for the water sector, more specifically on how processes and outcomes of the modalities affect CBM.

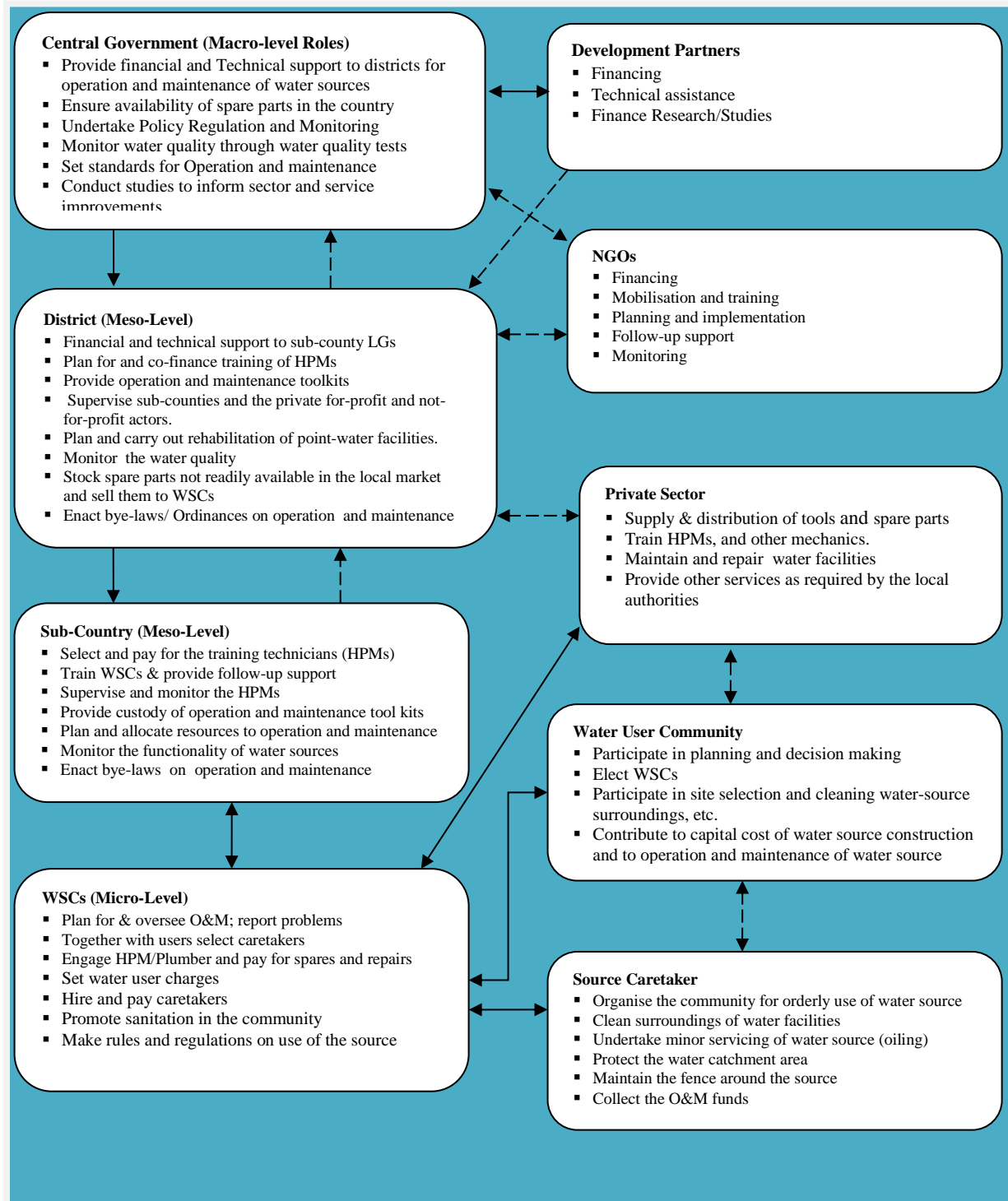
Water User Community Groups and Organisations

In a demand responsive approach (DRA) to development promoted under the decentralised service delivery framework, communities are expected to initiate the process of service delivery in their areas by making an application through the sub-county to the district under the bottom up planning framework. According to DRA, formation of WSCs, who are elected by community members, is one of the conditions that communities must fulfill prior to submitting an application for a service (GOU 1999). Key positions on the WSC include the Chairperson, Treasurer, Secretary, Publicity, Water Source Caretaker and the Village Executive Chairperson (who is an ex-officio member of the WSC)¹³. The major role of the WSCs is to ensure routine preventive maintenance of the water facility. But, is their role and the roles of specific WSC members e.g. the Water Source Care-taker being effectively played? Based on the technology used, tools should also be provided to the water facility caretaker, who is also a member of the WSC to carry out minor repairs and routine maintenance of the water source on a voluntary basis. Have these tools been provided, and are the caretakers using such tools to undertake routine operation and maintenance of the water sources?

According to the water policy, the WSC should also mobilise the community to pay a monthly contribution towards operation and maintenance of the water facility. Such funds should be well managed and preferably kept onto a bank account. The funds are not only supposed to be used for routine preventive maintenance such as oiling and tightening of nuts in the case of boreholes and shallow wells, but are also used to cover part of the costs for major rehabilitations. WSCs are also supposed to sensitise communities on good sanitation and hygiene so that the safe water chain is maintained (MWE 1999, Asingwire 2008). Are all these happening? What governance dynamics at national and local levels continue to affect the effectiveness of WSCs in playing their roles? The following diagram (figure 3) presents an illustrative summary of the different water sector actors, their functions and relationships on which the overall investigation was based.

¹³ The Water Statute 1995 provides for the formation of Water and Sanitation Committees (WSCs) as community level organisations for ensuring proper management and sustainability of water facilities. The water policy also provides for the composition of the WSC to be gender balanced with women occupying 50 percent of the positions on the committee

Figure 3 Water sector actors and their relationships over CBM of point-water facilities



Source: Adapted with minor modifications from MWE (2011a p. 12)

Conclusion

From the foregoing discussion, Uganda's legal, regulatory and institutional frameworks for rural safe water supply provide a potentially enabling framework for an effective CBM system for rural water service delivery and sustainability. This enabling potential is even reflected in the fact that Uganda's water sector has more ambitious targets than those set in the millennium development goal (MDG) target 7(c); while the MDG target is aiming at halving the proportion of the global population without sustainable access to safe drinking water and sanitation by 2015, Uganda is targeting (respectively), 77 and 100 percent. Thus, looking at plans, policies and strategies for the sector as elaborated in the foregoing discussion, it remains unclear, why the 'good intentions' fail to attract 'good attention'. As Lockwood (2004 p.1) rightly puts it, 'knowing the right way forward is one thing, but achieving the rate of progress needed is quite another'. The 'right way' for sustainable community-based management models for rural safe water supply is certainly known in Uganda's policy and planning framework, but 'achieving progress' remains problematic. In the next chapter, I examine among others, the dominant paradigms and theoretical foundations informing CBM and functional sustainability of rural point-water facilities. Debates and arguments generated in both theoretical and empirical literature are examined in order to distil varying opinions and their contextual relevance especially in explaining policies and practices on CBM systems for point-water supply and sustainability in resource poor settings.

Chapter Three

Dominant Paradigms, Concepts and Theoretical Foundations Shaping Policies around CBM

Introduction

Broadly, CBM as a service delivery model is conceived under the wider notions of the post-welfare state or post-weberianism. These notions have evolved and manifested themselves through the neoliberal policy prescriptions, new public management and good governance approaches to development. Since the 1980s, these approaches have become popular, shaping most if not all public policies of the developing world. In the rural water sector, CBM became an outcome of these notions as a policy option aimed not only at empowering users of public services in decision making, but also fundamentally as a cost reduction and/or public management efficiency project. In this chapter, these notions, concepts and development paradigms are examined mainly based on the wide debates in the theoretical and empirical literature. The aim throughout the discussion in the chapter is to distil pessimistic, optimistic or cautious views and opinions generated around these notions, paradigms and concepts and their implications on policies oriented towards community-managed models of service delivery. The chapter is divided into two parts; Part One examines in detail, the dominant development paradigms and theoretical foundations that have shaped policies around CBM. It also examines the literature on the concept of ‘an enabling local authority’ and the concept’s applicability in informing this study. Part Two examines the literature on the conceptual relationship between community based management (CBM) [also used interchangeably as community management (CM)] and community participation (CP). It then goes on to examine the literature on related empirical studies on CM and functional sustainability of water supply systems.

PART ONE

From a Bureaucratic and Welfare State to a Neoliberal State

Community-Based Management is a concept well positioned within the post-weberian approaches to governance in which the conventional systems for governing have become outmoded means of public service delivery. Until the early 1980s, production and delivery of basic services in most of sub-Saharan Africa was largely a domain of the state through its bureaus and directly to service beneficiaries (Awortwi and Helmsing 2008). The form in which the state was organised to deliver basic services was typical of Max Weber's ideals of what constituted an 'effective organisation' (Udy Jr 1959). Critics of the Weberian model of service delivery, or 'statism' viewed it as an undesirable and non-viable form of administration developed and applied in a legalistic and authoritarian context of society, and now, inevitably withering away due to its incompatibility with the contemporary complex, individualistic, and dynamic society (Ionescu 2011a, Olsen 2006). However, inherent as there may be weaknesses in the weberian model, some scholars (see for instance, Fine 1999, Stazyk and Goerdel 2011, Olsen 2006) have argued against emphasis of these weaknesses over the strengths, pointing out that even within the post-weberian liberal and neo-liberal schools of thought, Weber's principles remain a strong pillar of reference for those wishing to leverage organisational and managerial efficiency in doing business (Fine 1999), and that it may be time to rediscover Weber's bureaucracy (Olsen 2006), and understand how a number of other factors could influence organisational efficiency (Stazyk and Goerdel 2011 p.646).

Both orthodox and contemporary perspectives of the state as the prime actor in service delivery are traced in the popular conceptions of a 'welfare' or 'benevolent' state. Inspired by Richard Titmuss's work; 'essays on the welfare state' (Titmuss and Abel-Smith 1976), much of the social policy literature often refers to a 'welfare state' as an ideal model of service delivery in which the state is the sole actor, having responsibility for the production and delivery of comprehensive and universal welfare services for its citizens (Almog-Bar and Ajzenstadt 2010, Trydegård and Thorslund 2010). Barr (1993 p. 13) particularly traces the origin of the concept of the welfare state in the the works of christian charity in the 16th Century Europe but more especially in the 1601 English poor law legislation in Britain and its subsequent amendments in 1834, the liberal

reforms of 1906-1914, and the post world war legislation of 1944-1948. The proposals and their subsequent amendments were all directed at ensuring the well being of the people. Many other countries in Europe, The United States of America, and the colonial regimes in Africa and Asia enacted more or less similar legislations to promote the welfare of their citizens. However, in the early 1980s, there was a major paradigmatic change in the 'welfare state' approach to service delivery with efforts directed more towards reducing the role of the state. Concepts such as 'withdrawing the state', 'unbundling the state' or 'liberalisation' became drivers of major policy prescriptions spearheaded by The World Bank and The International Monetary Fund (IMF). Consequently, these changes have led to the emergence and popularisation of a new set of actors, in what has been viewed as the *third sector*. Concepts and practices such as 'community management' (CM), also understood as community 'self help' or 'cost sharing' have become part of contemporary public policy and quite alien to practices in the welfare state. However, complete withdrawal of states from direct service delivery continues to be complex as states must account to their electorate, as well as adhere to human rights standards and policy practices. But this has had to vary by country or region. In this study, I explore complexities surrounding community-managed public service facilities in the rural water sector in Uganda not only to further the understanding of implications of a withdrawn state on public service delivery, but also to expand the understanding of contextual dynamics that influence the ability of states in executing their new roles, particularly in young and resource poor democracies of sub-Saharan Africa.

As an outcome of the redefinition of the state, the concepts of 'failed state' or 'collapsed state' have also emerged in reference to institutional (*organisational*) or functional (*welfare or service provision*) failure of states. However, questions of what constitutes a modern state or the benchmarks of 'stateness' also remain almost unresolved, as economic, political and social contexts and systems of independent states tend to vary significantly (Hagman and Hoehne 2009, Milliken and Krause 2002). While economists view state failure mainly in terms of economic welfare variables of production and distribution of goods and services, political scientists define it more in terms of the political legitimacy and leadership capacity within a state (Hagman and Hoehne 2009). Despite this conceptual difference, both views can be regarded as mutually inter-related particularly when analysing their potential to impact on public service delivery such as in the current debates on how best to deliver rural safe water on a sustainable basis, and whether

CBM provides the ‘silver bullet’ for sustainability of services. The view of political scientists seems to reinforce arguments that even if there is financial resource abundance, poor leadership would definitely impact negatively on policies that appear to be empowering and participatory as is for instance reflected in CBM models of safe water service delivery, which seem to depend almost entirely on effective leadership at the micro and meso levels. Similarly, illegitimate leadership may only be pre-occupied with ‘self protection’ rather than institution building, thereby becoming injurious to the attainment of CBM goals.

In exceptional cases, Milken and Kraus argue that it is possible to have a politically failing state with some of its institutions persisting to function effectively. They cite the example of the 1994 Genocide in Rwanda where militia groups were so organised despite the fact that they were operating in a ‘politically failing’ state (2002 p. 757). However, as Cooper observes, Milken and Kraus do not seem to adequately acknowledge the fact that such persisting institutions of failing states survive on the prevailing political and economic bewilderment to serve their own selfish interests no matter whether they are private or public institutions (Cooper 2002). The post-‘September Eleven’ terrorist attack on the USA has also brought a new dimension in the understanding of ‘failed states’, particularly in as far as ‘global security’ is concerned. A ‘strong’ state is currently not only seen as one that is able to regulate markets or promote the independence of the economy, but also one that is not a ‘haven for global terrorist activities’ or one that directly supports anti-terrorist activities. Indeed, it can be argued that a lot of resources that would otherwise be directed to support the delivery of basic public services such as water and sanitation in developing countries are channelled towards anti-terrorism activities. Whether it is for purposes of human security, human rights, or the right economics, the more contemporary understanding of a strong state, as Hilgers indicates, remains largely one that offers a precondition for neoliberalism to deploy its moral responsibility in regulating regulate competitions that emerge out of spontaneous markets, or price instabilities that among others often characterise neoliberal regimes (Hilgers 2012).

While the concept of the welfare state is on one hand viewed as a sound measure for the redistribution of wealth particularly through taxation and the use of tax revenue to support the poor and propell the goals of social justice (Sejersted 2011, Emre Özçelik and Eyüp Özveren 2006), it has on the other hand been viewed as a capitalist conspiracy or strategy to contain social unrest

(Mubangizi and Mel Gray 2013, Ferragina and Seeleib-Kaiser (2011). Hence, the role of the welfare state in redistributive justice cannot be understated, nor should it be over-exaggerated (Batić 2011). Barr (1993 p. 103) argues that apart from its distributional objectives, the welfare state has a major efficiency role. The original principles or ideals of a welfare state may have changed as a result of the global policy shifts, but nation states remain responsible for guaranteeing the necessary service delivery effectiveness in their 'new governance' role. The use of the concept of 'welfare state' therefore remains relevant given the positions and service delivery responsibilities states hold over the well-being of their citizens. Therefore, it does not seem to matter whether public goods and services are provided directly through state institutions, indirectly through regulated market mechanisms or in partnerships of service providers and consumers as is prescribed in CBM. What matters is for the states to consciously enable systems meant to impact on effective and sustainable service delivery. But how best are they doing this, especially in sub-Saharan Africa? What can the study of policy prescribed CBM systems for rural safe water service delivery in Uganda contribute to this understanding?

Despite the fact that the conceptual analysis of 'welfare state' and 'state failure' based on the evidence of the bureaucratic inefficiencies of a benevolent state producing and delivering public goods and services to her citizenry, debates are still going on about the inevitability of 'statism in the contemporary world, as markets have also failed to deliver social equity and social justice (Jänicke 1990 p.31). In line with this argument, The World Development Report (1997) puts it as follows:

Certainly, state dominated development has failed. But so has stateless development—a message that comes through too clearly in the agonies of people in collapsed states as Liberia and Somalia. History has repeatedly shown that good government is not a luxury but a vital necessity. Without an effective state, sustainable development, both economic and social, is impossible (The World Bank 1997 p.ii).

Hence, the introduction and popularisation of concepts such as new public management (NPM), governance and good governance, which are explored later in this Chapter, is partly an experience of the negative consequences of the 'paradigm shift' from direct service delivery by the state, and whose impact has been felt more in the developing countries of sub-Saharan Africa than in its Anglo-American architects. Governments and states are increasingly getting weak to

‘steer’ or ‘row’, i.e. make policy and implement directly or enable other actors to deliver public services but are experiencing possibilities of ‘drifting’, ‘sinking’ or total failure to perform the legitimate mandates they owe to their citizens (Peters 2011 p. 5-11). As Hilgers observes, the legitimacy of the state depends on economic growth, which is determined by the ability of the state to shape a framework within which individuals are free to pursue their individual interests. This freedom, in a world of competition should lead to the recreation and rebuilding of the state itself. The re-engineering of the state appears clearly in neoliberal theory as a step necessary for triggering the modification of subjectivities and social relations, and for making them correspond to the underlying principles of spontaneous markets that emerge in neoliberal frameworks (Hilgers 2012 p. 81-82). Therefore, competition and maximisation become the organising principles of the state. But they also require close supervision and deliberate monitoring to regulate their potential excesses on the wider economy.

While it is obvious that both political and economic dimensions of state failure variously complement each other and collectively impact on the ‘traditional’ or ‘modern’ features and functions of a state, it is also correct to argue that even within states that may be visibly ‘functional’ as is the case with some countries in sub-Saharan Africa (SSA) such as Uganda, ineffective service delivery due to accelerated tendencies towards political patronage and elite capture become clear weaknesses that amount to state failure (Tangri and Mwenda 2008a). Recent studies (Green 2010a, Green 2011) have indeed shown that political patronage is on the increase in SSA, and has been amplified by corruption tendencies engineered by ‘hurried’ neoliberal policy implementation (Hilgers 2012, Mwenda and Tangri 2005a, Tangri and Mwenda 2006a). Consequently, failure to support effective public policy implementation such as ensuring that CBM systems prescribed in a national water policy become effective and sustainable can be conceived as an aspect of state failure. Paradoxically, the water policy design and implementation framework in Uganda is also conceived within the NPM and governance frameworks which are conceptually meant to address state and market failures.

The Hegemonic Influence of Neoliberalism on Public Policy Directions in Developing Contexts

As pointed out in Chapter One, rural water policy prescriptions around CBM of rural safe water service delivery are rooted in the neoliberal policy influence of the 1980s especially in developing countries in sub-Saharan Africa, Asia and Latin America. The creation of international institutions, i.e. the International Monetary Fund (IMF), the International Bank for Reconstruction (The World Bank) and the Bretton Woods agreements were the cornerstones that made neoliberalism an official economic and political gimmick of the early 1980s, particularly ‘directed’ to southern governments affected by the debt crisis of the 1970s. An acceptance of neoliberalism became a pre-condition for aid (Hossen and Westhues 2012, Ammani 2012) to countries whose economies were perceived as backward, stagnant, unbalanced or dysfunctional (Hugon 2001, as cited in, Hilgers 2012 p. 83). Founded in classic economic theory, neoliberalism aims at enhancing economic efficiency by reducing the influence of states on key economic decisions of their countries. It is also deeply rooted in the works of Adam Smith, who in 1776 in *The Wealth of Nations* postulated that by nature, human beings are self-interested, and that because of this, only the *invisible hand* i.e. the *market mechanism* would help to transform individual self-interest into a *common good*. He advocated for policies which govern least as the best prescription for the growth of the wealth of nations. His theorisation came nearly two and a half century ago, and just the second year into the industrial revolution in Europe, but until today, it remains highly influential in development theory and practices related to private sector participation in the delivery of public services (see Laffont and Martimort 2002). Influential economic and (public) administrative policy paradigms such as privatisation, public private partnerships or contracting out may sound new, but as scholars have argued, they are in fact, *old wine in new glasses* (Sebahattin Gültekin 2011, Page 2005).

Neoliberalism is a set of economic policies that emphasise ‘freeing the state’ by allowing the market mechanisms to influence the movement of goods and services. Most countries in Africa (including Uganda) became what Hilgers has called ‘radical testing ground’ for neoliberal policies (Hilgers 2012 p. 83). The first phase of the neoliberal policy implementation in most of sub-Saharan Africa and Uganda began in the 1980s. These mainly constituted adjustment policies directed on the economy such as privatisation, reduction of state expenditure through

removal of subsidies in health and education, reduction of the size of the civil service and removal of trade barriers among others. The second phase started in the 1990s and entailed democratisation policies or political adjustments. Under this second phase, policies such as deconcentration, vertical or inter-governmental decentralisation and horizontal decentralisation to the market, civil society and to the community were promoted particularly to correct drawbacks inherent in the economic structural adjustment policies and programmes introduced in 1980s (Conyers 1983). As chapter two has indicated, these are well reflected in the Uganda's institutional framework for rural water supply. The private sector and the community are key actors in the sector playing different but related roles with the public sector actors in a decentralised service delivery arrangement.

Neoliberalism is also seen as not just existing within states, but as a process that transcends the economic and political borders of nation states due to increasing globalisation and *anti-statism* (Moore 1999). It aimed initially at getting the prices right, but when this did not effectively play the transformative role, emphasis was shifted to ensuring that the institutional and legal frameworks work to facilitate a capitalist society to thrive (Moore 1999 p. 66). It is indeed not uncommon to hear of complaints from the public related to private sector exploitation, either in form of poor execution of contracts in infrastructure development or delayed response to calls for repair of a damaged utility infrastructure such as point-water source infrastructure for the rural water users (Harvey and Reed 2007). Waves of anti-neoliberalism in the 1990s in Latin America provided early examples as to how apart from being un-welcome to the ordinary citizen, these new policy directions could result into severe leadership consequences and political changes from organised groups (Munck 2003). This is possibly part of the explanation as to why CBM is relatively more successful in enhancing functional sustainability of water infrastructure in Latin America than it is in sub-Saharan Africa (Lockwood and Smits Stef 2011). Although similar anti-neoliberalism voices exist in sub-Saharan Africa and Uganda in particular, organised groups are still heavily challenged by the unique political and social dynamics characterised by a large majority rural semi-illiterate and poorly mobilised peasant population. In essence, neoliberal ideas may be good, but they are only so to the extent that they are implemented with the sole purpose of ensuring that they yield tangible benefits for the different categories of citizens in developing country contexts. This study questions whether the rural water policy implementation

and practice environment in Uganda is supportive of CBM and the latter's proven potential for functional sustainability of safe water supply facilities in rural areas. Without necessarily divorcing completely from the neoliberal policy framework, the study advocates for new and contextually relevant models of benevolence amidst the hegemonic presence of the neoliberal policy prescriptions that inevitably continue to face democratic states of the south.

In sub-Saharan Africa, both the first and second phase of the neoliberal policies have brought more development challenges than they meant to solve (Kakumba and Nsingo 2008, Hossen and Westhues 2012, Ammani 2012, Basheka 2011, Green 2008a, Green 2010b, Mwenda and Tangri 2005a, Tangri and Mwenda 2001). In the first decade of the 21st century, promoters of neoliberalism saw that believing in the independence of the economy was the major mistake of liberalism and a major cause of economic collapse. While it is incorrect to admit that market distortions are nearly/totally absent elsewhere in the world, studies on sub-Saharan Africa continue to generate evidence of limited state capacity to play an effective regulatory role. This is not just in terms of the lack of technical and financial resources, but largely because of the failure to deploy the right political will (Basheka 2011, Green 2008a). This lack of political will easily manifests at all levels of government but is seemingly more pernicious when it happens at the macro level. As Hilgers observes, given that in post-colonial Africa access to dominant positions in government is almost a precondition for access to positions where it is possible to accumulate wealth, the neoliberal policies have largely served to keep elite classes in power and to entrench political patronage (Hilgers 2012 p.84).

In much of the literature on economic reforms of the 1980s and 1990s in Africa, the main consensus is that the policies themselves were not necessarily bad, but only face dynamic challenges at implementation. In particular, tendencies associated with *rent seeking* and *elite capture* become easily accommodated in the systems (Awortwi 2003, Mwenda and Tangri 2005a, Kakumba and Nsingo 2008, Krutz 2006a, Green 2010c). Uganda even presents a unique context of the neoliberal policy implementation. The country had no option but to begin implementation of neoliberal policies when it was just emerging from long period of civil strife against two consecutive dictatorships led separately by Iddi Amin (1972-1979) and Milton Obote II (1980-1985). Initially it was difficult for President Museveni's newly formed government in

1986 to adopt policies that were incongruous with his ‘bush-war’ pro-poor and highly ‘socialist’ philosophies. However, the need to forge ‘alliance’ with donors in order to solicit their support for macro-economic stability and post-war reconstruction Uganda needed at the time, it became inevitable for the regime to accept the neoliberal policy principles that in the short and long-run appeared ‘conflictual’ with the ideals of the rebel movement (Craig and Porter 2006).

From the foregoing, two important points are worth noting: (i) production and delivery of basic goods and services was until the early 1980s a traditional responsibility of the state (ii) even if the the state eventually allowed the market mechanism to direct the production and distribution of goods and services, the overall responsibility for ensuring market efficiency has remained a primary function of the state. It is these two points, and particularly the latter, that largely inform the basis of this study. An understanding of the extent to which a government in sub-Saharan Africa is playing its public service delivery mandate amidst the broad economic and political reform agenda initiated largely from the north and ‘enthusiastically’ welcomed by southern governments continues to be imperative. It is now about three decades when the neoliberal policies became the face of political and economic reforms in Africa and many parts of the developing world. There may be islands of success in terms of efficiency and reliability of public service delivery (Kakouris and Meliou 2011) as there may be optimists about neoliberalism (Larner 2005). But, on the whole, much of the literature (see for instance, Hilgers 2012, Kay 1993, Oliver Marc Hartwich 2009, Moore 1999, Mwenda and Tangri 2005a) converges towards a common consensus that the hitherto ‘glorified’ neoliberal policy prescriptions of The World Bank and IMF have failed to deliver debt ridden countries of the South into the ‘promised land’.

The New Public Management (NPM) and Governance Agenda

Consequent to the problems manifested in neoliberalism, the NPM and governance agenda is now seen as a better alternative in re-directing action to the attainment of ‘real’ public goals (Hood 199, Osborne 1993). But are these helping to provide the answers to the many complex and dynamic contexts in sub-Saharan Africa and Uganda in particular? In theoretical orientation, NPM deviates from classical mamangement approaches typical of the Weberian bureaucratic and hierarchical models. It is oriented towards outcomes and efficiency through better management

of the public budget applying ‘competition’ to organizations in the public sector. At its core, it emphasises business-like principles of customer service, efficiency in production and distribution of goods and services, competition and output oriented management (Akif Ozer and Yayman 2011a, Hood 1991). NPM emphasises sound economic and leadership principles, just as it is popular in the private sector, and addresses beneficiaries of public services more like customers, and conversely citizens as shareholders in the public enterprises (Batley 1999, Hood 1991). According to Akif Ozer and Yayman (2011 p. 357), it responds to the growing demand for a change from hierarchical governance to more horizontal and participatory governance dynamics that substantially eliminate red tape, holding administrators accountable for measurable results, emphasizing customer satisfaction in agency dealings with the public, empower front-line managers to make their own decisions and contracting out whenever possible with the private sector for public-service delivery. In sum, the basic hypothesis of NPM holds that the market oriented and business-like management of the public sector will lead to greater cost-efficiency for governments, without having negative side-effects on other public sector objective (Leach and Barnett 1997, Pollitt and Bouckaert 2011). Hood viewed NPM as a hybrid ‘marriage of two different streams of ideas’ namely, (i) the new institutional economics built on the post World War II development of public choice, transactions theory, and principal-agent theory, and (ii) the latest of a set of successive waves of business-type managerialism in the public sector requiring high discretionary power to achieve results’ (Hood 1991 p. 5-6). NPM seeks to reinvent government by breaking its hitherto stiff bureaucratic configurations and opening them up for transparency, accountability and good governance (Kooiman 1993, Mayntz 2003, Graham, Amos and Plumpre 2003). Thus, the use of terms such as ‘value for money’, ‘doing more with less’ and the ‘consumer as customer’ will be found in the literature on NPM (Hood 1991, Kakouris and Meliou 2011). At its core, NPM emphasises business-like principles of customer service, efficiency in production and distribution of goods and services, competition and output oriented management (Akif Ozer and Yayman 2011a, Hood 1991). The water sector reforms in Uganda embraced all of these aspects as reflected in the institutional framework elaborated in chapter two. Intergovernmental relations between the central government and the district local governments and sub-counties have for the past two decades existed along with the private and voluntary water sector actors. However, these have until now inadequately provided solutions to problems equity and sustainable access to rural safe water service delivery.

Governance as a concept has evolved from its orthodox meaning i.e., ‘the act or process of government’, to the more participatory and consultative approach to governance, now embedded in the NPM debates on reinventing government (Akif Ozer and Yayman 2011a, Denhardt and Denhardt 2000, Krebs and Pelissero 2006, Osborne 1993). In the context of Max Weber’s ideal type of bureaucratic framework, and according to the Anglo-American political theory, ‘government’ refers to the ‘formal institutions of the state and their monopoly of legitimate coercive power’ (Stoker 1998 p.17). Hence, government is not synonymous with governance, and the confusion of terms can have unfortunate consequences because governments thrive on bureaucracies that are not a welcome idea in the new governance framework (Graham, Amos and Plumptre 2003 p. 1).

The attempt to trace the origin of the concept of governance traces it as far back as the 16th century in Northern Europe (Akif Ozer and Yayman 2011a p.85). However, most literature concurs to the fact that the concept became popular in the 1990s following the 1989 World Bank Report¹⁴ on ‘*Sub-Saharan Africa-From Crisis to Sustainable Development*’. It provided the definition of the ‘new’ governance as ‘the exercise of political power to manage a nation’s affairs’ (The World Bank 1989 p.61). Two years later, the Bank developed the concept further by adding the ‘development’ nuance; ‘the manner in which power is exercised in the management of a country’s economic and social resources for development’ (The World Bank 1991 p. 1). Further, in its 1994 publication on ‘*Governance-The World Bank Experiences*’, major features and measurements of governance were stressed thus: ‘good governance is epitomized by predictable, open, and enlightened policy-making (i.e. transparent processes); a bureaucracy imbued with a professional ethos; an executive arm of government accountable for its actions; and a strong civil society participating in public affairs; and all behaving under the rule of law’(The World Bank 1994 p.vii). Public sector management, i.e., ‘the capacity of governments to make and implement public policy, the effectiveness of public programmes, and the strengths of public institutions’ was also highlighted by the report as the most visible of all the other dimensions of governance (The World Bank 1994 p.1). Henceforth, the concept of governance,

¹⁴ The report was an outcome of a study intended to understand why in the 1980s, the economic performance of Sub-Saharan African countries had worsened despite the implementation of the Bank’s structural adjustment programs (SAP’s)

and increasingly ‘good governance’ has infiltrated national and international development and academic discourses largely as subjects relating to the broad mechanisms by which humanity is served not only within and across national government institutions, but also globally, involving both for-profit and not-for-profit agencies (Akif Ozer and Yayman 2011a). Critical emphasis is placed on the array of socio-economic and political factors that mediate processes of governance and service delivery as reflected in the following:

‘Governance has to do with the institutional environment in which citizens interact among themselves and with government agencies/officials. The capacity of this institutional environment is important for development because it helps determine the impact achieved by the economic policies adopted by the government. Hence, this capacity, and the governance quality it reflects, is a vital concern for all governments’ (ADB 1999 p.v).

Within the academic discourse, debates not only expand perspectives about governance as a concept but also examine its applicability and relationship with other development paradigms of the 1980s i.e. neoliberalism, new public management, democratisation and participation (Graham, Amos and Plumptre 2003). Some debates are pessimistic about the originality of the concept, while indeed, others align together on the role of the World Bank in its promotion. Rogers (2006) has argued in fact, that the popularisation and embracing of the concept of governance and its subsequent integration in discussions of bilateral agencies and among the NGO community is merely re-naming or branding a concern that goes way back in time for most agencies, giving it just a new look. He argues further that what seems to have given the concept greater impetus is the realization that development challenges and problems are not simply the lack of capital but rather a complex set of factors whose solutions are embedded in governance (Rogers 2006 p.16).

Governance has also been applied in the analysis or understanding of international trends in which decisions or actions in one locality are said to have increasingly been able to transcend national boundaries and influence decisions elsewhere in what Ohmae has written extensively about in his books around the *borderless world* (Ohmae 1990) or *the end of the nation state* (Ohmae 1995). Consequently networks between nation states or international agencies that have been seen to emerge in collaborative arrangements to tackle global economic, political and social policy issues have been regarded as an ‘inevitable alternative to the lack of a global government’

(Akif Ozer and Yayman 2011a p.88). Indeed, as elaborated in Chapter One, various international events have significantly shaped debates on CBM as a service delivery and sustainability model for rural safe water supply. The symposium organised jointly by the UNDP-World Bank and USAID-WASH programmes in Washington in December 1998 is one of such events. It for instance provided a definition of CBM emphasising the need for actors to prioritise building the capacity of water users to assume a leading role in financing and management of new water supplies (McCommon, Warner and Yohalem 1988). However, while global interconnectedness is inevitable, nation states and their institutions ought to be astute enough to ensure that their visions, priorities and targets are not compromised by distant contexts. At the minimum, they must ensure context specific ‘global’ policy adaptation. They also ought to monitor and where necessary mitigate the effect and consequence of local policies inclined to international paradigms. Achieving this in the rural water sectors of sub-Saharan African countries would be one sure way to build an enabling and sustainable water policy and implementation framework. But how is this happening? How do government institutions and structures consciously prioritise service delivery models such as CBM that call for their direct support in enhancing the capacity of communities (service users) to manage sustain service infrastructure?

Governance, Networks and Public Private Partnerships (PPPs)

Governance is viewed as ‘the development of governing styles in which boundaries between development actors have become blurred’ (Stoker 1998 p.17, Akif Ozer and Yayman 2011a). This view presupposes that development actors intimately work with one another, while underscoring the importance of networks in planning, implementation and monitoring activities for efficient and optimum results. But networks are also known to be prone to unhelpful conflicts and may be vulnerable to evasion of downward and social accountability by some of their members (Wilikilagi 2009). Indeed, Ewalt (2001 p. 9) observes that ‘blurring of responsibilities can lead to blame avoidance or scapegoating’. This tendency challenges the very reason networks are advocated as enablers of effective service delivery. In addition to blurring of boundaries and responsibilities for tackling social and economic issues, Akif and Yayman (2011) add three more propositions about the concept of governance, namely:

- i. A set of institutions that are drawn from, but also beyond government;

- ii. Governance breeding power dependence in collective action;
- iii. The capacity to get things done without dependence on the power of government to command or use its authority.

While dependence on the power of government to get things done is no longer viewed as an obstacle, contemporary governance frameworks and philosophies directly and indirectly depend on the power and influence of governments. Indeed, Stoker (1998) views government as able to use new tools and techniques to steer and guide other development actors within its jurisdiction (Stoker 1998 p.18). It is thus imperative to assess the extent to which government and her institutions are able to play an effective role that fits in the contemporary understanding of governance. In the context of this study, the multiplicity of public, private and voluntary actors in the rural safe water supply sub-sector, and how their actions impact on CBM and sustainable service delivery is assumed to depend on how central and local governments play their steering role. The steering role in this case is in regard to policy management. How committed is government in guiding the rural safe water actors to adhere to the goals of community management? How effective are local authorities in ensuring that community bye-laws, which are crucial for community organisation, collective behaviour including compliance to operation and maintenance of water facilities are put to work?

The new governance discourse also embeds public private partnerships (PPPs), which in the NPM paradigm or public governance relates to governments 'serving rather than steering' (Denhardt and Denhardt 2000 p.549), 'governance without government' (Peters and Pierre 1998 p.223) or a move within public service delivery from 'competition to collaboration' (Entwistle and Martin 2005 p.234). While a flexible government willing to collaborate and network with other actors rather than steering is advocated in NPM or public governance, the complex relationships that result also inevitably need a strong organisation. More so, the complex relationships need a 'strong' public sector that does not control but rather, one that 'influences' the activities of others (Peters 2011 p.223). To emphasise the complexity of networks in public governance, Kickert (1997) notes that 'the confusion in understanding governance offers a type of governance neither at a central level nor at the lowest level (Kickert 1997, cited in, Akif Ozer and Yayman 2011a p.89). Graham, Amos and Plumptre (2003) also observe that 'a public policy issue where the heart of the matter is a problem of 'governance' becomes defined implicitly as a

problem of ‘government’, with the corollary that the onus for fixing it necessarily remains with government.

Referring to PPPs between public and the business sector, Heilman and Johnson defined PPPs as ‘the combination of a public need with private capability and resources to create a market opportunity through which the public need is met and a profit is made’ (Heilman and Johnson 1992 p. 197). Hence, in the new governance framework, PPPs allow for a combination of government resources and those of the *private-for-profit* agents or *not-for-profit* bodies to deliver societal goals (Skelcher 2005). In his study on local government-non-profit sector partnerships in Uganda, Muhangi (2009 p. vi) noted that ‘the most extensive use of the term partnership is that which equates it to a ‘collective response’ or a ‘generalised relationship’ open to all actors to work together in a variety of collaborative forms with varying degrees of formality towards some shared goals’.

The rural water sector in Uganda has mainly witnessed PPPs in form of contracting out to the private for-profit sector and strategic partnering with the NGO/voluntary sector. Broadly, contracting out or tendering involves separating the service provider from the service purchaser while maintaining a relationship on contract management/monitoring (Skelcher 2005, Savas 1981). Central or local governments hire private firms or individuals to carry out specified tasks such as repair of water systems or trainings for capacity building for a period of time, based on the national legal framework. The public authority remains the sole provider of the service but pays the provider for the service under the conditions stipulated in the contract agreement. Service agreements may be between local authorities and mechanics and plumbers to undertake routine maintenance or major repairs of water systems in rural areas. But are these relationships always well managed to ensure that high efficiency levels are maintained for the sector and CBM in particular?

Perhaps Skelcher’s (2005) ‘typology’ of public-private actions or partnerships may provide a useful alternative for PPP arrangements. He identifies two forms of PPPs, namely *public leverage* and *strategic partnering* for risk sharing between public and private agents, that may not necessarily be business oriented, and where partnerships between public institutions and the

non-profit sector could be located. *Public leverage* as a form of PPP occurs when governments use their legal and financial resources to create conditions they believe will be conducive to economic activity and growth (Skelcher 2005 p. 351). Governments may also directly encourage or induce private sector actor decision makers to align their plans and developments with public policy goals. Inducements could be in form of infrastructure improvements, business development and support services or financial incentives targeting the private sector. Apart from targeting the business community, public leverage also targets the non-profit or voluntary sector to participate in the production and delivery of public services. In Uganda's water sector, such inducements may be seen to include supporting CBM teams e.g. the WSCs or private hand pump mechanics in form of trainings to enhance their effectiveness. However, Skelcher (2005) warns of the danger of over-supply of government inducements especially to the private sector particularly if there is a weak system of monitoring and regulation. *Strategic partnering* on the other hand, according to Skelcher (2005), stresses an open-ended nature of partnering between the public and private for-profit or private not-for profit agents with full sharing of risks and rewards. Unlike in contracting out where legal and contractual agreements bind public and private actors on a purchaser-provider principle, in strategic partnering, trust based relationships cement a collaborative endeavour between the organisations. However, there may be dangers of the government failing to adjust to this form of working because of its traditional style based on institutional bureaucratic norms (Skelcher 2005 p. 358). Could these caveats raised on strategic partnering and public leverage constitute some of the issues that disable the effectiveness of CBM models of service delivery in Uganda's context? In the current policy and institutional frameworks based on the NPM and governance agenda, the effectiveness of partnerships and relationships between government and non-state actors remains very crucial for the performance of CBM.

Conceptions about 'Good Governance' in Public Service Delivery

The call for 'good governance' is mainly associated with the failure by third world countries to improve economically despite the implementation of Structural Adjustment Programmes [(SAPs) (Akif Ozer and Yayman 2011a, Hilgers 2012)]. The 1989 World Bank report of a study on sub-Saharan Africa pointed out *bad governance* practices in the region as having primarily

caused economic stagnation, leading to a compelling need to establish ‘good public administration criteria’ (Akif Ozer and Yayman 2011a p.89). There are rather conflicting ideas in both academic and development literature about what constitutes good governance, with a remarkable convergence towards what the UNDP (1997) and (2012) outlines as the principles of good governance. Based on the literature, good governance is characterised as participatory, consensus oriented, accountable, transparent, responsive, effective and efficient, equitable and inclusive and follows the rule of law. It promises that corruption is minimized, the views of the minorities are taken into account and that the voices of the most vulnerable in society are heard in decision-making (UNESCAP 2012 p.307). Thus, while the conventional meaning of governance maintains some degree of relevance, it has to a large extent given way to the much more broader and non-hierarchical meaning encompassing how public, private *for-profit*, and *not-for-profit* sectors are managed, and whether and how they seek to learn from decision implementation experiences (Kooiman 1993, Mayntz 2003). However, while emphasizing governance effectiveness in promoting equity, the UN-Water (2003) also identified integration and ethics as separate principles. It underscored holistic development approaches and the differences/variations in needs across the different socio-economic groups and contexts as critical for effective/good governance (UN-Water 2003).

In her recent study on the use of the concept among development aid donor agencies¹⁵, Van Doeveren’s (2011) also identifies five commonly shared principles of good governance, namely accountability, effectiveness and efficiency, openness/transparency, participation, and the rule of law. Earlier Graham, Amos and Plumptre (2003) also clustered good governance principles into five broad categories including; legitimacy and voice, direction, performance, accountability and fairness¹⁶. On the whole, these have been the fundamental principles on which most community managed public projects are based, including the management of point-water facilities this study is focused at. These conceptions and meanings of ‘good governance’ may have a strong convergence, but Van Doeveren’s (2011) warns against treating the concept of good governance as a *one-best-way* development strategy. She notes that the presence of common characteristics of good governance may imply a shared meaning of good governance that could easily mask the

¹⁵ The European Union, The Organisation for Economic Cooperation and Development (OECD), The World Bank and The United Nations

¹⁶ See Annex II for detailed definitions of these principles.

variations in application of the concept, pointing to the need for a clear consensus among both academicians and development agencies on its meaning and principles. According to her, much consideration should be given to defining the components of good governance, identifying the possible interactions between their components, specifying their optimal values, and paying attention to outcomes (van Doeveren 2011 p.311).

There is also growing literature around the concept of ‘water governance’, but there is not as yet a very clear meaning of the concept. Water governance as a concept is used in the water sector, partly as an extension of the orthodox meaning of governance, but more towards the good governance framework that emphasises networks made of actors in the private, voluntary (including the community) and public sectors. Most literature on water governance cites the definition developed by Rogers in his work with the Global Water Partnership (GWP). He defines water governance as *‘the range of political, social, economic and administrative systems that are in place to develop and manage water resources and the delivery of water services at different levels of society’* (Rogers 2006 p.16). The definition builds on the general ideas about governance as comprising a range of systems including those of government and the public services provided by other sections of society (Franks and Cleaver 2007). Further, it recognises that these systems relate and link to each other through inevitable political processes pertinent to managing natural resources such as water (Franks 2004, Franks and Cleaver 2007), and ‘suggests a range of outcomes (‘water resources’ as well as ‘water services’), which go far beyond the management functions of individual organisations or groups. Its reference to different levels of society implies recognition that outcomes may be different at different levels and that, for example, the poor may need special consideration while working out governance systems (Franks and Cleaver 2007 p.292). This definition is quite useful in the analysis of relationships between different rural safe supply water actors at the *meso*, *micro* and *macro* levels of the water policy implementation, and how these impact on community management.

One of the core issues in the water sector performance debate has been that governance weaknesses particularly in the sector policy implementation largely contribute to the current global, national or locality specific water problems (Grigg 2011, Jiménez and Pérez-Foguet 2010, Jones 2011a, Cleaver and Hamada 2010). Consequently, most countries including Uganda

have embraced policy and institutional frameworks for water resource development and management that emphasise multi-stakeholder participation and more decentralised planning and management, partly ‘because of the pressure from flows of resources and services across international boundaries’ (Franks and Cleaver 2007 p.294) to meet the global water targets. The dominant assumption has been that the ‘new’ approaches bring about opportunities for sustainable supply and utilisation of scarce water resources (Montgomery, Bartram and Elimelech 2009, McCommon, Warner and Yohalem 1990, Harvey and Reed 2007, Carter and Rwamwanja 2006).

Decentralisation, Multi-stakeholder Participation and Service Delivery Efficiency under NPM

Decentralisation, networks and collaborations between and among government and non-governmental agencies are all aspects of the ‘new good governance’ agenda. However, while they call for a more people-centered and results-oriented development and service delivery approach, they are not completely immune from practical and contextual challenges of applicability. As earlier highlighted, global development and service delivery targets in sectors such as water and sanitation remain difficult to meet despite the wide acceptance and application of ‘good governance’ principles. Multi-stakeholder participation in form of inter-governmental and market decentralisation, and decentralisation to the community form part of the wider public sector reform agenda. This reform agenda aims at deliberate changes to the structures and functioning of public sector organisations, with the objective of ‘getting them to run better’ (Pollitt and Bouckaert 2011 p.2). Since the 1980s, administrative reforms have emerged under the banner of NPM or ‘reinventing government’ (Page 2005, Lodge and Gill 2011, LACINA 2011).

For greater efficiency, NPM advocates for greater citizen participation, cross-functional partnerships and networks between government, civil society and profit oriented market institutions (Nguyen 2010, Santizo Rodall and Martin 2009, Page 2005). Its advocates further contend that it offers citizens more public choice and stimulates competition geared towards making the public service highly efficient and consumer oriented (Prokopy 2005, Etemadi 2001). One question that is important for this study relates to how *macro* and *meso*-level institutions of

government and their partners from the private for-profit and not for-profit sectors have succeeded in treating consumers of rural point water facilities (the community) as ‘customers’ or ‘partners’, and how this is reflected in their actions to enable the CBM model of rural safe water supply which is known to guarantee equitable and sustainable access to safe water. Decentralisation, departmentalisation or marketisation as structural adjustments prescribed in NPM may promise greater organisational autonomy in decision making, high efficiency and output levels, but they have partly served to split the hitherto large bureaucracies into smaller, and more fragmented ones (Page 2005, Thompson 2008, Torma 2010). In developing contexts this fragmentation has resulted into competition for scarce resources among public officials and agencies, including sub-national governments (Awortwi, Helmsing and Oyuku-Ocen 2010, Smith, et al. 2003), and between public agencies and private firms (Sebahattin Gültekin 2011). It has also exacerbated public resource mismanagement, largely because of the wider institutional weaknesses characterised by limited political will and more significantly because of greed, elite capture, patronage, and clientelism (Tweheyo and Twinamatsiko 2010 p.110-123). To a large extent therefore, NPM-inspired reforms, in particular, the change from central to territorial administrations has provided greater room for increased, rather than reduced, corruption (Tangri and Mwenda 2008a, Tangri and Mwenda 2006b, Green 2008b). This has been particularly so because of the more contacts spawned between public and private sector actors. It has created new opportunities for bribery and self-gratification (Tweheyo and Twinamatsiko 2010, Tangri and Mwenda 2008b), at the expense of service delivery (Basheka 2011, Awortwi, Helmsing and Oyuku-Ocen 2010, Awortwi and Helmsing 2008). Indeed, much literature has indicated that contrary to the conventional wisdom held within the NPM philosophy, corruption has tended to thrive on the presence of multiple rather than few markets (Kaufmann and Siegelbaum 1997, Hall 1999, Celarier 1997, Wenzel 2007). Some studies in the water sector in Uganda and other Sub-Saharan African countries have indicate that ‘contracts and commerce’ may be more pronounced at the expense of efficiency (Barungi et al. 2003), and the utility services have turned into real commodities (Bond 2004). Hence, the purchaser-provider principle or principle-agent phenomena embedded in NPM and assumed to promote efficiency and effectiveness are questionable here. How are governments and their institutions as regulators positioned to mitigate problems associated with market failure? How is the rural domestic water supply sub-

sector responding to complexities and dynamics in market oriented service delivery in Africa and Uganda in particular?

On a positive note, more debate is emerging to show that NPM/decentralisation could produce greater results with the deployment of innovations such as the use of modern information and communication technologies (Ionescu 2011a, Dunleavy, et al. 2006, Lodge and Gill 2011), more flexible decision making, and a new kind of relationship between the state and the citizens that more deeply promotes downward accountability and citizen empowerment (Cole 2010, Ionescu 2011b, Nyalunga 2006b, Mugumya et al. 2008). Undoubtedly, NPM has been and is still a good planning framework for service delivery. However, if measured against the tempo with which it was introduced in Africa, and in most of the developing world, it has particularly performed poorly in sub-Saharan Africa (Quin, Balfors and Kjellén 2011, Barungi et al. 2003, Awortwi and Helmsing 2008, Quin, Balfors and Kjellén 2011). Where some semblance of contracting out and networking exists, rent seeking and clientelism work to undermine its prospects for greater efficiency in public service delivery (Barungi et al. 2003, Tweheyo and Twinamatsiko 2010, Tangri and Mwenda 2008b) While there may be visible reforms, particularly in the decentralization of water, primary education and health informed by NPM, vertically integrated bureaucratic tendencies still slow down the process (Quin, Balfors and Kjellén 2011, Barungi et al. 2003, Awortwi and Helmsing 2008).

It is important to acknowledge that NPM and its policy prescriptions originated from the part of the world in which social, economic, political and democratic fabrics compared to those of the developing world, provide sufficient ground for NPM effectiveness, and therefore less need for 'tight' implementation of laws and bye-laws at the grassroots. With high levels of access to modern information and communication technologies such as television, radio, and the internet accessed not only with a personal computer but by the multitude of mobile tele-communication devices, it is much simpler to pass on information. In addition, NPM origins have had a long history of effective democracies, and experience high levels of literacy and education. They not only enjoy comparatively high levels of public trust, but also high levels of social, financial, and downward accountability. In the 1980s, Uganda was only about 20 years beyond independence and was for much of the 1970s and early 1980s involved in civil wars. Today, the larger part of

Northern Uganda is only beginning to recover from a more than two-decade insurgency that has caused untold suffering and trauma to the local communities (Ochen 2012). It is these and more country specific contexts that would warrant specific alterations in public management as opposed to assuming that ‘one size can fit all’ or whether NPM is ‘public management for all seasons’ as Hood (1991 p. 4) questions.

In conclusion, advocacy for the creation of sub-national autonomous authorities, privatisation, multi-actor approaches to public service delivery and governance, and the focus on subsidiarity, efficiency and downward accountability through local capacity building may be great NPM proposals. However, results from the implementation of NPM policies have largely been mixed, and more on the downside for developing countries in sub-Saharan Africa (Awortwi and Helmsing 2008, Tangri and Mwenda 2008a, Tangri and Mwenda 2006b, Green 2008b). Subsequently, given that these are still actively being implemented, and sufficient lessons have so far been learnt, the time is ripe enough for governments to re-think innovative ways of enhancing cost effective approaches to service delivery. One of these would be to identify and effectively manage factors that disable effectiveness of community managed public services such as rural safe water. Hence this study examines the extent to which the governance of rural water policies enables the effectiveness of proposals that place operation and maintenance of rural point-water supply infrastructure on the communities. In the NPM and governance framework, it is expected that policy practitioners would ensure that all disablers and threats to policy performance are understood and mitigated.

The Concept of ‘Enablement’ or an Enabling (Local) Government

The concepts ‘enabling government’ or ‘enabling local authority’ are used in literature to emphasise the ‘new role’ of the state (Lund 1994, Smith 1998, Smith 2000, Mulwa 1994, Smith 2000, Wistow, et al. 1992, Muhangi 1996, Masser, Rajabifard and Williamson 2008). However, while the concept became more popular in the 1990s, as an approach to service delivery, it was much earlier already embedded within the professional practice of social work in the early 20th

century in Europe¹⁷. For example, Lund (1992 p.326) traces the ‘enabling’ function of local authorities as far back as the late 19th Century in the United Kingdom in the housing sector when local authorities gave rent subsidies to individual households, and later in 1919 to collective provisioning when arguments for collective provision were supported. But the form taken by the social work model of enablement in the late 19th and early 20th century in Europe differs markedly with the contemporary World Bank and IMF sponsored forms of enablement, which conceived it in the context of government withdrawal from welfare or direct service provision to ‘facilitation’ of other players to deliver public services. What is common in both, however, is that government remains the lead actor responsible for public service delivery either directly or through regulatory and contextually enabling mechanisms.

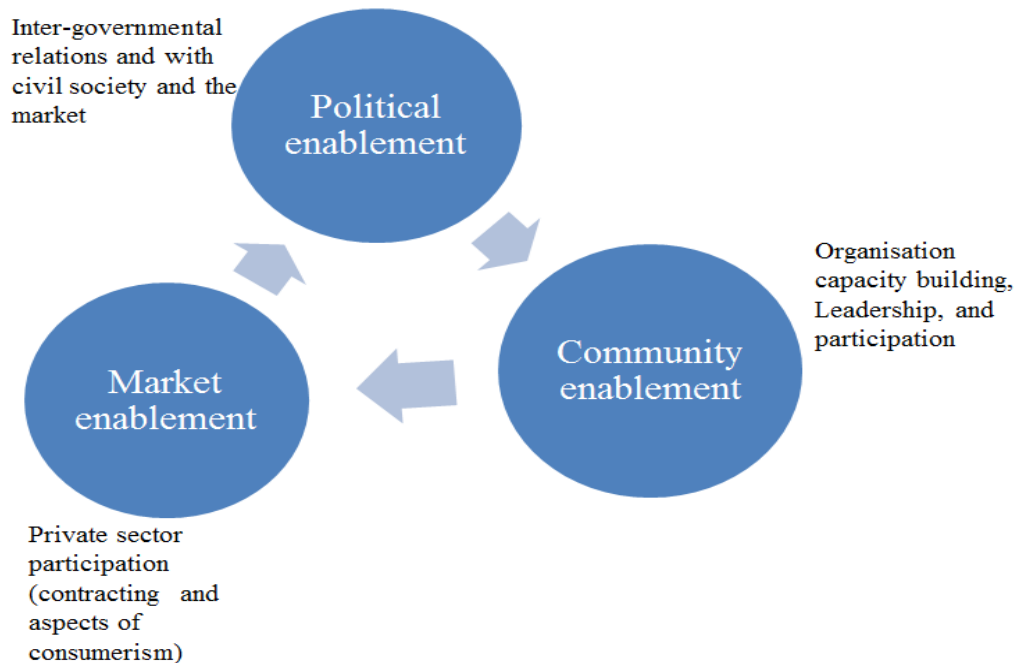
In addition to being enablers, social work professionals in generalist practice ensure that they play the mutually reinforcing service delivery roles as ‘advocates’, ‘brokers’, ‘negotiators or mediators’, and ‘educators’ to individuals, groups and communities (Ambrosino et al. 2011). The generalist perspective assumes interdependence between individuals, groups or communities with their complex environments. It hence advocates that development and policy actors or change agents should have a broad base of knowledge about the functioning of individuals, families, groups, organisations and communities and ways in which these entities reciprocally support or inhibit functioning (Walsh 2009). This study among others held an underlying hypothesis that effective advocacy and negotiation with rural water service authorities and policy makers at the meso and macro levels of rural safe water service delivery can have a strong positive bearing on communities at the micro-level in form of functional water facility management committees, and improved water services. Such advocacy or negotiation would best be undertaken by community representatives or other civil society groups, NGOs or influential individuals. The study thus examines the relationships between public and NGO actors and how these link with communities to enhance their capacity for CBM of the rural point-water supply infrastructure.

¹⁷ The Social Work profession emerged as a response to the many social problems that resulted from the industrial revolution in Europe expanding to America and Canada in the 20th century (See for instance, Hopps and Collins 1995, Ehrenreich 1985).

In the early 1980s enablement as an approach to public service delivery was widened to cut across many sectors. As already mentioned, it was part of the wider neoliberal policy advocacy for a reduced role of the state in territorial administration (Rydin 1998, Wistow, et al. 1992, Smith 2000). This ‘new’ role, as prescribed under the NPM has taken as many shapes and concepts as the activities and service delivery strategies the governments are expected to enable (Smith 2000).

Three different but interrelated categories of enablement are distinguished: (i) Market Enablement, (ii) Political Enablement and, (iii) Community Enablement (Burgess, Carmona and Kolstee 1994, 1997, as cited in, Helmsing 2002). Drawing from the British local government experience in the 1990s, Smith (2000 p.80-91) also enunciates six distinct strands of practices related to an ‘enabling local authority’. He points out such practices as contracting out, consumerism, community planning, community leadership, pluralist collectivism, and community participation as critical interventions to be adhered to by an enabling government. Indeed, as Helmsing rightly points out, Smith’s strands of enablement highly correspond with the three broad categories mentioned earlier (i.e. political, market and community enablement). These strands as they emerge from the NPM and governance perspectives are mutually integrated in shaping service delivery as illustrated in figure 2. These are further elaborated in the subsequent discussion.

Figure 4: An illustrative relationship between the three major strands of enablement in relation to NPM and governance



Source: Author's diagram based on Smith (2000) and Lund (1994)

Market Enablement

Market enablement is ideologically a perspective of the New Right (Jou 2011, Smith 2000). It advocates for the removal (but with 'state regulation') of impediments for private sector participation in the production and delivery of services hitherto directly provided by the state. In his synthesis of the various meanings attached to market enablement, Helmsing points out that market enablement means 'facilitating and promoting the formal and informal business sectors and entrepreneurs to provide market solutions for the production, distribution, and exchange of goods and services. In Smith's (2000) categorisation of enablement, contracting out and consumerism become part of the package of market enablement initiatives. He observes that 'the most familiar form of enabling is that which aims to engage local authorities less in direct provision of services and more in the specification of policy objectives which are met by a variety of external agencies sponsored by or under contract to an authority which concentrates on its planning and coordinating roles'; in effect, an authority specifies a service requirement but purchases the service from another supplier (Smith 2000 p.80). Smith further observes that 'an enabling authority in this context is one that identifies requirements, sets priorities, specifies standards of

service, and finds the best way to meet those standards with the emphasis shifting from ‘a monopoly of service delivery and management to enablement and monitoring (Smith 2000 p. 80).

Based on Smith’s observations, ‘accurate’ specification of the service to be produced and delivered, and ‘accurate’ or ‘correct’ identification of the right service provider(s) using a competitive bidding approach are critical ingredients of an effectively enabled market system. The services must be seen to meet the needs of the ‘customer’ or consumer; this he terms it as *consumerism*. In essence, local or central government authorities ‘are urged to compensate the consumer of public services for the lack of consumer choice by issuing customer contracts specifying standards of service and means of redress, statements of citizens', customers', or clients' rights, and information on performance levels (Smith 2000 p. 83). It is further observed that ‘by removing market obstacles, mobilising resources, and encouraging entrepreneurship skills, and innovation, market enablement would increase the supply of goods and services. It would produce sustainable long-term growth and employment gains, and it would enhance cost effectiveness of delivering services (Burgess, Carmona and Kolstee 1997, in, Helmsing 2002 p. 322). In the context of this study, market enablement is examined in terms of how the private sector functions of actors in the rural safe water supply have been enabled by central or local government authorities to positively impact directly or indirectly on CBM effectiveness and functional sustainability of improved rural point-water facilities.

Political Enablement

Political enablement is part of what has been termed as ‘second generation’ neoliberal policy prescriptions (Hilgers 2012 p.83). It focuses at a ‘transformation in the structure and functions of central and local government, the relations between them, and their relations with the market and the community’ (Helmsing 2002 p.322). Central and local relations mainly take the form of decentralisation of fiscal and administrative authority (although in varying degrees) from the central government to a local authority in what has been regarded inter-governmental decentralisation (Helmsing 2002, Smith 2000, Smith 1998, Enikolopov and Zhuravskaya 2007), with ‘noble’ goals of empowering local authorities to deliver services in their localities guided by

the principle of subsidiarity¹⁸. Political enablement not only focuses on the resultant relations between governments but also on their relations with the market, the community and non-state actors (Muhangi 1996, Wistow, et al. 1992, Helmsing 2002). The change in relationship between this set of institutions or actors is believed to be more effective if it is informed by deeper goals for democratisation, political and administrative decentralisation, managerial and institutional reform, and good governance. Political enablement is therefore closely related with market enablement; lower level governments can enter into contractual agreements with the private sector or service production and delivery partnerships with the voluntary sector to produce and deliver goods and services (Helmsing 2002, Smith 2000, Wistow, et al. 1992). In the context of this study, political enablement forms a very useful framework for the study and analysis of the extent to which prevailing relations between central government actors in the rural water sector and local government sector actors and local authorities in general and how these relations directly or indirectly affect CBM models of rural point-water supply.

Community Enablement

Community enablement is also conceptually related to market and political enablement. It is defined as ‘a strategy adopted by central and local government to co-ordinate and facilitate the efforts of community and neighbourhood-based organisations to initiate, plan and implement their own projects according to the principles of self-determination, self-organisation and self-management’ (Burgess, Carmona and Kolstee 1994 in, Helmsing 2002 p.322). Although enablement as a development concept gained much popularity in the 1990s, community enablement is reflected in earlier works of personalities such as David Korten who, on observing the challenges of growth driven development trajectories, proposed a people-centred development strategy that incorporated values of social justice, sustainability, and inclusiveness (Korten, 1983)¹⁹.

¹⁸ The principle which states that ‘action should be taken at the lowest effective level of governance’ (Jordan 2000 p.1307)

¹⁹ According to Korten, prevailing growth-focused development strategy is unsustainable and inequitable. He calls for transformations of institutions, technology, values, and behaviour that is consistent with our ecological and social realities. He emphasized the need for flexibility in the procedures of implementing agencies, participation, changes in attitudes and skills, capacity building, accountability, and local control (Korten 1983)

There are several elements that make up the community-enablement strategy, but the most important of these is the increased significance attached to the principle of community participation (Helmsing 2002 p.322). Indeed, in community social work practice, ‘enabling’ as a professional role focuses at helping people to identify and clarify their problems using participatory assessment processes, while simultaneously supporting and stimulating them as groups or individuals to secure some change (Ambrosino et al. 2011). The change may be secured from government or any other actor, or from their own self-help efforts²⁰. Smith identifies community leadership, community participation and pluralist collectivism or community self-help as key aspects of community enablement, although these are also conceptually related. *Community planning* also looks at measures aimed to strengthen the capacity of local authorities to plan strategically for the overall welfare of their areas. Such measures according to Smith would involve adoption of ‘synoptic’ view of the community through surveys, analysis of local developments and identification of needs (Smith 2000 p.85). *Community Leadership* on the other hand emphasises the importance of the presence of an effective leader to stimulate action towards change in the community. According to Smith, after identifying community needs, a local authority assumes community leadership. In this regard, ‘enabling’ means identifying and persuading other development agencies or actors, and networking with them to achieve prescribed ends (Smith 2000 p.86). This form of enablement points towards the formation of partnerships intended to maximise economies of scale by responding to community problems using a diversity of experiences, skills and financial resources brought into a common pool. In *pluralist collectivism*, enabling means ‘organisation building with empowerment as the main motive’ (Smith 2000 p.87-88). The focus here is that a local authority or actor puts up an inventory of existing community self-help groups which are strengthened through such activities as training, education and sensitisation and access to relevant information. Where such CBOs do not exist, community support towards their formation may become part of this community enabling approach. Smith observes further that ‘enabling community organisations helps to ensure that a local facility remains in existence when under threat from budget cuts. Democratisation strategies within local authorities can focus on decentralisation to new forms of social or collective provision.

²⁰ Other professional roles of a Social Work in generalist community social work practice are: Advocate – urging unresponsive institutions to take action and promote fair and equitable treatment of a client system; Broker - linking communities and other client systems to resources so that they can achieve their goals; Educator – providing information and or using teaching skills to stimulate or facilitate change and; Negotiator – working as an intermediary to resolve conflicts by gathering and transmitting information between client systems and the broader environment (Ambrosino et al. 2011 p. 125-126).

Empowerment of local groups and communities is regarded as a contribution which local authorities can make to the development of local democracy. Such bodies can form part of a democratisation strategy that strengthens accountability to weakly represented and dependent groups in society', and the role of local authorities in this 'pluralist collectivism' is to "monitor, support and regulate 'third sector' provision of public services"(Hambleton, Hoggett and Tolan 1989, Smith 2000 p.88).With regard to *participation* as a form of enablement, the local authorities facilitate the participation of citizens as policy makers and managers at the local level rather than just as consumers of public goods and services. Citizens would not only be enabled to decide what and how needs should be met (or the quality of provision), but would also be empowered by a local authority to demand for the services. From such a perspective, rather than just being agencies providing services, development actors are primarily concerned with the rights of citizens in making choices affecting the development of their communities (Smith 2000 p 88-89).

Applicability of the Concept of Enablement in the Present Study

Based on the above conceptualisation of enablement, an enabling government or local authority should not be taken to mean that governments should play a lesser role in service delivery as is sometimes understood in the discourses on state withdrawal from direct service delivery. Rather, enablement implies a different role, one that lies in the fact that governments are duty bound to undertake a conscious effort in facilitating and regulating the overall framework within which all development actors can make their most effective contribution towards the well-being of the populations they serve (UNHS 1991 in, Helmsing, 2002 p. 320). Within the neoliberalism and NPM paradigms, enablement indeed seems to be a lesser role for governments, but when particularly viewed from the context of developing countries, and more so in the rural domestic water service delivery, it is a more demanding role. It calls for real political and leadership commitment that goes beyond actual numbers of 'people served' by the rural water schemes, how they are served or the magnitude of business enterprises that result, to an aggregate measure of the sense of contentment leaders and governments derive from serving their populace.

In addition, as can be seen from the theoretical literature, the usage of the concept of enablement can sometimes be problematic. There is a rare attempt by its users to distinguish between its three

dimensions and their reinforcing character (Helmsing 2002, Goodlad 1994, Muhangi 1996, Helmsing 2002, Smith 2000, Smith 1998). The failure to have a clear understanding of what enablement means has tended to negatively amplify its contextual applicability, with a tendency to emphasise more market enablement than political and even much less, community enablement (Helmsing 2002 p.322). Market enablement also assumes that there would be a simultaneous increment in the volume and quality of goods and services produced and supplied and that the inherent forces of demand and supply (the invisible hand) would make such goods available at a lesser cost, generate long-term growth and employment to benefit the majority poor (Smith 2000, Jou 2011). However, literature on the effect of market enablement especially in the rural water supply brings out mixed views and opinions about it especially in developing country contexts, and it is easy to glimpse an emphasis of the need for a strong state (de Gouvello and Scott 2012, Furlong 2010, Prasad 2006, Megdal 2012).

When applied in a decentralised governance context, enablement implies local government ability to engage in innovative practices for ensuring sustainable service delivery. Indeed, current water governance approaches have seen a shift in the role of government (Barungi et al. 2003, Asingwire 2008, Awortwi and Helmsing 2008, Oyo 2002, Lewis and Miller 1987). However, it has been observed that many stakeholders, particularly water and sanitation committees, NGOs and local communities often lack the funds, institutional capacity and sometimes adequate representation or membership to contribute significantly to the governance of water facilities (Warner 2010, Bakker, et al. 2008). The presence of a national water policy and service delivery framework helps in guiding activities of different actors in the sector, but the extent to which adherence to rules and procedures is concerned depends much on whether public actors are committed to playing their oversight, regulatory and standardisation function.

Without an effective government at the macro, meso levels, there is a high likelihood for actors to pursue their own individual interests which automatically conflicts with rural water supply standards, goals and targets. Paradoxically, in its neoliberal origin and prescription, enablement seems to primarily suggest that governments (central or local) are the main ‘donors’ of the ‘enabling energies’ to actors in the market, lower level governments, the community and other

actors as ‘recipients’²¹ in sort-of a unidirectional and linear style. In this thesis enablement is viewed as going beyond the type predominantly prescribed in the neoliberal frameworks and in the literature to a more multi-directional one that transcends differences in financial resource endowments, level of service delivery, political influence, or any other form of power. By so doing, the study challenges the popular belief that development actors owe a common agenda for the community, i.e. supporting or enabling them to maximise the utility they can derive from the consumption of public services. Hence, mutual support, trust, respect and collective learning are indispensable ingredients of an enabling framework that all rural domestic water sector actors (public, private, and voluntary) ought to consciously pursue so as to scale-up the quality and volume of services delivered to communities.

PART TWO

Community Management, Community Participation and Functional Sustainability of Water Supply Services

In the water sector, and the rural domestic water supply in particular, community participation (CP) and Community Management (CM) or Community –based management are often combined with the Demand Responsive Approaches (DRA) in an endeavour to promote sustainability of projects and programmes (Quin, Balfors and Kjellén 2011). Often, these concepts are utilised as tools for enhancing citizen rights to participation in making decisions that affect them, or as tools for enforcing citizen participation in self development in form of direct contributions (Cleaver 1999, Jones 2011b). However, whether understood as complementary approaches or not, the literature indicates that these approaches have not always been able to deliver good results wherever they are applied. Underpinned here is the significance of proximate and contextual factors (Plummer 2008, Jones 2011a, Mulwa 2010, Prokopy 2005, van Koppen, Rojas and Skielboe 2012). Some of the factors, which are discussed later in this chapter relate to the differences in conception and application of the concepts and theories related to CM

²¹ the private sector, the voluntary or NGO sector and communities who mainly constitute the end users of human services

and CP (Harvey and Reed 2007).

Community participation in deciding what level of service they want, where they want it, how they want to pay for it, are all aspects of CM. As distinguished from CP in the water sector, CM is in some literature taken to mean that beneficiaries of water supply services have the responsibility, authority, and control over the development of services (McCommon, Warner and Yohalem 1990 p. 2). Thus, CM is more conceived in relation to ‘how communities are involved in day-to-day operation and maintenance, in collecting, utilising and accounting for the money spent in relation to what is collected and is about power and control’ (Schouten and Moriarty 2003, as cited in, Lockwood 2004 p. 7). But, according to Lockwood (2004), CM can also practically mean different things to different people resulting into problems in their application and attainment of intended results. He argues that ‘at one level, CM is a means of valorizing labour inputs or locally procured materials in project budgets with no corresponding transfer of authority or decision-making power devolved to the community itself’, and that at another, CM can enable people to take control of the operation and administration of their own rural water supply system completely and indefinitely’. In a way he argues that CP and CM are sometimes used interchangeably (Lockwood 2004 p. 7). Similarly, Harvey and Reed also emphasise the thin but complementary difference between CP and CM in leveraging sustainable service delivery. They argue that ‘CP is a consultative empowerment process designed to establish communities as effective decision making entities. It can be stimulated by the community itself or by others, and begins with dialogue among members of the community to what, and how issues are decided and to provide an avenue for everyone to participate in decisions that affect their lives’ (2007 p. 367-368).

Whereas CM can be viewed as a form of CP, according to Harvey and Reed (2007) (2007 p. 368), CP does not automatically lead to CM, nor should it have to. They argue that services that are not to be managed by the community can still be provided following CP principles, such as community consultation. Hence, according to them, even without CM, CP remains a pre-requisite for sustainability (efficiency, effectiveness, equity, and replicability in service delivery), but CM is not (Harvey and Reed 2007 p. 368). From their conceptions of the relationship between CP and CM in the rural water sector, it can indeed be argued that CM or

CBM entails mainly all aspects of governance that are aimed at ensuring that elected community representatives effectively discharge their responsibilities and stimulate greater sustainability for the projects. Such aspects include formation of committees, their training and capacity building and collection and management of water.

The conceptualisation and emphasis of the thin difference between CP and CM shows on one hand that CP is just an important but not indispensable input into the success of community managed models of service delivery (Harvey and Reed 2007). On the other, hand it shows that both CP and CM are an indispensable combination needed to to be fully emphasised in order to leverage the sustainability of projects. In addition, both CM and CP need to be continuously strengthened (with minimal internal variability) through out the life of the projects (Carter and Rwamwanja 2006, Lockwood and Smits Stef 2011). The meaning and conceptualisation of CM also implies that even when rural point water facilities are provided with minimal emphasis of DRA, adequate attention and emphasis to post-construction support from service authorities would yield good sustainability results. Community participation in governance and management of water supply facilities aims to produce a sense of ‘community’ between the service providers and the beneficiaries of services (Prokopy 2005, Pahl-Wostl et al. 2007, Kleemeier 2000, McPherson and Livingstone 1993). It also aims to lower costs associated with service delivery (UNDP 2004, Smith 2000, Prokopy 2005). Hence, a seemingly common convergence of the literature on the fact that decentralising water decision making and enabling the participation of water users in the governance of water systems yields greater satisfaction to beneficiaries, and enhances opportunities for sustainability of the water facilities/projects. Viewing CM and CP from the angle of complementarity, this study considers CBM to be dependent on processes that shape community participation in rural point water service delivery. These processes are also embedded in what shapes the behaviour and interactions of the actors. Hence, achieving CP goals depends on the extent to which communities are helped to appreciate how indispensable they are to project success (Marcus 2007, Nyalunga 2006c, Helmsing 2002). Empirical literature shows that public policies, frameworks and guidelines that promote CP may have very good intentions in their prescriptions, but in many cases remain ineffective due to lack of deliberate commitment on the part of implementers to ensure that CP yields the desired changes (Entwistle and Martin 2005, SPT 2004, McNamara and Morse 2004).

It is important to note the thin line between community management models of service delivery and *self-help* or *voluntary service*. Both are ‘third way’ (Mitlin 2004 p. 330) models and partly emerged as a result of imperfections in the market and ‘state failure’. It is partly on the basis of this that in early 1998, the senior Vice President of the World Bank, and Head of Economic Research, Joe Stieglitz came out clearly and criticised the market model of development. More positively, he proposed the alternative of a ‘post-Washington consensus’, among which he stressed the rationale for more micro level interventions, marking what for some, has been called the demise of the Washington consensus (Fine 1999 p.1). Hence, CM is largely a product of political choice, donor ideology and historical and global contexts and discourses.

CBM as a Necessary Condition for Sustainability of Rural Point Water Facilities

Studies have consistently demonstrated that effective CBM systems are a necessary precondition for functional sustainability of established point-water facilities and of increased equitable access to safe water (Carter and Rwamwanja 1999, Harvey and Reed 2004, Lockwood and Smits Stef 2011 and MWE 2011). However, CBM thrives on a functional and enabling policy and service delivery environment which, among others allows articulation of the need to address water sector and community specific needs (Rogers, Llamas and Martínez-Cortina 2006, Hoekstra 2006). For CBM to produce sustainable outputs, it also requires a strong and combined commitment from service providers and beneficiaries in order to support the work and motivation of community-based structures referred to in this study as Water and Sanitation Committees (WSCs), and on which the wider CBM dynamics depend (Montgomery, Bartram and Elimelech 2009, Oyo 2002, Lewis and Miller 1987). According to Lockwood and Smits Stef (2011 p. 24), ‘sustainability of the service is affected not only by the technical or physical attributes of the system, but also the financial, organisational (support functions) and managerial capacities of the service providers.

In providing a precise meaning of sustainability in the context of CBM, Carter and Rwamwanja (1999) identify development interventions that are not sustainable or for which sustainability is fragile to include; ‘the promotion of technologies which require maintenance, periodic repair and eventual replacement, but for which institutional or financial mechanisms for such activities are

weak or non-existent' (Carter and Rwamwanja 1999 p. 7). They also carefully distinguish the notion of project sustainability in the rural point water supply from that of project success, arguing from the angle of the *time dimension* as the major distinguishing feature. This time dimension is reflected in the popular concepts of *functional sustainability* (Carter and Rwamwanja 1999) or *sustainable water services at scale* (Lockwood et. al 2010). A newly constructed water facility may work for some time but fail in future because the mechanisms for obtaining a spare part are not known due to factors internal or external to the water user community. When this happens, then there is a breakdown in service. Functional sustainability is therefore a function of regular facility maintenance and continuous service yield. But these depend much on the extent to which communities are motivated to participate in overall governance and management of facilities (Amerasinghe and Carmin 2009, Cleaver and Toner 2006a, Carter and Rwamwanja 2006). If services are falling into disrepair as others are being newly constructed, the net progress toward full coverage decelerates, which becomes the antithesis of the drive toward scaling-up of service delivery (Carter and Rwamwanja 1999 p. 8).

Factors Influencing Effectiveness of CBM Systems for Water Supply

Based on some parameters such as ability and willingness to make financial contributions, attendance of meetings, functionality levels of water facilities, CBM for rural water facilities is believed to have succeeded in some communities and failed in others (Carter and Rwamwanja 2006, Haysom 2006, Prokopy 2005, Isham, Narayan and Pritchett 1995). The literature attributes the differences in levels of functionality and performance of CBM models of service delivery to factors within and outside of the targeted communities (van Koppen, Rojas and Skielboe 2012, Haysom 2006). Further, the literature also shows that while increase in coverage of safe water may improve in areas where water users have participated compared to where they have not, maintenance of the water sources, which is their responsibility has remained a big challenge (Cleaver and Toner 2006a, Haysom 2006, Asingwire 2008, Singh 2006). This has meant therefore that participatory/demand driven processes are necessary but not sufficient conditions for functional sustainability of point-water facilities. The discussion of the literature on the factors that affect the effectiveness of community-managed water facilities has been categorized into micro or community level factors and factors external to the communities, and attributable

to relations and hierarchical processes at the meso and macro levels of service delivery that tend to characterise most public policy frameworks.

Macro and Meso-level factors

CBM is embedded within the NPM framework discussed that emphasises a shift in the hierarchical modes of planning and delivery of public services to a more liberalised and decentralised design. While decentralisation of service delivery recognises the importance of citizens and communities in public service delivery, studies (Krutz 2006b, Mwenda and Tangri 2005a) indicate that effective delivery of decentralised and market oriented services including domestic water supply has until today faced daunting challenges, particularly in developing country contexts of SSA. A multitude of socio-economic and political issues such as political patronage, weak civil society, elite capture, information imperfections, poor financing and poor public accountability as well as weak law enforcement systems continue to sit in the way for meaningfully decentralised, participatory and sustainable public policy implementation (Amerasinghe and Carmin 2009, Blair 2000, Kakumba and Nsingo 2008).

Studies conducted in Uganda and elsewhere in sub-Saharan Africa identify inadequate leveraging of financial resources to support community water projects and local political interference (Quin, Balfors and Kjellén 2011), limited government support for community capacity building (Carter and Rwamwanja 2006), poor financial management, poor customer service orientation and inadequate/absence of community consultation as some of the key constraints to the delivery of participatory and decentralised rural safe water services (Barungi et al. 2003 p. 5). Studies have for instance highlighted limited capacity of local government authorities to adequately comprehend macro-level policy and legal frameworks particularly because of the latter's volatility (Asingwire et al. 2005, Whittington, Davis and McClelland 1998) and the failure by institutions to promote 'participation as citizenship' rather than promoting participation as 'payment' for water (Jones 2011a).

In their study on the local government council performance in Uganda, Tumushabe et al. (2009) concluded that the existence of major policy distortions in Uganda undermined service delivery and the accountability relationships between leaders and citizens in local governments. Such

policy distortions fell outside the mandate or capabilities of local governments and included; the absence of integrated strategic development plans, a national and local government budget architecture that did not propel the goals of devolution, general absence of clear power and accountability relationships among local government leaders, populist and civic disengaging policy regimes underpinned by ‘welfarism’, tax relief and ‘administrative, among others (Tumushabe et al. 2009). In another recent study that assessed the effectiveness of the community based maintenance systems for rural water supply in Uganda, service authorities and key stakeholders were said to have always blamed one another for the problems in the sector. The study found out for example that communities blamed sub-county authorities for not doing their part, while sub-counties in turn blame “lazy” communities for their pathetic attitude towards O&M, and also districts for not providing resources. The districts on the other hand blamed all including central government for not doing enough, while the central government apportioned blame to district and sub-counties for not adequately performing their implementation role (MWE 2011a p. 44). As conceived under NPM, decentralised service delivery strategies and approaches assume that public officials and managers will respond to citizens or communities in the same way markets respond to customers (Hood 1991, Denhardt and Denhardt 2000), but evidence from literature especially from SSA continues to reveal market inefficiencies within the NPM framework, corruption and delayed implementation or execution of contracts mainly due to rent seeking, slowness in disbursement of funds and a host of other bureaucratic and administrative negativities (Green 2011, Awortwi 2003, Awortwi, Helmsing and Oyuku-Ocen 2010, Basheka 2011, Mwenda and Tangri 2005b). These demand for an effective central and local authority that prioritises the needs of citizens ahead of those of individual public servants and bureaus.

A study on the impact of Uganda’s Poverty Action Fund (PAF) in Kamuli district in Eastern Uganda also found out that institutional barriers such as corruption and limited capacity within local governments were a hindrance to efficient service delivery, concluding that; ‘future iterations of Uganda’s PAF will have a larger impact on poverty alleviation if the poor are integrated more fully into the process of policy creation’, and that ‘international and national policymakers must be willing to temper macro-level assumptions about how people get out of poverty with micro or village-level realities’ (Lentz 2002 p. 1). The risk and opportunity

mapping study on integrity and accountability in the water supply and sanitation sector in Uganda also established that ‘corrupt use of state resources in exchange for electoral support, political interference at all government levels and the lack of political will to fight corruption’ constituted the major risks that the water and sanitation sector in Uganda is afflicted with. The study pointed out further that in the water sector, it was possible for water projects to be initiated based on political rather than technical considerations (MWE 2009b). Related to the above, Holmberg and Rothstein (2010), point out in their paper on *quality of government and quality of water* that ‘public procurement for big contracts is a well-known source for large-scale corruption resulting in too high costs and too low quality of the constructions that, eventually, are put in place’. They further observe that petty corruption at the point of service delivery may deter people from using safe water and may also lead them to be reluctant to pay for water at all, since they may suspect that the money will be stolen instead of being used for maintenance of the safe water equipment, resulting into water managers having far too little money for keeping the installations running’ (2010 p. 5).

The difficulty for many governments to effectively confront the many intertwined issues concerning water supply has also been underscored by the United Nations (UN-Water 2003, Hoekstra 2006) pointing not only to the challenges in collaboration of different departments within national governments but also the numerous management decisions that have to be taken at sub-national and community levels. The need for governments to build links with NGOs and the private sector further complicate management and decision-making (UN-Water 2006b). The lack of context specific mechanisms of engaging with the community to participate in community programmes has also been highlighted. Brannelley et al. (2009) point out that, participatory interventions at community level need to be socially acceptable and responsive to local priorities and community structures if they have to be long lasting and move beyond tokenistic participation. They argue further that engagement with communities should be culturally appropriate, strengthening and or revalidating positive cultural mechanisms and traditions, and that, the healthy aspects of community participation are negated when a ‘one-size-fits-all’ community participation approach or a set of ‘best practices’ is implemented without taking into consideration local contextual issues such as cultural or social practices validated by the community (Brannelley et al. 2009 p. 2-3).

Based on a longitudinal ethnographic study of a village water supply in Tanzania, Cleaver and Toner (2006b) observe that the policy goals of community participation, ownership and cost sharing in rural water supply as aligned in the broad international consensus on water governance are not easily achievable and their benefits may be overstated, both in terms of efficiency of resource management and in equality of outcomes. They warn against assuming that managing water at the local level leads to broad community ownership, or ownership in the interest of all (Cleaver and Toner 2006b p. 216). They observe further that the limitations of ‘bottom-up’ and demand led approaches need to be recognised without discrediting their potential for challenging inequalities as a community ownership may benefit a small group of community members. They conclude raising some important questions about the role of the state and external agencies in setting and enforcing equity criteria in community-managed initiatives (Cleaver and Toner 2006b).

In sum, CM is embedded in the new governance and NPM paradigms that call for the involvement of multiple actors with different roles and responsibilities. It is thus an outcome of the realisation that providing water services for all ‘is beyond the reach of governments and the public sector of their own, and that the contribution of the private and voluntary sectors is essential if global water targets are to be met (Franks and Cleaver 2007 p. 292). The literature has however continued to indicate that while it is crucial that a ‘pluralistic’ and synergetic approach to the provision of essential public services is undertaken, government as an actor remains the mainstay for the success of programmes of all the other actors particularly in developing country contexts (Awortwi and Helmsing 2008, Jiménez and Pérez-Foguet 2010, Helmsing 2002, Asingwire 2008). Other literature argues that even if synergies of external actors and their resources (human and financial) can leverage CM models, the success of CM depends on the willingness of the target community and its members or leaders to mobilise themselves for self-help (Lockwood 2004, van Koppen, Rojas and Skielboe 2012).

Micro-level factors

The CBM approach to service delivery is a new form of co-operation between communities and support agencies in the water sector, viewed as central to long-term sustainability of services (Brosius, Tsing and Zerner 1998, Lammerink, et al. 2001). Its basic principles include participation, control over decision making, ownership and cost sharing (Lockwood 2004,

McCommon, Warner and Yohalem 1990, Amerasinghe and Carmin 2009). But, the literature has criticised the approach for assuming that communities can maintain service systems alone, pointing out constraints such as exploitation by the private sector actors in liberalised markets (Barungi et al. 2003, Danert, et al. 2003, Dardenne 2006). Some literature has also attributed the failures in CBM models of service delivery to the inadequate application and emphasis of processes of community participation (Harvey and Reed 2007, MWE 2011a, Quin, Balfors and Kjellén 2011, Nyalunga 2006b). However, there is some evidence to show that even where CM has failed due to the weak participatory process that preceded it, or poor support for community management structures, retrospective participatory efforts of some NGO actors have been able to revitalise CM effectiveness to achieve long term sustainability of point-water facilities (Nankunda 2010, Smits et al. 2012, Lockwood, et al. 2010).

CBM models of service delivery may also face effectiveness challenges because they thrive on collective action of beneficiaries of services in the communities targeted. The literature indicates that collective action results into multiple tasks and responsibilities for the community members who may already be struggling to meet their own individual needs. Consequently, some members in the community may fail to adequately have time to participate in collective activities that impact on the effectiveness of CBM. In her study of community water associations (CWAs), Mitlin (2004) concluded that ‘many CWAs are beset with management problems, such as lack of active participation by the members, undemocratic if not oppressive management style, irregular or no annual elections resulting in monopoly of leadership, and the lack of financial transparency and accountability’. Her study further found out that it was not uncommon to hear that a CWA official had disappeared with the association money to the dismay of the members (Mitlin 2004 p. 332). Mitlin further observes that ‘communities may be responsible for enforcing regulations but may have limited capacity and may be vulnerable to coercion and intimidation from local authorities and other actors, and that CBM systems may be self-governing, but this does not mean that they always work in the best interest of all the community’ (Mitlin 2004 p. 332-333).

Regulations to promote CBM may also be unrealistic in terms of the realities surrounding communities. Studies related to this discuss the complexities surrounding willingness and ability for communities to contribute to operation and maintenance of water schemes. These underpin the assumptions the model has on homogeneity of communities as the main challenge associated

with its conception and application (Brosius, Tsing and Zerner 1998, Montgomery, Bartram and Elimelech 2009, Whittington, et al. 2007). Other studies point to challenges in ensuring that communities comply with making contributions to O&M (Quin, Balfors and Kjellén 2010, Jiménez and Pérez-Foguet 2010). The studies largely converge on the idea that while it is crucial for water users to be key actors in the governance and management of water facilities, the efficacy of their role in water governance and management cannot be maximized if they are left on their own (Marcus 2007, Barungi et al. 2003, Cleaver, et al. 2005, Malzbender et al. 2005, Jones 2011a). Further, the problem of communities participating in CBM activities is even said to be more worrying if water users live in poor and marginalized rural areas (Jiménez and Pérez-Foguet 2010, Jones 2011a). Indeed, some studies have indicated that most problems of CBM in the water sector do not occur immediately after construction and commissioning of an improved water sources, but from the first to the third year of commissioning (Lockwood and Smit Stef 2011, MWE 2011, Asingwire 2008). Hervey and Reed (2007 p. 370) point out the most common reasons for a breakdown in CBM to include: over reliance on voluntary inputs from community members, high attrition rates of elected water user committees due to death, migration or total withdrawal of some members without being replaced, loss of trust and respect for water committees from the community, failure by the community to contribute to O&M, inadequate contact with service providers for possible support and communities as well as community inability to replace worn out parts of the service system due to poor household incomes.

Other literature also shares the view that communities may be ineffective in their endeavour to have sustainable services due to elite capture (Neubert, Scheumann and Kipping 2008, Jiménez and Pérez-Foguet 2010, Fritzen 2007, Dasgupta and Beard 2007). In their analysis of project politics, priorities and participation in Rural Water Schemes in four case studies in Mali, Vietnam, Zambia and Bolivia, van Koppen, Rojas and Skielboe (2012) found out that the elite in the communities where projects were implemented appeared hardly motivated to maintain communal schemes, unless they themselves benefited directly and conclude that the dependency of projects on the elite can be reduced by ensuring participatory and inclusive planning that meets the project's conditions before budget allocation. Other literature on elite capture indicates however, that when communities are supported by service agencies, elite control rather than capture may serve to meet the interests of the community. For example, in their study on community-driven development, collective action and elite capture in Indonesia, Dasgupta and

Beard (2007) found out that local elites were willing and able to contribute the time and know-how needed to facilitate community-level projects and governance. Their findings challenge the often assumed relationship between a community's capacity for collective action and elite capture, mainly as a result of deliberate actions to build the capacity of communities. Some studies have also indicated that in a decentralised and multi-stakeholder safe water service delivery framework it is hard to rule out conflicts such as between water users and private contractors or between private contractors and local government politicians mainly because of vested interests which in the long-run affect implementation and service sustainability (van Koppen, Rojas and Skielboe 2012, Mweemba et al. 2010).

A synthesis from the Literature and Studies on CBM

On the whole, the literature on the determinants of CBM effectiveness as an alternative to centrally managed water schemes has shown that CBM may be succeeding in some countries e.g. in Asia and Latin America, but failing in other contexts especially in sub-Saharan Africa including Uganda. Many studies also agree that more practical and pragmatic actions for effective CBM are yet to become a reality in sub-Saharan Africa. The studies thus attempt to explain the gap in terms of governance, but they do not adequately make clear how specific facets within the rural safe water governance and service delivery frameworks enable or disable community based management systems to yield the much anticipated results. Studies that have attempted to integrate governance dynamics in their analysis have also tended to put limited emphasis on its complexity at macro, meso and micro levels of service delivery. In addition, the role played by central and local government relations in leveraging CBM, and promoting sustainable service delivery is not exhaustively examined, nor have studies so far undertaken in sub-Saharan Africa adequately examined mechanisms that constrain individual and community interest to participate in CBM activities for rural domestic supply, especially using the new governance and new public management discourses.

In addition, most studies on CBM or water user committee effectiveness have been undertaken in the analysis of large schemes of water for production especially in Asia and Eastern Europe with a very limited number in sub-Saharan Africa and Uganda in particular. Studies that have recently targeted consumers of services or communities have also mainly focused on the analysis of the

motives, processes and wider consequences of the shift from supply-driven to demand-driven approaches (see for instance, Asingwire 2008, Whittington, Davis and McClelland 1998, Whittington, et al. 2007). The methodologies and research strategies adopted by many of the studies so far undertaken on CBM have also not prioritised integrating any participatory problem solving initiatives with their study communities as a strategy for enhancing not only the rigour of their methods but also further testing of the dominant assumptions held about CBM approaches for rural safe water supply, particularly in operation and maintenance (O&M) of facilities. Nevertheless, the literature and studies show that the orthodoxy about the effectiveness of community driven development or community managed service delivery models continues to raise debates regarding the extent and circumstances in which policy proposals related to CBM models of service delivery can leverage equitable and sustainable benefits to the communities they target. These indeed, acknowledge that if well implemented, CBM models of service delivery have the potential to build consumer capacity for self-support, but only after a long and consistent period of support from service providers as part of the enabling policy framework. This study undertakes to extend the debate on the governance dynamics and circumstances that work to disable policy intentions that potentially promote community managed models of service delivery using Uganda as a case study.

The Analytical Framework and Focus for the Present Study

The paradigms and theoretical foundations on governance and NPM, and the conceptions around enablement all provide a useful conceptual and analytical framework for examining the dynamics that shape the effectiveness of CBM in impacting on sustainability of rural safe water supply. The concept of ‘enablement’ or an *enabling government* is utilised in this study as a common ‘denominator’ while examining actions that promote or undermine community managed models of rural safe water supply and service sustainability. In Uganda’s rural water policy and institutional framework three levels are distinguished at which different but mutually reinforcing ‘enabling actions’ may be undertaken or not, thereby affecting the performance of CBM in impacting on the sustainability of rural point water facilities. These levels highlighted earlier in chapter two include *macro*, *meso* and *micro* levels.

At the *macro-level*, enabling actions ought to be mainly spearheaded by central government in partnership with other national level sector actors. Hence such actions are reflected in the ways and means central government relates or functions with the private for-profit sector, sub-national government institutions, local and international NGOs and donor institutions. The *meso-level* includes sub-national or intermediate institutions of government, national or local NGOs, CBOs and the private sector. These are closer to the community of water users and are therefore at a vantage position in the entire policy and institutional/implementation framework for CBM. The *micro-level* constitutes individuals and households in the community, community/village leaders and community self-help groups. This study specifically focuses on how these micro-level actors have been enabled or disabled by the national policy and institutional framework to effectively manage point water facilities while ensuring good operation and maintenance of such facilities for sustainable service delivery. Therefore, policy and governance dynamics present within and among macro and meso level actors and institutions (central and local governments, private for-profit and not-for profit agencies) and the levels of influence of these actors constitute this study's independent variables. The relationships between and among *meso-level* actors, the latter's relationship with the communities and central government institutions determine how enabling or disabling they can be to the communities they are meant to serve, especially in terms of community capacity to fulfil their CBM roles.

In Uganda's rural water sector, decentralisation has ensured that central government plays a subsidiary function at the lowest point of service delivery by decentralising powers and functions in the rural water supply sub-sector. But, the extent to which these provisions are working to enable CBM for rural safe water supply sustainability achieve its desired levels of performance remains inadequately known. In addition, within the community and particularly among community based water management structures, the dynamics that affect individual or collective behaviour and actions towards CBM and how these affect and are affected by dynamics at the meso level are also not adequately known. Hence borrowing from the concepts of political enablement, community enablement and market enablement as they relate with the wider concepts of NPM and governance this study explores whether and how local authorities and other water sector actors ensure that such behaviours or actions do not disable the effectiveness of CBM models in leveraging functional sustainability of installed point-water supply facilities. How *meso* and *macro* level institutions are enabled to ensure that they stimulate a good working

relationship with community level actors are also issues that this study explores borrowing from the concepts and literature examined earlier in this chapter.

Thus, in the context of this study, effective CBM which happens at the level of service consumption is shaped by the governance and policy dynamics at the national and intermediate levels. These processes depend so much on the inter-play between individual and institutional factors that subsequently impact positively or negatively onto CBM structures. The policy and institutional frameworks for rural safe water supply described in chapter two presents a clear definition of the roles and relationships of actors. But how these relationships effective in impacting on CBM? According to the institutional set-up for rural safe water supply, communities are almost entirely dependent on the performance of higher level actors if their role in operation and maintenance of point-water facilities is to have a positive impact on sustainability. But do these higher level actors (especially local governments) consciously 'enable' communities to play their roles? In order to answer these questions, an analysis of the governance dynamics at the *meso* and *macro* levels, and how these are capable of influencing dynamics at the *micro* level in the community is in this study undertaken largely borrowing from the concept of an enabling government or local authority.

Chapter Four

Research Methodology and Methods

Introduction

This chapter presents a discussion of the methodology and processes of inquiry. The chapter begins by making explicit my personal orientation on the wider subject of (community) enablement and how this has come to influence my research interest and motivation for this study, its design, epistemological and ontological stances and then the research process. An effort is also made to elaborate on why and how, important methodological decisions were considered indispensable for integration into the study design and methods, and how they have contributed to enhancing the validity and reliability of the results. Reflections on ethical issues pertinent to this study both as a policy requirement in Uganda, and as a quality assurance strategy for research are also discussed. The chapter concludes with a discussion of the challenges and limitations of the study along with the ingenious choices made to minimise their impact on the quality of results, and what emerged as new and unique experience from the research strategy that could inform related future research undertakings.

Research Design, Epistemological and Ontological Stance

An exploratory and analytical single-case study in a predominantly qualitative mixed method research design was adopted. Various methods of qualitative inquiry were triangulated with a survey targeting households (water users) in a purposively selected rural community in Uganda. The survey aimed to capture quantifiable baseline information for cross-analysis and reference with the predominantly qualitative inquiry. This design was adopted to broadly understand the extent to which community managed public services can be sustained in a rural community context in a sub-Saharan African country - Uganda. Specifically, the case study sought a deeper understanding of how the effectiveness of CBM models of domestic water supply services could be undermined (and or, promoted) by the legal, policy and institutional frameworks, and the rural

community contexts they are meant to benefit. According to Yin (2003 p. 13) ‘a case study is an empirical inquiry that investigates a contemporary phenomenon in depth and within its real-life context, especially when the boundaries between phenomenon and context are not clearly evident’. Adoption of a single case study design as opposed to multiple case study designs popular in purely qualitative or quantitative studies was based on its suitability and convenience in representing ‘the critical test of a significant theory’ (Yin 2003 p. 41). This study examines the relevance and contextual applicability of widely held beliefs around governance, community management, and sustainable rural safe water service delivery using a theoretical framework mainly drawn from organisation and management theory. Yin also views the purpose of case study designs, among others, as that of theory development and argues that ‘only if you are forced to state some propositions will you move in the right direction’(2003 p. 22). He considers theoretical propositions to be a starting point rather than the result or outcome of case study analysis, making case studies aim at analytical generalization just as experimental designs can do.

In his study of multiple-case study methods in governance-related research, Stewart (2012 p. 68) observes that single-case studies have been popular in governance-related research because of their intrinsic value rather than their interest in producing generalisable findings. This study examined the extent to which CBM as integrated in rural safe water policy and governance frameworks could deliver sustainable safe water services if assumptions ‘continued to be held’ that communities (water users) always respond to calls and conditions for their participation in the form of functional CBM organisations, as if they enjoyed it unhindered. The study held an underlying proposition that enforcing deliberate measures to enable CBM models of service delivery is a largely missing ingredient of the existing governance framework for rural safe water supply in Uganda.

The choice of mixed methods was informed by the belief that narrow views of the world characterised by positivist orientations can be misleading, requiring that researchers approach complex, multifaceted and dynamic research phenomena from different perspectives and paradigms so as to gain a holistic perspective about phenomena under study (Greene, Caracelli and Graham 1989, Alvesson and Sköldböck 2009). Post-positivists argue that using more than one method in undertaking social science research may have particular strengths with respect to

what the subject matter of the inquiry is addressing and that such an approach should help to get a clearer picture of the social world and make-for more adequate explanations (Golafshani 2003). They argue further that by combining methods and empirical materials, researchers can hope to overcome the weakness or intrinsic biases and problems that come from single method, single-observer and single-theory studies (Dick 2005). Literature indicates that the strength of mixed methods design is in enhancing both theory testing and theory building through extension, convergence and contradiction of findings (Denzin 2012, Creswell 2009, Foss and Ellefsen 2002, Jennifer Grafton, Anne M. Lillis and Habib Mahama 2011). According to Grafton, Lillis and Mahama (2011 p. 18), ‘the lack of use of such methods suggests missed opportunities’.

Triangulation, a concept said to have been borrowed from navigation and military sciences (Smith 1975 cited in, Jick 1979 p. 602) is at the heart of mixed methods research. Just as the application of basic principles of geometry allow navigators to singly view multiple points with greater accuracy, ‘organizational re-searchers can improve the accuracy of their judgments by collecting different kinds of data bearing on the same phenomenon’ (Jick 1979 p. 602), thereby enhancing the rigour, relevance and reliability of their results. Yin (2003) also emphasises triangulation as a critical imperative for mitigating the biases embedded in a single-case study research. In naturalistic studies, triangulation advocates for a combination of strategies, theoretical perspectives and methods or investigators in the study of the same phenomenon (Jick 1979, Thurmond 2001). Any biases from particular data sources, investigators or methods and theoretical perspectives, would be neutralised when blended and integrated with other data sources, methods or investigators in an interpretive style (Jick 1979, Creswell 1994, Thurmond 2001).

Triangulation can take place ‘within’ or ‘between and across’ methods (Thurmond 2001, Jick 1979). *Within-method* triangulation, multiple techniques within a single approach or method (qualitative or quantitative) are used to collect and interpret data, cross-check for internal consistency or reliability, while the researcher’s interest for using the *between-method* triangulation is to test the degree of external validity (Jick 1979 p. 603). Thus, using both *within* and *between* method triangulation approaches in a single study (as this study was designed), provides additional sources of valuable insights that cannot be gained from a single method. Two or more sources augment and verify one another reducing the impact of bias while enhancing

rigour, reliability and validity (Foss and Ellefsen 2002, Denzin 2012, Chauncey E. Wilson 2006, Thurmond 2001).

Owing to the need for validity and reliability measures that allow convergence of data from different sources, mixed methods have also been referred to as a *convergent methodology* or *convergent validation* (Campbell and Fiske 1959 p. 83). Creswell (1994 p. 175) identifies five purposes advanced for combining methods in a single study including: (i) seeking convergence of results (ii) complementarity of emergent findings (iii) sequential development of evidence from one method to another or method mix e.g. moving sequentially from qualitative research activities to a survey (iv) initiation, where contradictions and fresh perspectives may emerge and (v) expansion, where mixed methods add scope and breadth to the study. In this study, the findings generated from FGDs and interviews with water users were compared with results from macro and meso level key informant interviews as well as theory in order to arrive at conclusions.

Yin (2009) also emphasises the need for precise documentation of the data base and maintaining the chain of evidence which provides validity in reconstructing the study from the research question to the conclusions. The use of qualitative methods in this study was also to some extent informed by *grounded theory* (GT). Using GT, researchers can systematically generate theory from data through inductive and deductive thinking. The goal of GT is therefore mainly that of formulating hypotheses based on conceptual ideas as opposed to verifying hypotheses that are generated by constantly comparing conceptualized data on different levels of generalization dominated by comparisons containing deductive steps (Dick 2005). Throughout the data collection process, emerging findings were compared after successive interviews, focus group discussions or observations. Insights generated would inform subsequent data collection activities and processes.

My Reflexivity and Positionality within the Study

From the outset, as is the tradition in qualitative research designs, this study ensured the necessary rigour in its design and execution in order to enhance the reliability and validity of the research results. One of the most imperative aspects of this endeavour be self-aware, preside over and mitigate the influence or biases my dispositions can have had on the research process, and

ultimately on the results. This is what has been coined in qualitative research as reflexivity (England 1994, Steier 1991, Jootun, McGhee and Marland 2009a, Parahoo 2006). It connotes ‘a continuous process of reflection by the researcher on his/her own values, pre-conceptions, behaviour or presence and those of the research participants which can affect the interpretation of responses’ (Parahoo 2006 p. 326-27), and involves researchers recognising that they are part of the social world under study’ (cited in, Jootun, McGhee and Marland 2009b p. 42). Creswell also elaborately puts it that ‘qualitative research begins with assumptions, a world view, the possible use of a theoretical lens and the study of research problems inquiring into the meaning individuals or groups ascribe to a social or human problem’ (2007 p. 37). Thus, the credibility of one’s research increases with one’s understands how their own values and views may influence research findings (Jootun, McGhee and Marland 2009b p. 42).

My early experiences of poor public service delivery as a primary school boy in rural Uganda, the then (and now still) wide spread rural household poverty, and what I came to better understand later in lectures of social policy (as an undergraduate Social Work student) to constitute what Robert Chambers coined ‘clusters of disadvantage’ (Chambers 1983), are among the landmarks that cannot be overlooked in so far as they have significantly shaped my professional and academic career, interests, beliefs and world views. My social work training, among others, introduced me to the analysis and appreciation of the complexity of social problems, to the principles of social justice and the core roles of a professional social work practitioner. In generalist social work practice, a social worker is an ‘enabler’, ‘advocate’, a ‘broker’, ‘negotiator or mediator’, and an ‘educator’. Ambrosino et al. (2011) elaborate more clearly on these roles as intertwined, mutually reinforcing and crucially important in stimulating and propagating socio-economic development and transformation in various social work practice settings e.g. among rural and urban community settings.

Furthering my interest on enablement was my *master’s* degree training in *development studies* and subsequently my thesis on *livelihood strategies of the poor when coping with social welfare deficits*. This training not only built onto the earlier one I had in social work, or my earlier exposure to complex social realities in developing country contexts, but also effectively mirrored

into my future interests in promoting local economic development (LED)²² by building on the unique economic, social and political resources of localities. In addition, my personal conviction about the inevitability of a functional public authority, with an adequate ‘dose’ of the values of nationalism, and an interested and empowered civil society as a condition for achieving social and economic transformation and development of localities, further motivated my epistemological and ontological disposition to the title of this thesis and to the entire study design.

Last but not least, my experience from participating in teaching and research activities at Makerere University have also overtime, and to great measure, contributed to my appreciation of the theory and rhetoric about tendencies for public authorities to want to ‘profit’ from a weak public service system which, alas, is amplified by a weak civil society incapable of demanding for downward and social accountability from public officials. A predicament exacerbated by the seemingly ever growing trend of political patronage and a weak civil society in most of sub-Saharan Africa, and of the apathetic attitude among public sector workers over addressing vast structural problems that generally impact on public service delivery.

The naturalistic inquiry which predominantly informs the design and approach to this study may appear to stand in tension with developmental approaches that seek specific improvements or changes to a certain status quo. However, the use of mixed methods and a highly triangulated research approach, including the WSC revitalization activities which lent themselves more towards participatory action research, helped in ensuring that where my interpretation of responses during and/or after use of one or a combination of methods were checked by the use of another method or a combination of methods. In this chapter, and in the entire thesis, I endeavour to demonstrate that my own disposition to the study did not significantly affect the research process and indeed the validity and reliability of this work. It is however also important to note, as Jootun puts it that ‘while the researcher’s reflexivity is imperative for the research process, total detachment is also an unrealistic aspiration that can limit or hinder good results’ (Jootun, McGhee and Marland 2009b p. 46).

²² LED is a community development framework which underscores the importance of building on the competitive and comparative advantages of localities, by development actors (external agencies) who at best, should work in close and strategic partnership with local actors and the community in order to stimulate positive transformation and development.

Selection of the Case Study

The Water is Life Project and the case study

Makondo parish²³ in *Lwengo* district - Central Uganda constitutes the case for this study. The area was purposively selected as part of the Irish Aid funded *Water is Life* (WIL) Project coordinated by the Dundalk Institute of Technology (DKIT) in Ireland. Having had earlier contacts with the Medical Missionaries of Mary (MMMs) in *Makondo* Parish, the WIL Project supported a multi-disciplinary doctoral research undertaking on eight broad thematic areas related to water. My own thematic area broadly focused on '*participation and governance in water management systems*', while the other seven focused on broad and specific areas around water management and gender; water governance, women water and health, climate change and water management, hand pump technology, ground water sourcing and distribution, and solar disinfection of water. All of these research projects, whose fieldwork was based in *Makondo* Parish in Uganda, were each led by a PhD student researcher with individual supervisors and an overall WIL Project Leader based at DKIT in Ireland. The WIL project was implemented in a collaborative arrangement with Higher Education Institutions in Ireland [including Dublin City University (DCU)] and Makerere University Kampala (MUK) in Uganda. Hence, the present geographical area of study was purposively selected as part of the WIL Project implementation framework. Nonetheless, my expression of interest, and acceptance by the WIL Project to research under the theme '*participation and governance in water management systems*' allowed me a great opportunity to identify a thesis topic and research questions that would meet my own research interests, while at the same time contributing to meeting the wider goals of the WIL Project.

The Uganda Country context

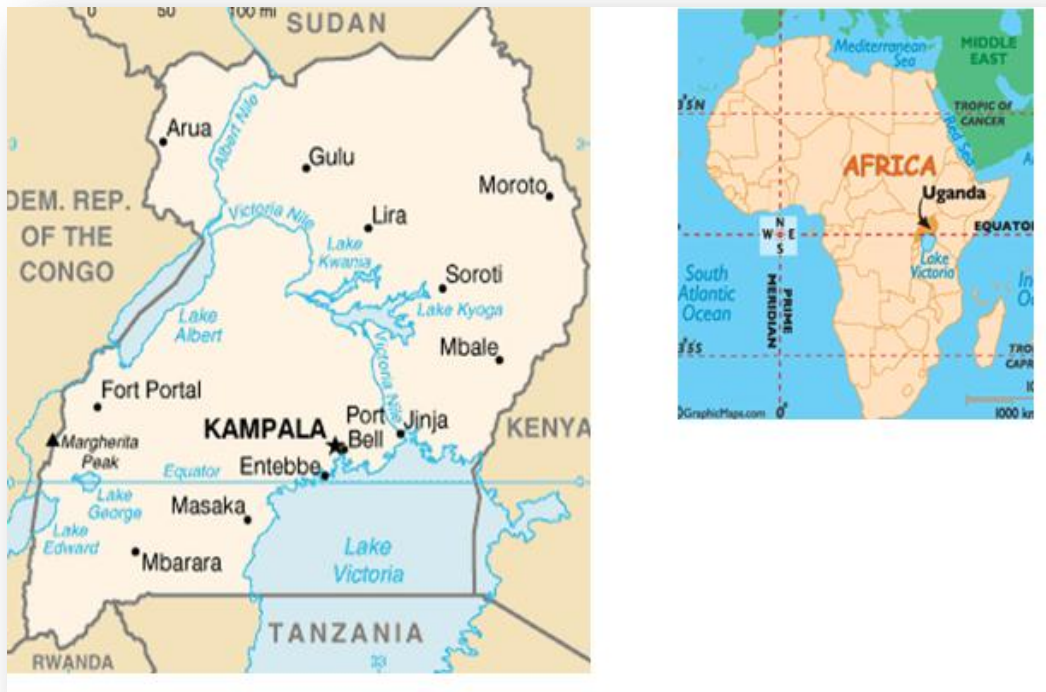
Uganda is a land locked country located in the Eastern part of sub-Saharan Africa about 800 kilometers inland from the Indian Ocean. It shares borders with Kenya to the East, South Sudan to the North, Democratic Republic of Congo to the West, Rwanda and Tanzania to the South. It has a land surface of 241,500.7 square kilometers, a land cover of 199,807.4 square kilometres,

²³ A parish in Uganda's local government structure is the second lowest level of government administration in rural areas and is headed by a Parish Chief (who is a civil servant), and an elected council representative at a Sub-county Local Government (immediately below a district Local Government).

water and swamps covering 41,743.2 square kilometres. The country has three of the major lakes in the Great Lakes Region namely Lake Victoria, Albert and Edward, which also constitute much of her border lakeshore areas. The River Nile also originates from Lake Victoria in Uganda, through the Lake Kyoga basin in the north-central part of the country, South Sudan and to North Africa into the Mediterranean Sea. Despite being astride the Equator, Uganda has more temperate tropical climate compared to her surroundings.

There are two major wet seasons in a year (March-May, and September-November) and an average rainfall ranging between 582-1690 mm per year, while the temperatures range between 16-31 degrees (UBOS 2010b). The country's altitude also ranges from 620 metres in the Albert Nile area to 5,111 metres above sea level at the country's highest peak on Mount Ruwenzori (UBOS 2011).

Figure 5 Map of Uganda and location in the African Continent



Sources: (<http://goafrica.about.com/library/bl.mapfacts.uganda.htm> and <http://www.worldatlas.com/webimage/countrys/africa/ug.htm>)

In June 2011, Uganda's population was estimated at 33 million people at an annual population growth rate of 3.4% (UBOS 2011). This places the country among those with the fastest growing populations in the world. Of the 33 million people, 4.9 million (14.8%) live in urban areas and 28.9 million (85.2%) in rural areas (GOU 2011b p.153). Majority of the rural inhabitants depend on subsistence farming for their livelihood.

Despite a remarkable recovery from very poor service delivery in the 1980s and early 1990s, Uganda's rural safe water access figures show that there is still a big challenge for the country to meet not only the millennium targets but also its own target of 77% safe water access in rural areas by 2015. Access to safe water in rural areas has since 2009 stagnated at 65% and even projected to decline to 64% in 2011 (GOU 2011b). Yet, there are also notable spatial and socio-economic access variations within the country. Some of the north-eastern parts of the country have as low as 19% coverage while others notably in urban and peri-urban areas and south western highlands have as high as 95% (GOU 2011b p.167). Women and children have also for long been more greatly affected by supply and distribution problems (Rudaheranwa, Bategeka and Banga 2003, Water Aid 2012). Part of the factors to explain this occurrence is the inadequate operation and maintenance (O&M) of the rural water sources. According to the policy and Institutional framework elaborated in chapter two, the responsibility for O& is largely given to water user communities and the Water and Sanitation Committees (WSCs) as their coordination structures.

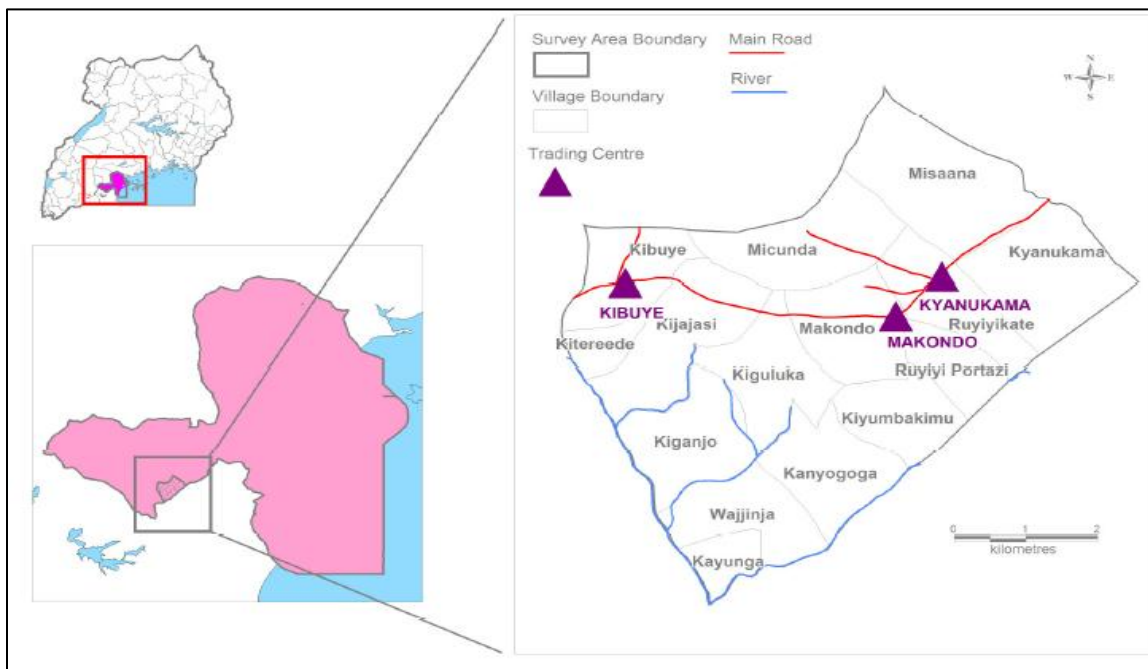
Makondo Parish

Makondo Parish is located about 194 km south of Kampala Capital City, and within the south of the newly created²⁴ local government district of *Lwengo*. The parish is made up of 15 *geopolitical* villages each having its own elected political structure locally known as an 'LC' (Local Council) or village council headed by a *chair person*. Based on the 2002 National Population and Housing Census, Makondo Parish is estimated to have around 2275 households and a population size of about 8193, of whom 51% are female and 49% male (Ndagwe Sub-County 2011). Survey results also show that 72% of the households derive their livelihood from crop and or livestock farming on a subsistence basis (Macri et al. 2013).

²⁴ Lwengo district was carved out of Masaka district in a parliamentary decision in 2010.

Like most parts of Uganda, Makondo Parish has two rainy seasons in a year from March - May and September – December. It receives an average rainfall of 750-1100 mm. The parish is located in a region that also experiences two dry seasons which are sometimes prolonged, affecting farming activities as was reported in 2005 (Ssali 2005). Villages in the parish are endowed differently with water resources, which include; traditional hand dug wells, swamps and improved or protected water source facilities supplied by the government and non-governmental organisations (NGOs). As is the case in most of Sub-Saharan Africa, deep wells, shallow wells and protected springs are evidently the main technologies used for the provision of safe water in Makondo parish. This is largely because of their relative low cost in service delivery compared to piped water especially when targeting rural sub-Saharan communities that are characterised by sparsely distributed homesteads. Some households in Makondo Parish supplement these sources through self-supply mainly using simple rain water harvesting technologies.

Figure 6: Map showing location of Lwengo district in Uganda, Makondo parish and location of villages in the parish.



Source: (Macri et al. 2013 p. 11)

It is important to note that, while the selection of Uganda and Makondo Parish was purposive and project based, public (water) policy regimes that Uganda has gone faced are not very peculiar from those of the rest of sub-Saharan Africa. Nearly all countries in the region have been implementing public sector reforms since the early 1980s, including those specific to rural safe water supply (Awortwi and Helmsing 2008, Van Koppen 2003). Similarly, the nature and quality of rural safe water service delivery in Makondo Parish is not peculiarly different from that of the rest of the rural communities in Uganda in terms of access, quality and governance. While minor deviations may not be ruled out, Makondo Parish as the case study community remains underserved. As recent reports and studies have revealed, rural safe water service sustainability is still a countrywide problem in Uganda (MWE 2011a, GOU 2011b), as it is in much of sub-Saharan Africa (UNICEF and WHO 2012). It was thus methodologically suitable for this study whose primary goal was to explore issues related to community management, community participation and sustainability of rural safe water facilities and services, based on Uganda's policy and institutional frameworks.

Study Implementation Process, Strategies and Justification

The implementation of this study was undertaken in a number of successive, mutually integrated and reinforcing milestones/stages, involving planning and implementation of key study activities, strategies and decisions in an iterative manner. Activities and decisions kept unfolding based on insights emerging at every stage in the study process. Ensuing is a discussion of the strategies, activities and decisions best conceived as having been mutually reinforcing rather than purely unidirectional milestones of the research process.

Reconnaissance visits and entry into Makondo parish

Fieldwork started with a study tour of all the villages in Makondo Parish. The tour provided an overall picture of observable socio-economic, physical and environmental characteristics of the case study. Different types of community water resources including functioning and non-functioning deep and shallow wells, a protected spring (the only one in the parish) and the various open water sources were visited. Of interest to me also, was observing the housing and sanitation conditions, dominant economic activities as well as the physical environment all of which were intended to contextualize the inquiry. Indeed after the tour, what I had seen on the

physical map of the area and what I had read in the literature about Makondo Parish came into a better focus. The tour was guided by a community (local) facilitator hired by the WIL project. In addition to observing socio-economic, physical and environmental characteristics of the study community, informal conversations were held with the village leaders met in various locations. The same was done with water users and some of the water user committee members, particularly the caretakers of improved water sources irrespective of whether the sources were functional or not. During and immediately after such conversations, I ensured that I took notes capturing whatever I found relevant for my research interests. Similarly, whatever was found relevant to the inquiry was noted in addition to photography. It took seven days to cover the entire parish.

Meeting with village leaders

In a typical rural African village, the presence of a new person or ‘visitor’, no matter how long they stay, must at least be well-known to a village elder or leader. As a new person in the community, more so one who was not just visiting, but a researcher hoping to interact with many village residents as well as visit and observe community water resources, activities and practices, my research activities would have not only faced problems of authenticity and acceptance in the community, but would have also faced tremendous challenges in accessing households without making the study’s goals, strategies, target groups, and its sponsors known to community leaders. Earlier before my reconnaissance visits, the WIL project manager organised a meeting in which I was introduced to the various leaders of the 15 villages in the Parish. However, in order to consolidate myself, advance my own research agenda and gain full entry into the community, another half day meeting with all village leaders was organised. Box 1 below presents a summary of the key issues covered in the meeting and discussion with community leaders.

Box 1 Key topics covered in the meeting with the village leaders

- the general history and character of public service delivery in the area, key development actors and more particularly in domestic water supply services;
- community participation in development activities, with emphasis on safe water service delivery;
- knowledge of roles and responsibilities of the community or water users in safe water service delivery;
- existence and functionality of water user committees; and
- their views and opinions on mechanisms and modalities of ensuring sustainable safe water service delivery in the area and the envisaged challenges.

The village leaders were also requested to update lists of households in their respective villages and informed that the lists would later constitute a sampling frame from which a random sample of households (water users) would be drawn for the baseline survey. Apart from introducing my specific research agenda and politically/socially gaining leadership acceptance (which was very crucial for my inquiry on governance issues), this meeting became a springboard for the entire fieldwork process. In particular, it informed the decision to select two functional and two non-functional water sources, their catchment communities and management as case-studies (within the Makondo Parish case study) for a deeper qualitative inquiry into contextual factors that work for and against community managed safe water facilities. The meeting also helped to inform the development and fine-tuning of the draft household survey questionnaire as well as topics for in-depth interviews, focus group interviews (FGIs) and focus group discussions (FGDs).

Selection of villages for FGDs and Focus Group Interviews (FGIs)

Following the meeting with local leaders, four villages were *purposively* sampled for FGDs, and FGIs. In broad terms, sampling ‘refers to the points of data collection or cases to be included within a research project. These points of data collection may be; a person, a document, an institution, a setting, or any instance of information or data gathering’ (2009 p. 56). The *Misaana* and *Luyiyi-Kaate* villages were selected based on their relevance and uniqueness to the study, and on their potential to represent the entire case study as theoretical or purposeful sampling permits (Coyne 1997). The two villages thus represented communities with functional *shallow-wells* provided by a local NGO but with committees described in the meeting with village leaders as ‘weak and nearly fully disintegrated’. While *Kibuye* and *Kanyogoga* villages represented

water user communities with non-functional government provided *deep-wells*, and with fully disintegrated water user committees, but a few of whose members were traceable for the FGDs. This study was not specifically interested in gender dimensions regarding CBM, but to allow free and socially unhindered discussions male and female water users were separated for separate FGDs. This was mainly because a male dominated society and culture is still apparent in the case study, as it is in most of sub-Saharan Africa. Similarly, group interviews constituting elected village executive council (VEC) members were also conducted separately from those of WUC members who could be traced²⁵ to permit a free discussion of views and perspectives based on the two different community leadership portfolios. This study acknowledges that children (especially girl children), the disabled, extremely poor and elderly potentially face political marginalisation when it comes to rural community settings; it thus did not prioritise organising separate FGDs with them. This was mainly because they all had representatives on village councils covered under FGIs. In addition, the household questionnaire covered aspects related to vulnerability to inequitable access to public services by such population categories.

While FGDs with water users were conducted based on the basic principles of strict adherence to numbers, homogeneity of participants and moderation (Folch-Lyon and Trost 1981), FGIs with local leaders were based more on their leadership portfolio as legitimate community representatives having more direct contact with service providers and actors from the meso and macro levels of policy implementation. With the help of the village leaders, a convenient selection of at 8-12 participants to the FGDs was made based on participant availability in the community at the time of the FGD, age, gender and proximity to a functional or non-functional water source. In all the FGDs conducted the participants had to have lived in the area when their respective water sources were constructed, and it did not matter whether or not households were known to use deep/shallow wells or a protected spring for their domestic water needs. A central and convenient location in the village was always considered as appropriate for the FGDs to allow a fairly easy accessibility for all participants. On the whole this study succeeded in ensuring that water user participation in the FGDs was as representative and convenient to participants as possible.

²⁵ For very diverse reasons, most of the WUCs in various communities had disintegrated. It was almost impossible to find all the members available as they had been elected by communities they were meant to serve.

The time taken to start and conclude a single FGD or FGI also varied depending on the nature and detail of participant experiences or the need for probing. A digital audio recorder was used always with permission from the participants after explaining to them its role as '*secretary and time manger*' rather than a '*spy*' tool. Note-taking was also done during the interview but mainly for probing purposes; identified probes were quickly noted and posed at the end of an on-going submission to avoid interruptions. Effective listening and patience were very important ingredients of the focus group sessions, and members were informed that they were free to leave anytime if they so wished, although in none of the cases did any member leave before all the discussions and issues were exhausted. Two FGDs (male and female) and two FGIs (LC and WUC) would be conducted per village and preliminary analysis of the discussions undertaken before moving into another village. Emerging issues from these FGDs and FGIs would be compared and where necessary, further explored in subsequent discussions and interviews. The findings also helped in the development and finalisation of the household survey questionnaire that explored some of the issues in structured individual interviews with a sample of households proportionately distributed across all the 15 *geo-political* villages in the parish. Both female and male members in WSCs or LC councils freely participated in the same interviews.

In addition to the strengths of individual interviews, doing group interviews in a mixed methodology according to Dushku presents unique opportunities for increasing validity and reliability through triangulation. It also saves on the resources needed by a researcher to cover individuals for information that could otherwise be obtained in a group setting (2000 p. 765). Notwithstanding the minor differences between FGDs and FGIs (Dushku 2000, Folch-Lyon and Trost 1981), both approaches required effective probing on issues related to community management of improved water resources and how meso and macro level actors and policy frameworks interfaced with water users in determining levels of functionality or sustainability of water sources. In total, eight FGDs and eight FGIs were conducted in this phase of the study, although in each of these villages more meetings were undertaken as elaborated later.

Both FGDs and FGIs covered topics related to community participation and community management of water facilities. The aim was to obtain detailed and locally contextual qualitative

data on participants' knowledge and experiences about community participation in rural water service delivery. Opinions about their mandates as water users or facility managers of decentralised safe water supply, their knowledge and experiences about the support received and expected from the macro and meso level water actors, and amongst themselves at the micro-level were discussed initially using (but without strictly following) a topical guide. This is because the discussions could start and naturally flow un-interrupted and focused. Issues pertaining functionality and non-functionality of water sources and WSCs were discussed in FGDs and FGIs and contextual opportunities, challenges and conditions for their revitalisation and sustainability explored.

In-depth interviews and household survey implementation

In-depth interviews with sub-county civil servants and politicians overseeing service delivery in Makondo Parish were undertaken at the same stage/concurrently with the implementation of the household survey.

The household survey

In a predominantly qualitative mixed methods study design, researchers can undertake surveys on some of the quantifiable variables or indicators and use such survey results for cross-reference, analysis and triangulation with the data obtained using qualitative methods (Creswell 1994, Abowitz and Toole 2010). A household survey of water users was conducted using a structured questionnaire administered through personal interviewing. The specific strength the survey brought into this study was its potential to enhance reliability and validity of results by allowing collection and analysis of quantitative data on largely pre-coded questions covering among others knowledge, perceptions and experiences of water users about their mandates in rural water supply. The survey also investigated contextual issues at household and community level that are believed to have the potential to impact significantly on desired levels of CM effectiveness.

The sample size (602 households), its proportionate distribution in the 15 villages of Makondo Parish and the actual selection of participating households were determined following

statistically accepted protocols. The sample was determined using Yamane's (1967) formula as follows:

$$n = \frac{N}{1 + N(e^2)}$$

Where n represented the sample size of households to be selected for interviews, N the estimated total number of households in Makondo parish, and $e=0.05$ (5%) the desired 95% level of precision (Yamane 1967 p. 886 cited in, Israel 1992 p. 4). Using the national household survey (UBOS 2010a), and the national voters register (Uganda Electoral Commission 2011), the number of households in Makondo were estimated at 1883. Therefore, substituting into Yamane's formula as indicated below gave a value of 330 households.

$$n = \frac{1883}{1 + 1883(0.05^2)} \cong 330$$

By adding a 5% value of 330 ($0.05 \times 330 = 17$) to cater for sampling errors, the final value of the minimum (statistically acceptable) sample was 347 households ($330+17$). However, for purposes of enhancing accuracy, 606 households participated in the survey, and following the process of data cleaning in preparation for data analysis, a total of 547 entries (households) remained in the sample. Having constructed sampling frames²⁶ for each of the villages with the help of village leaders, proportionate samples were distributed to each of the respective villages and a systematic sampling technique²⁷ employed to select the actual households for interviews. Village codes and household numbers (in an ascending order) were allocated each day of data collection for ease of their identification.

The development of the household questionnaire was initially based on an extensive review of literature guided by the study's research questions. Later, it was significantly reviewed based on insights generated mainly from informal conversations, FGDs, FGIs, and the observations made during the reconnaissance visits. The questionnaire also went through a WIL project peer review process led by my supervisor before it was translated in a local dialect for pretest. A suggestion was made to the WIL steering committee and adopted that questions for this survey be combined

²⁶ A sampling frame is the range of cases from which the participant cases can be selected for inclusion in the sample (Gibson and Brown 2009 p. 56)

²⁷ One in every three households according to the random order of names of household heads on the sampling frame

in one questionnaire with those of another WIL supported survey whose main focus was on gender, water access and use at household level in Makondo Parish, and which was likely to be implemented parallel to the one for this study. The main justification for the merger was to avoid errors accruing from respondent fatigue in case some households were included in samples of both surveys. Moreover, some of the general questions around household characteristics were largely similar.

With help from the community based health care (CBHC) project of the MMMs, seven community health workers (CHWs)²⁸ (3 women and 4 men) were recruited to assist in the data collection exercise. Their age, ability to read and write well, and their experience in working within similar communities as mobilisers and trainers were of a great advantage to the efforts into preparing them for a successful household data collection exercise. In order to ensure that CHWs were adequately prepared for the task, they were subjected to a six-day rigorous training planned and implemented jointly with the lead researcher²⁹ on the gender aspects integrated into the ‘merged’ questionnaire. The training emphasised among others the critical skills necessary for locating respondents, conducting and recording interviews, editing filled questionnaires as well as use of the Global Positioning System (GPS) equipment³⁰. During the training each and every question in the merged questionnaire was read and its expected responses discussed since most of the questions were closed. The questionnaire, earlier translated from *English* to *Luganda* (the local dialect) was piloted on the third and fourth day of the six-day training programme. The pilot took place in a purposively selected village called *Luwanga* located in neighbouring *Naanywa* parish. Piloting of the translated questionnaire helped in the identification of some inconsistencies between the translated questionnaire and its English version. These were carefully addressed before final questionnaire production and use.

28 CHWs are community based volunteer mobilisers and trainers in the CBHC. They had adequate experience in data collection at household level, which they had accumulated over a number of years of working as community health workers.

²⁹ Also doctoral student under the WIL project

³⁰ The GPS equipment was used to capture coordinates on each of the participating households for possible mapping and for analytical purposes. It also eventually served a validation strategy for checking interviewers to ensure among others that they interviewed the households that had been randomly selected and assigned to them (Fowler, J., Floyd, Jr 2002 p. 133).

Owing to the fact that the questionnaire was fairly lengthy (after merging), it took an average of 3-4 days to complete data collection per village and an average of an hour to fill a single interview. In addition to prior notices, the first day of work in each village involved meeting the village chairperson for self-introduction as a survey team, talking about survey objectives, the randomly selected households as well as seeking for their support in locating the household heads for interviews. A two-hour meeting with data collectors would be held on a daily basis to share fieldwork experiences as well as finalise editing filled questionnaires, while a one-day meeting was held weekly for the same activities covering a week's work, after which completed questionnaires would be parked ready for computer entry and processing. Editing and feedback sessions with the entire survey team on the data collection exercise provided an opportunity for reflection on the emerging findings as well as elicit general observations on contextual issues in the community that were relevant to the study. In addition to peer support as a survey team, the meetings constituted a good source of ideas for data triangulation and analysis. Where necessary, some of the useful insights were carefully followed-up in KIIs/in-depth interviews at the micro, meso and macro levels.

In-depth/key informant interviews (KIIs) with local civil servants and politicians

In this study, the application of KIIs and in-depth interviews was not particularly restricted to their conceptual difference in which KIIs emphasise seeking 'expert' opinions or experiences of selected individuals on specific issues as opposed to in-depth interviews that tend to be more open ended covering a much wider scope of issues and relatively targeting more respondents (Nichols 1991 p.13). In this study, exploration of issues at the micro or meso level depended so much on the respondents' time, willingness and availability for the interview, and their distinct levels of knowledge and experience with regard to rural safe water service delivery in Uganda and in the case study. Moreover, most of the respondents targeted for both in-depth interviews and KIIs at the micro and meso level (sub-county) lived in Makondo parish. Both in-depth and KIIs at the micro and meso level targeted civil servants and politicians and representatives of local community based organisations (CBOs). Community leaders became key informants because they were regarded as experts on most community dynamics related to CBM of improved point water facilities (Gilchrist and Williams 1999 p.73). KIIs with local leaders and available WSCs were undertaken after deployment of the survey assistants (CHWs) to their

respectively assigned households for interviews. It did not matter whether a WSC weakly existed or had fully disintegrated in order for them to be interviewed. While very few interviews with the village leaders or WSCs had been conducted prior to the survey, they were treated more as informal interviews/conversations in preparation for the more in-depth ones.

Meso level civil and political leaders interviewed especially at the sub-County level included the *Ndagwe* sub-County representative in the *Lwengo* district council, *Makondo* parish representative in the *Ndagwe* sub-County local government council, water sector specific civil servants and technical personnel serving the study community at sub-county and district levels. The non-governmental/not-for profit rural safe water service delivery stakeholders interviewed included staff of the CBHC project of the MMMs and field staff of Kitovu Mobile. In addition, private-for profit water sector actors in the area; the hand pump mechanics (doubling as ‘spare parts dealers’) were also targeted and interviewed. Table 1 below presents the categories of KII participants at the meso and micro levels.

Table 3 Categories of key informants interviewed at the micro and meso levels of planning and rural safe water service delivery

Meso (District/Sub-county/Regional)	Micro (Community)
<ul style="list-style-type: none"> • District Water Officer • District Community Development Officer – Lwengo • Community Development Specialist (Technical Support Unit – Masaka Region) • District Health Officer • District Hand Pump Supervisor • District Secretary for Finance • Deputy Programme Coordinator – Makondo Community Based Health Care Programme • Field Staff Kitovu Mobile Clinic – Masaka Region • Lwengo sub-county Chief • Lwengo sub-county Health Assistant • Lwengo sub-county Hand Pump Mechanic • The Parish Chief- Makondo Parish 	<ul style="list-style-type: none"> • Village Executive Leaders • Makondo Parish Development Committee Chairperson • Representative of Makondo Parish in the Sub-County Council • WSC Chair persons • Water Source Caretakers

The interviews focused on specific and contextual rural safe water governance issues that affect sustainable safe water service delivery. Prominent among the issues covered in the interviews were functionality levels of improved water sources, dynamics of community/water user

participation e.g. monthly contributions, community management support provided/received, knowledge and utilization of external support opportunities, community sensitisation and training provided/received, and community level conflicts. On average two interviews were conducted in a day. A digital recorder was used to record all the interviews although some notes could be taken during the interview, mainly as probe points. The interviews were also listened to on the same day they were carried out, and salient issues requiring follow-up or clarification noted for possible follow-up in subsequent interviews.

Validation of preliminary findings, revitalisation of WSCs and repair of two hand pumps

By sharing preliminary research findings with study participants or target groups researchers can obtain feedback that may be used to refine their results thereby enhancing validity and reliability of their research findings (Silverman 2010 p. 380-381), especially through recognizing and dealing with their own prejudices (Parahoo, 2006 p. 327). In each of the villages selected for the qualitative inquiry, community meetings were organised in order to:

- i. validate emerging study findings;
- ii. use the validation exercise to sensitise them on their roles and responsibilities;
- iii. motivate them to see the need for revitalisation of their WUCs;
- iv. mobilise communities to make a financial contribution towards the repair of their improved water sources, and
- v. obtain practical insights through direct observation on issues of community management and community participation in rural safe water supply services.

While I was more of a direct observer, I also participated in some of the activities as I observed the processes of hand pump repair and WSC revitalisation. Jorgensen (1989 p.12) notes that through participant observation, it is possible for researchers to ‘describe what goes on , who or what is involved, when or how things happen, how they occur and why things happen as they do in particular situations. In order to enhance the naturalness of the processes, I ensured that the sub-County Hand Pump Mechanic (HPM) took the lead in the entire exercise, allowing me sufficient opportunity to conveniently observe, take notes and use photography to capture major events where necessary.

With support from HPM, village executive leaders and the representative of Makondo parish in the Ndagwe sub-county local government council, WSCs of four water user groups (WUGs) in *Misaana, Makondo, Kibuye* and *Kiganjo* villages were revitalised³¹. Three of the non-functioning hand pumps in *Kibuye, Misaana* and *Kanyogoga* villages were also repaired and their disintegrated committees reconstituted. In both of the cases, participation in each of the activities in the process provided a very rich source of insights for the study. Practical dynamics involved in community mobilisation such as community interest, time management, community labour, and other logistical and material contributions such as (food and water) were a key source of insights for the study. In addition to insights obtained from interviews and discussions, direct observation of such process brought new dimensions in understanding the issues in CBM. Observed also were potential sources of conflicts; e.g. processes, considerations and preferences while electing new members of WSCs; priorities, methods and challenges in community training and sensitisation on roles and responsibilities; aspects of handover of ownership and maintenance responsibilities to the community, the need for a committed water source care-taker as well as the need for follow-up by a technician or other service providers.

Revitalisation meetings and the repair of hand pumps activities also utilised some of the principles in action research (AR) while keeping my positionality as an outsider. In addition to being a researcher, my role as the initiator of the hand pump repair and WSC revitalisation meetings became more like that of a ‘change agent’. As Reason and Bradbury observe, AR ‘involves practices of living inquiry that aims ‘in a great variety of ways, to link practice and ideas in the service of human flourishing’ (2008 p.1). Herr and Anderson also observe that AR ‘generally requires that some form of evidence be presented to support assertions’ (2005 p.3).

The validation exercise³² provided a very good ground for an effective process of community sensitisation especially on roles and responsibilities of stakeholders sustainable rural safe water service delivery, with a lot of emphasis placed on the rather determinant and indispensable roles

³¹ The sub-County HPM, who earlier granted me request to work with me, was the most accessible resource person with whom I could work to mobilise community members and their leaders for the validation meetings, pump repair and WUC revitalisation. During my interactions with the community, district and sub-county leaders, I became convinced that the HPM was the best person to work with in this exercise. He was familiar with the Parish and it was ‘part of his job’ as a sub-County HPM to mobilise communities, sensitise them and facilitate formation or revitalisation of WSCs of newly established or rehabilitated water sources respectively.

³²This was the first activity at each of the community meetings following a welcome note and introductions made by the village leader.

of the community in CM. During my presentation of emerging research findings, I allowed and kept on inviting participants for questions and comments most of which I kept posing back to the leaders and the community members in the meeting to allow further insights and learning from the process intended to enrich the findings. The use of a digital recorder to record the discussions was made, having explained at the beginning about its role as a minute/note taker and obtained the consent of the participants. Both the validation exercise and the sensitisation and education exercise led by the HPM motivated community members and their leaders to have their WUCs revitalised, with community members pledging more support towards their elected WUCs in order to ensure sustainability of their improved water facilities.

National level key informant interviews (KIIs)

The final stage of fieldwork for this study mainly entailed conducting KIIs with stakeholders at the macro level. These were identified based on Gilchrist and Williams' (1999 p. 73) definition of key informants as 'individuals who possess special knowledge, status, or communication skills and are willing to share their knowledge and skills with the researcher. Nichols (1991 p. 13) observes that 'it is often possible to collect valuable information from a few persons who are 'particularly knowledgeable about certain matters'. Researchers may use various approaches to ensure that such individuals adequately inform the study including use of formal and informal interviews or conversations, requesting KIIs to share relevant documents or use of a combination of interview and observations, depending on the researcher's own ability (Gilchrist and Williams 1999).

Key informant interviews for this study mainly targeted technical personnel of the rural water supply Directorate, i.e. the Directorate of Water Development (DWD) in the Ministry of Water and Environment, water NGOs operating at national and international levels, as well as key private-sector actors, particularly hand pump spare-parts dealers. Members of some of the newly forming associations of hand pump mechanics were also interviewed. These were targeted as key informants because of their diverse and specialised knowledge, experience and expertise on rural safe water supply as and the CM model in particular. At the sector ministry level, personnel that were purposively selected for interviews included the commissioner for rural water, the principal sociologist, his assistant and the head of the technical support unit (TSU) for the central and

southern region in which Lwengo district lies. *Buyaya* technical services, the main spare parts dealer in the country represented the hand pump spare parts dealers at national level. Uganda Water and Sanitation NGO Network (UWASNET), Network of Water and Sanitation (NETWAS) Uganda, Triple-S Uganda, and Water Aid Uganda were the NGOs considered and interviewed at national level. Table 4 below provides a list of the participants in KIIs and the organisations they represented at the macro level.

Table 4 Participants in key informant interviews at the national level

Macro (National)	Organisation
Commissioner Rural Water	Directorate of Water Development (DWD)
Senior Sociologist	Directorate of Water Development (DWD)
Social mobilisation and gender specialist	Ministry of Labour, Gender and Social
Programme Coordinator	Triple-S Uganda
Policy and Advocacy Officer	UWASNET
Member	Good-Governance Working Group
Directors	Buyaya Technical services (spare parts dealers)
National Learning Facilitator	Triple-S Uganda
Programme Officer	NETWAS Uganda
Member	Hand Pump Mechanics Association
Head of Campaigns Advocacy	Water Aid Uganda
Research Officer	Water Aid Uganda
Programme Officer	SNV Netherlands

In addition to broadly seeking their independent views and opinions about the national policy framework for rural safe water service delivery, and how it impacted on the CBM model for rural safe water sustainability, I shared with these actors key of the study’s emerging governance and enablement issues particularly from the case study. This strategy adequately served to validate such findings³³. Particularly important was to identify, collect and analyse some of the documented success stories of CBM in the rural safe water activities of the NGO actors so as to distill more information and lessons that would further inform answers to the core question of this study.

The inclusion of actors as sources of data helped in obtaining answers to the question of why, despite their knowledge of the fact that community management was a key determinant for

³³ In seeking appointments for the meetings, I ensured that I emphasised sharing feedback from the field on the study rather than interviewing, and that the meetings would need not more than one hour, although this varied based on the different contexts. Stating the amount of time it would take to start and conclude the meeting was quite helpful in ensuring that consent for the interviews was quickly obtained from these actors.

sustainability³⁴ service providers especially from the public sector continue to lay limited leverage to CBM as opposed to investing in hardware. It was envisaged that obtaining answers to this question in the water sector would also indirectly answer the question of why most community based development initiatives in Sub-Saharan Africa and Uganda in Particular promise very little when it comes to their potential to trigger *bottom-up* development-management, most especially through community capacity building for sustainable community development. Views and opinions were also sought during KIIs on the failure by community development actors to build and sustain community capacity to demand for accountability from their representatives in public decision making forums including government, private and voluntary sector (NGO and CBOs) institutions³⁵.

Perspectives and experiences of key actors at the micro, meso and macro levels on what could leverage effectiveness of CBM systems for sustainable rural safe water service delivery, their roles and relationships in the governance framework were sought and examined alongside theoretical debates and literature as well as the actual realities from the case study. Given that community capacity building was considered a key enabling factor for rural safe water service sustainability, questions were asked in order to compare NGO and government support to communities in terms training and the areas of training emphasised. Among the key training issues investigated were leadership attributes such as patriotism, accountability, transparency and conflict management. The forms of support prioritised for WSCs and their communities were also investigated, for example, by-law development and implementation, trust building between and among private, voluntary and public actors.

In addition, views and opinions were sought during KIIs on the nature of relations between public officials (politicians and technocrats) and other actors including private for-profit and private not-for-profit, as well as relations between all the actors and the water user communities. Not only, was the extent to which water actors believed in CBM models as indispensable

³⁴ as stated in the policy documents and sector research reports (See e.g.MWE 2011a)

³⁵ This general discussion was considered important in order to obtain respondents' broad perspective of critical contemporary governance issues in developing country contexts that inevitably impact on service delivery in sub-Saharan Africa. It is believed that communities in resource poor settings typical of Sub-Saharan African rural set-up can easily be 'commoditized' by 'social or populist investors' in government, NGO and private sectors; i.e. they can easily be treated as allies only in as far as they can help such actors to 'sell' their agendas rather than focus on ameliorating their real problems or development constraints. This was linked to the systems thinking that development issues are multi-faceted, complex and dynamic, and that the most effective way of diagnosing a single problem is to appreciate its possible links with others.

determinants of sustainable rural service delivery, but what they actually did to leverage its effectiveness. Emphasis was placed on actors' knowledge and perceptions of policy contradictions, management of power relations among actors at all levels, motivations and expectations. Opinions on the seemingly growing apathetic public service culture among politicians and civil servants over public service delivery and the practice gap in social and downward accountability were also sought during KIIs. The case study and mixed methods approaches were indeed pertinent for this study in generating credible information on the intricacies inherent in public (water) policy implementation in the current NPM and governance framework characterised not only, by many actors working in formal and informal partnership arrangements, but also where recipients of public services are seemingly 'only presumed' to be the key determinants for policy/CBM success.

Review and analysis of documents

Identification and analysis of data from documents was an important and on-going process throughout this study. Gibson and Brown (2009 p. 65) view documentary research as a process of using documents as a means of social investigation, and which allows researchers to gain detailed insights into people's lives, and to the workings of organisations. Documents review and analysis involves identifying and using pre-existing data and information to answer a different research question or concern than was intended by those that collected the data or prepared such documents (Schutt 2011, Gibson and Brown 2009). Finding and analysing secondary material or data is also useful for understanding ways in which important institutions in the politics of development and national governments view problems and solutions in the domain being studied (O'Laughlin 1998).

While the websites of actors had earlier provided a useful source of documents for review, more documents were identified during the key informant interviews with some of the national level actors particularly the NGOs. The documents identified during interviews with NGO actors mainly included annual programme reports and documented success stories of their interventions in support of community-managed rural point-water facilities. Annual NGO reports and case studies were considered key for this study mainly because it is often claimed that NGOs are more effective when it comes to community development work. Their reports were anticipated to

provide more insights into what innovative strategies could be adopted to make CM work in delivering sustainable rural water supply. The review of documents helped in enhancing the understanding of relationships between key actors in the rural domestic water supply in Uganda, roles and responsibilities of actors as well as the analysis of contextual challenges faced by actors in playing these roles to support CBM. The review and analysis of policy and guidelines also facilitated a deeper understanding of the relationship between international and national contexts of rural water supply policy formulation, its interpretation and operationalisation in the water legislations, implementation manuals, guidelines and the analysis of contextual limitations that disable policy effectiveness.

In order to understand the national guidelines and laws concerning procurement, and financial accountability in the rural water sector, the Water and Sanitation Sector Specific Schedules and Guidelines 2009/2010 were reviewed along with the Public Finance and Accountability Act, and the Public Procurement and Disposal of public assets Act. A documents review and analysis checklist was developed, although it was not conscientiously followed as it could occasionally be revised to suit contexts and needs due to constant overlaps. It is important to note that the documents were not only helpful as sources of data for answering the study's specific research questions but some of these documents contributed to informing the overall study design, methods and strategic fieldwork decisions.

Data Management and Analysis

Data capture, quality controls and storage

Gibson and Brown rightly point out the importance of data protection as 'the nature of research work normally involves lots of travel, multiple work places and interest groups' such as colleagues and supervisors. By implication, they argue that 'location of data can be hard to specify and contain' (2009 p. 62). Data management strategies for this study began before and continued through fieldwork up until write-up and completion of the thesis. Indeed it would have been naive to collect good data without having a useful data capture, storage and management strategy.

Prior to fieldwork, folders specifying categories of electronic information materials were organised and relevant data files saved in their corresponding folders. Recorded interviews, FGDs and observation notes or photographs taken on observed phenomena were saved in appropriate folders bearing their dates and sometimes with codes bearing certain meanings. This served to ensure efficiency in locating such data as well as build and enhance early analytical categorisation and data associations. Unlike in the survey where the use of a structured questionnaire was a must, in the qualitative component of this study I was more of a 'tool' of data collection as Parahoo (2006 p. 326) observes. While a digital recorder was effectively utilised in recording all of the qualitative interviews and FGDs, notes were also taken during interviews and FGDs but more as 'probing clues' rather than verbatim capture of data or voices of participants. Recorded interviews were routinely listened to and important clues for data analysis and further interviews and discussions noted. With regard to survey data, filled survey questionnaires were edited for completeness and clarity of recording on a daily basis before subsequent interviews were undertaken. Data collectors also kept field diaries for record of any issues they found relating to the questions in the questionnaire. Such issues would be discussed in the daily editorial meetings to establish in particular, if they carried important meanings for quality assurance in the data collection and management processes.

Further safety and controls were ensured through data backups using an *external hard drive* and (sometimes) uploading on a *g-mail* address account specifically opened for that purpose. Data summaries from FGDs, and observations as well as materials downloaded from the internet were saved with file names that reflected their categories, sources and dates last saved (for those that were updated).

Processing and analysis of qualitative data

Quality controls for ensuring effective data collection, reliability and validity of results were indeed integrated in the overall research design, strategy and methods. Method and data triangulation were inevitably the best research strategies that could be adopted in order to enhance rigour, and reliability of the case study design. As noted earlier, processing and analysis of qualitative data started during fieldwork and continued through the writing of the thesis. Listening to audio recordings, transcription, editing and storage into *Microsoft-word* files was done as more interviews were being undertaken. The process ensured that pertinent issues that

emerged especially from FGDs, in-depth interviews and KIIs were used not only to cross-check internal consistency and inform study conclusions but also reiteratively stimulated identification of important clues for data collection, management and analysis. The process of qualitative data collection involved ‘sifting and analyzing data during the interviews and discussions as well as transcribing and making sense of the data immediately after’ as Parahoo (2006 p. 326) observes.

The analysis of data generated by qualitative methods was greatly informed by models and approaches suggested by Yin (2003 p. 110-139). Among the various techniques or approaches he proposes as suitable for the analysis of data generated in case study designs, *pattern matching* and *explanation building* were found to be very useful and have been applied in the analysis of this study’s qualitative data and cross-synthesis with survey data. In the *pattern matching* analytical technique, comparisons were made between the predicted patterns (mainly based on theory) and the emerging and observable patterns or issues from the data (empirical patterns). The conceptual debates and issues about new public management, enablement and governance discussed in detail Chapter Three greatly informed the construction of theoretical propositions that were tested and compared with the findings in order to generate explanations (*explanation building*). In using the *explanation building* technique, theoretical reflections on the empirical data were part of the entire fieldwork and data collection process. These reflections continued after fieldwork, particularly at the thesis writing stage. Tables and charts were used to map out and describe relationships (similarities and differences) based on data sources and study specific issues to allow for more correct inferences or conclusions. Theoretical patterns were constantly and iteratively modified to reflect theoretically significant propositions against the data. The initial theoretical statements or propositions based on the study’s research questions were thus confronted with the empirical findings. Where there were differences or mismatches between propositions and empirical data, theoretical revisions were made, to inform the creation or formation of new perspectives, theory and conclusions.

The analytical techniques employed in the analysis of this study’s qualitative primary data i.e. *pattern matching*, *explanation building* and *cross-case analysis* techniques should not be viewed as having been applied in a mutually exclusive manner. Rather, their application was highly mutually inclusive, integrated and simultaneous following the principles of *theoretical triangulation* elaborated well by Thurmond (2001 p. 256). As rightly argued, at data analysis

stage, triangulation helps to obtain confirmation of findings through convergence of different perspectives or independent approaches (Campbell and Fiske 1959 p. 83-85), especially based on comparing data to theory, and it is at the point of convergence that reality about a specific research issue or phenomenon is understood (Jennifer Grafton, Anne M. Lillis and Habib Mahama 2011, Thurmond 2001). Continuous cross-checking with the research question, focusing on significant theoretical aspects, and *rival explanations* were a very pertinent component of the efforts to enhance validity and reliability of the findings.

Processing, analysis and presentation of quantitative data

Before starting data collection in households, data collection assistants would first finalise editing filled questionnaires of the previous day. Subsequently, they would exchange individual questionnaires in groups of two or three for further cross-checking to ensure clarity, visibility and completeness of data for ease of data entry into the computer software and eventual processing and analysis. A full day questionnaire editing, and most crucially, discussion of emerging findings from the survey as well as sharing of experiences or lessons was organised on a weekly basis in addition to the 1-2 hour daily morning meetings. The meetings not only ensured a very effective and well managed fieldwork process but also most importantly generated very interesting clues that enriched the analysis of findings from other methods. The age and experience of the CHWs not only enhanced their ability to synthesise some of the preliminary findings from the survey data they collected but also helped to clarify most of the issues encountered in the community using FGDs, in-depth interviews and unstructured observations. Some new codes for pre-coded questions were added in the first three days of data collection and codes for very few of the open ended questions developed based on the recurrence and predictability of responses.

Household survey data were entered into a computer using *Epi Info* [Epidemiological Information (Windows 2001)] and double entry done to ensure quality. On a continuous basis, all data files were crosschecked and cleaned. Initial editing was performed from *Epi Info* using a simple frequency and pivot table observation. The data were then transferred to the Statistical Package for Social Scientists (SPSS) for further editing, summary statistics generated for each variable and transformation performed for some variables before the actual analysis started. Data

analysis involved generating descriptive, bivariate and multivariate statistics for indicator variables and displayed using frequency distribution tables and charts.

Descriptive statistics focusing on measures of central tendency and dispersion (i.e. mean, median, mode totals, minimum, maximum and etc.) were generated for the continuous variables namely: age of the respondents, household size and frequency distributions generated for the categorized variables. Bivariate analysis was used to determine relationships between variables of interest and included generating cross-tabulations for household socio-demographic characteristics and livelihood by access to water, knowledge of hand pump functionality in the community and water user perceptions of safe water services and systems. The chi-square test statistic was also used to test the strength of the relationship between the dependent variable and independent categorical variables. Multivariate analysis included computing logistic regression models in order to predict the likelihood of a household/respondent's characteristics such as size and estimated monthly income or participation in training and sensitisation activities in influencing its contribution towards community development initiatives.

Addressing Ethical Concerns

Seeking ethical approval has for long been part of the research process particularly with studies conducted among human subjects. Gibson and Brown indicate that researchers need to give consideration of ethical issues because they impact on the entire research design and therefore the quality of their research results rather than because research boards expect them to do so (2009 p. 61). Official permission to undertake this study was sought from the Uganda National Council for Science and Technology (UNCST) after submission of an application form specifying among others the purpose, schedule, target groups and the geographical areas for fieldwork.

Getting ethical approval from UNCST was not the end of my ethical reflections and considerations for this study. Study participants received full verbal explanations about the aims and objectives of this study, its relation to the WIL project, and their consent to participate sought before any interviews or discussion could be held. Participants were particularly informed that their participation was voluntary and that they were free to withdraw even in the middle of the interview or discussion if they so wished. However, in order to increase opportunities for full

participation, their invaluable contribution to the results of the study was emphatically explained to participants and efforts made to variously link it to national policy and development. Adherence to privacy and confidentiality of the information given by respondents was explained to the participants as a working principle. In addition, requests to use the digital recorder, camera and GPS machine were always made to the participants before their actual uses. This enhanced their confidence levels to freely share their views and opinions, particularly regarding government policies and practices as well as Community participation and management dynamics at the micro-level.

Overall Study Design Limitations, Challenges and Emerging Experiences for Future Research

There are worries that seem to confront some academicians that project based doctoral research may deny doctoral researchers some degree of methodological independence. However, my own experience from implementing this research could contribute to reversing the trajectory of such perspectives. The WIL project and its broad thematic doctoral research area met my own individual preferences in public service delivery and community development, allowing me to identify a thesis topic that would motivate me to research with a good amount of enthusiasm. In addition, the choice of the case study and mixed methods design to understand disabling governance dynamics in rural safe water service delivery could still be applicable anywhere in Uganda or in sub-Saharan Africa where CBM models are pronounced in policy proposals but seemingly practically ignored or undermined at policy implementation.

While this study did not orient itself much into an action research (AR) design, it benefitted from the AR theory and techniques to integrate participant observation techniques into problem solving actions during repair of hand pumps and revitalisation of WSCs in four villages. By implication, another researcher having more time and resources could ably undertake a similar study using AR techniques. Before stimulating community discussions over the need for their participation in the management of their improved water sources, preliminary findings from FGDs and in-depth interviews were presented and discussed. Revitalisation meetings facilitated by the sub-county HPM in selected communities led to unanimous decisions by participants to renew their perceptions of the WSCs and support their work if sustainable access to services was

to be achieved in their respective villages. Follow-ups to such groups promising to succeed could be made to ensure that their success in CBM was used to support other neighbouring villages through inter-village learning activities coordinated by local leaders.

In situations where research problems and contexts of academic researchers allow, integration of AR principles and theory in academic research reduces the extent to which researchers will be regarded as ‘data miners’. Integration of methods also allows researchers some degree of confidence and reduces the ‘burden’ on researchers having to always declare to the researched the ‘anticipated contributions to wider national policy and programming’ etc. This is because such policies or programmes academic researchers always hope to contribute to may never directly benefit the researched communities. Where they do, the time may be too long for communities to be able to link such programmes to any research they participated in.

Depending on the time researchers stay in the community and the organisations they are linked to, community trust for the researchers can grow beyond just the research period. Most of the contacts built in the study community have remained, and could easily be maintained for any future research or WIL project interests. Undoubtedly, two months of living and working within the community, and my links to the MMMs, WIL project and Makerere University Kampala were important. They led to a strong community trust and consequently a very friendly research atmosphere. Coupled with a successful fieldwork and learning experience, I have until today kept a fresh memory of the community.

Meetings with community leaders, formal interviews and discussions, informal discussions at water sources, in shops, with *boda boda*³⁶ cyclists, in restaurants and bars not only contributed to my data collection experience but also helped me to quickly envisage an opportunity for testing some of the emerging theory and hypotheses from FGDs. The community meetings at validation, hand pump repair and WSC revitalisation added another dimension in the study by enabling the community to see their own potential for operating without always having to look up to government or charity organisations. Further, they were able to appreciate their responsibility not in contributing to O&M of their water facilities but also in demanding for social accountability from their leaders, local governments and other non-state service providers. This was quite

³⁶ Boda boda is a local name given to hired motor cycle transport services in Uganda and most of Eastern Africa

rewarding on my part as a researcher for (i) I was able to test some of my propositions around ‘community enablement’, and (ii) I felt more confident as part of the new but already familiar community. I understood that a researcher as an ‘outsider’ and more so, one communities often tend to perceive as ‘expert’ may be helpful in stimulating community action into tackling community problems, but only in circumstances where the researcher has the time and sufficient ‘community sanction’.

Initially, it was quite challenging to implement an academic research fieldwork in the WIL project framework linked to the MMMs. The presence of seven more academic researchers running their research projects more or less at the same time even made it more challenging particularly in dealing with community and leadership expectations, and their time. The case study’s political economy, culture and socio-demographics compare very well with the rest of Uganda. Consequently, I found it fairly easy to deal with community expectations, although it always took a good amount of time to tap from my previous experiences researching in similar contexts in Uganda in order to address this unique challenge. Fortunately, the specific interests of different studies were clearly distinct. In addition, individual timelines as well as research designs including selection of specific WUGs in different villages were also different (except for the merged household survey). Despite my confidence and experience working and researching in similar community conditions, I still knew at the back of my mind that surprises were inevitable. I knew it was very challenging to learn (in the correct time) the significant social and political relations in the community’s social fabric. My curiosity about the leadership-community relations was always considered important at every stage of my fieldwork. In particular I always ensured (whenever it was possible) that I obtained a more clear picture of such relations at entry into every village and before leaving every village I worked in. This was particularly because such relations were likely to have significant implications for the study both in terms of fieldwork and data interpretation.

In most of the cases the community and their leadership perceived me as a ‘visitor’. I thus found it imperative, especially during my introduction in FGDs, FGIs and at WSC revitalisation meetings, to always emphasise my interests without denying the title of ‘visitor’ by making quite clear my research objectives, the institutions I associated with i.e. MMMs and WIL project (and the project partnership with Makerere University, Irish AID and Dublin City University), and my

role as an academic researcher. This worked very well in building the community's trust and confidence for very enriching discussions and interviews. While associating and identifying with village political leadership is of necessity for researchers in the Ugandan rural political context, it was found in some cases to be detrimental to the research process particularly where such leaders were perceived as having been responsible for community services failure; e.g. in causing laxity or sometimes conflict among community members over contributions for operation and maintenance of water facilities, or where they maintained future political ambitions. Building and carefully utilizing parallel contacts with elders, retired civil servants or women groups in the communities was found to be a very helpful counteractive strategy for more effective fieldwork. But, again situations and contexts ought to vary.

There were unique challenges associated with the revitalisation of WSCs and the hand-pump repair exercises. The study hoped to compare two sets of communities whose WSCs were revitalised with the help of the HPM by providing 'post-revitalisation' support to one set of communities and no support to another in order to be able to compare results against which conclusions would be undertaken regarding the impact of regular support to communities over their adherence to CBM principles. However, the follow-up could not be carried out beyond four months as the time and financial resources could not allow. Nevertheless, within the four months there were some good insights found useful in informing findings and conclusions for this study. These have been integrated in the analysis of findings on the micro-level dynamics that impact on CBM presented in Chapter Six.

In conclusion, a single case and mixed methods study design is considered to have been a credible design choice for this study, given the WIL project context, my reflexivity and positionality within the study. The flexibility in mixed methodologies allowed me to test theory using a range of research methods and strategies based on the unique contexts of the study notwithstanding its complex and time consuming rigour that required taking strong decisions while maintaining the credibility of research results. The design and methods greatly allowed a detailed analysis of available evidence from policy and programme documents of public and voluntary actors as well as data generated through interviews, observations and survey methods at meso, macro and micro levels. However, it is important to note that, by its nature, the mixed methods design led to the generation of huge amounts of data from different sources, and indeed,

this had the potential to cause confusion or frustration particularly at the analysis stage (Parahoo 2006). A lot of time had to be spent not only in organising data-sets but also comparing and matching data and insights from different sources in order to enhance the data analysis rigour. There were situations where I could get stuck trying to make sense of different texts from different sources, until I consulted theory or literature several times in order to settle on a certain specific position. I always had to ask myself before making a final position on an issue or a set of issues emerging from the data. The interpretation of the data therefore was not just based on dominant theoretical and conceptual perspectives but also on my personal experiences with community structures in Uganda, general country leadership and service delivery experiences. Indeed another researcher could have interpreted some of the data very differently, as personal experiences are completely inevitable while making sense of qualitative data. Nevertheless, the final study results and the conclusions drawn thereof remain adequately credible to contribute to existing knowledge around the subject of community managed public services.

Chapter Five

Macro and Meso-Level Factors Undermining Community Managed Point-Water Facilities in Rural Uganda

Introduction

Knowing the right way forward is one thing, but achieving the rate of progress needed is quite another (Lockwood 2004 p.1)

More than three decades of the neoliberal influence on public policies should have indeed meant that development actors, especially governments of the developing world, are sufficiently aware of the equity implications of state withdrawal from direct service delivery. As a result, this knowledge ought to have compelled them to put in place measures that address bottlenecks to development approaches that place ‘new’ responsibilities on consumers of public services. As part of the new policy paradigms, CBM in the rural water supply sub-sector is premised on its potential for enhancing equity and sustainability principles. Indeed, in the theoretical and empirical literature, the NPM and governance agenda emphasise blurring of boundaries between and among development actors (Stoker 1998 p.17, Akif Ozer and Yayman 2011a) as an important recipe for enhancing effectiveness in service delivery and development. But how is this coming possible in a sub-Saharan context? In the context of effective CBM for rural safe water supply and sustainability, blurring suggests that water sector actors at the macro, meso and micro levels of service delivery work closely with one another for optimum results. But how is this happening drawing from a detailed study of Uganda? This chapter examines macro and meso level factors that undermine the effectiveness of community managed models of service delivery. Broadly, it examines the dynamics that characterise relationships between and among rural water supply sector actors and institutions in a decentralised and ‘networked’ service

delivery framework. By so doing, the chapter further illuminates how the influence of the NPM and governance agenda may perpetuate inequality in access to public services, even if such policies and programmes may be ‘designed in a pro-poor manner’. Specifically, analysis is made on inter-governmental/decentralised relations in budgeting and financing the rural water sector activities and programmes that have a direct/indirect impact on CBM effectiveness. It also examines dynamics and power relations among government actors and how these undermine CBM. The chapter also examines the dynamics surrounding private sector participation and whether and how the regulatory function of public authorities are executed in a manner that compromises the goals of CBM. Finally, the chapter examines NGO relations with government and the private sector, and the challenges and prospects such relations have for CBM and functional sustainability of rural point-water facilities and services.

Central-Local Government Financing Relations and Challenges to CBM Effectiveness

In Uganda’s decentralised governance framework, central government (CG), through its line Ministry of Finance, Planning and Economic Development (MFPED) transfers funds to local governments and other public sector bodies mainly in form of *conditional grants* for the delivery of specific public services. Finances for rural water supply primarily come from the national treasury and donor funding (in form of loans or grants as national budget support). Budgetary processes for the rural water sector consider both *on-budget* and *off-budget* funding mechanisms in line with the sector-wide approach to funding discussed in chapter two, in which a single budget framework is followed by government and donor agencies. In Uganda’s budget framework, on-budget funds are financial resources allocated to a given sector based on the government’s estimates of its revenue and expenditure in given financial year. Off-budget funds on the other hand are estimates of funds to the sector outside government’s sector finance ceiling and the medium term expenditure plan usually covering a period of three years. These funds mainly include funds from development partners which may go directly to local governments, semi-autonomous government institutions or to NGOs implementing programmes/activities in the sector. These funds are released to district local governments (LGs) in form of conditional grants or equalisation grants for ‘least developed’ districts.

Through District Water and Sanitation Conditional Grants (DWSCGs), and/or District Equalisation Grants (DEGs) drawn from the Poverty Action Fund (PAF)³⁷, local governments receive, utilise and account for funds for rural water services, including operation and maintenance of systems for point water facilities. An analysis of the dynamics in national budget allocations for the water and environment sector, and rural safe water supply in particular, reveals important concerns that have far reaching implications for CBM. These are discussed in detail in the following sections.

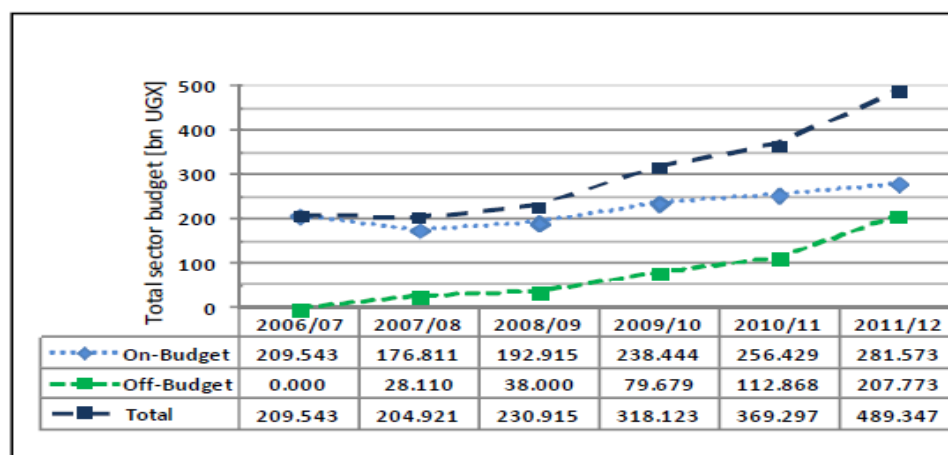
Changing dynamics in national budget allocations and delays in disbursement of funds to LGs

The findings show that while the total national budget share for the water sector increased by 16.1% in financial year 2010/11 (MWE 2011b), there was a 5.5% drop in the *on-budget* funding by the government of Uganda (GOU) from 74.9% reported for the financial year 2009/10 (MWE 2011). As noted in the 2012 sector performance reports, this implies a ‘gradual but positive growth in *off-budget* funding’ for the sector (see figure 7). The 2011 water sector performance report, indicates that the national budget share of the water and environment sector has decreased by about 5% since 2004/05, although the sector budget share for rural water supply has remained high compared to other sub-sectors (MWE 2011b p.14).

The reduction in government funding for the water sector not only threatens the effectiveness of policy options intended to enhance public service delivery with the participation of beneficiaries at the local level, but it is also a reflection of the difficult and contextual realities in implementing NPM policies in resource poor democracies. As will be discussed later in this chapter, a decline in priority for funding the water and sanitation sector automatically affects CBM activities that already receive a relatively much smaller share of the funds available for the rural water and sanitation activities.

³⁷ Budgets for PAF are prioritised and ring-fenced for specific activities aimed at poverty reduction.

Figure 7 Overall off-budget and on-budget sector funding mechanisms since financial year 2006/07



Source: MWE (2012 p. 20)

In addition to the gradual reduction in *on-budget* support to the water and environment sector, this study found out that delays in disbursement of funds to decentralised units further undermine prospects for CBM to enhance opportunities for the sustainability of point-water facilities. The 2011 water sector performance report indicated, for instance, that efficiency in release of sector funding to districts, together with delays in procurement have often led to hurried implementation of activities and/or poor budget performance (MWE 2011b). Moreover, not all the amounts approved for the water supply and sanitation (WSS) budget are also usually released, nor are all of the funds released always spent as can be seen in table 6 below.

Table 5 DWSCG expenditure for the financial year 2002/03 – 2020/11

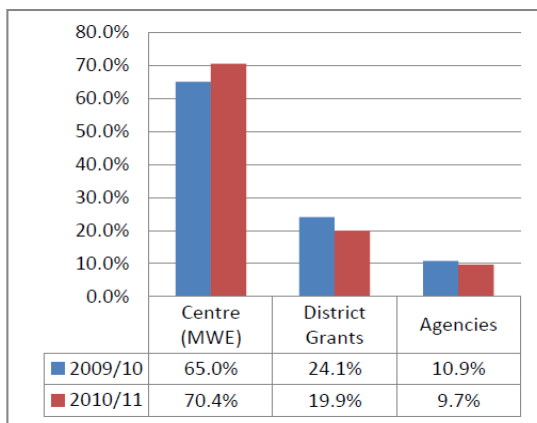
Item	2002/03	2003/04	2004/05	2005/06	2006/07	2007/08	2008/09	2009/10	2010/11
Total Budget	24.50	29.60	29.60	27.73	40.66	46.35	45.44	55.37	56.85
Total Releases	24.48	25.46	27.96	27.65	40.50	41.44	44.13	55.37	52.1
Total Expenditure	22.07	24.16	26.95	25.06	36.62	35.51	40.86	42.72	52.1
% of Budget Released	100	86	94	100	100	89	97	100	91
% of release spent	90	95	96	91	90	86	93	80	100

Source: MWE (2011 p. 18)

These findings indeed raise questions as to whether decentralised financing is capable of enhancing equity in access to essential services as the NPM and governance policy framework seem to suggest. At a glance, one would question the government’s level of precision in terms of revenue estimations at the macro level, and bureaucratic performance both at the macro and meso levels to identify whether the answers to such a problem are related to technical capacity gaps or simply an inefficient and irresponsive government. But as table 6 particularly shows, it is clear that, the service delivery and governance system for the rural water and sanitation sector does not seem to learn from a nearly ten year experience of budget inefficiency in terms of release and utilisation of DWSG.

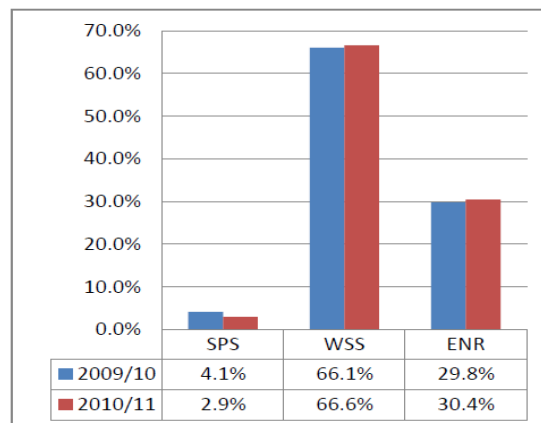
An analysis of the distribution of the water and environment budget may also reveal that the budget share for Water Supply and Sanitation (WSS) has remained high at 66.6% compared to that of the Environment and Natural Resources (ENR) at 30.4%, and Sector Programme Support (SPS) at 2.9% (figure 8). However, more finances (over 60%) for the WSS sector remain at the centre compared to what is disbursed to districts as conditional grants (figure 9).

Figure 9 Budget allocation by management level 2009/10 and 2010/11



Source: (MWE 2011 p.16)

Figure 8 Budget allocation by sub-sector 2009/10 and 2010/11



Source: (MWE 2011 p.16)

The findings of this study also suggest that central government in Uganda is yet to enable lower level governments to effectively play their roles in ensuring equitable access to safe water services for the majority the rural population. The findings also seem to confirm those of an earlier study in Uganda that stressed inadequate financial and human resource capacities of local

government institutions as partly responsible for their poor performance levels (Tumushabe et al. 2009). Indeed, as political enablement and decentralisation demand (Helmsing 2002), these findings reflect Uganda's inadequate level of transformation in the structure and functions of central and local governments and the relations between them. This inadequacy in transformation is at the heart of all the problems that continue to afflict CBM and its potential for leveraging functional sustainability of rural safe water supply.

Skewed funding in favour of new water supply facilities undermining CBM

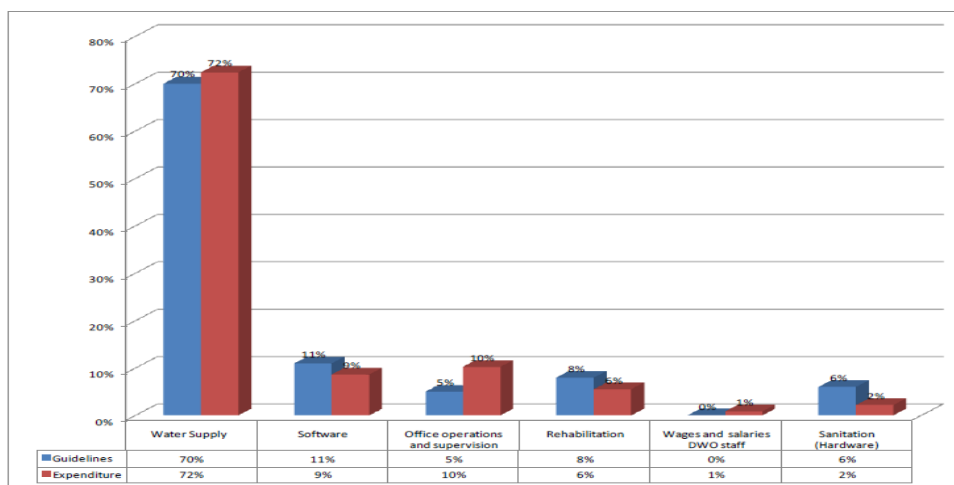
While the WSS sub-sector receives a higher share of the water sector budget compared to other sub-sectors as highlighted above, funds disbursed to the districts for rural water supply are also heavily skewed towards water supply installation and repair activities compared to CBM activities. This study found out that new water point source installation and repairs (or hardware activities) are allocated 70% of the budget compared to CBM *software*³⁸ activities which are allocated 11%, with the rest of the budget funds allocated to cover administrative costs (5%) and water and sanitation activities [14% (MWE 2009a p. iv)]. Indeed, CBM activities such as community mobilisation, training and sensitisation, and post construction follow-up support are indispensable inputs for building community capacity for operation and maintenance of rural point-water facilities. However, Key informants in the NGO sector and other sector ministries concurred that the present allocation between *hardware* and *software* activities would not render CBM effective. They argued that a significant change in budget allocations was long overdue, given that CBM is a cornerstone for functional sustainability of rural water supply. Other informants argued that it was considerably unreasonable and unsustainable to fund new constructions amidst high numbers of water facilities that were non-functional due to the poor performance of community-based water management systems.

You cannot use millions to construct boreholes which may be abandoned by the community... the community development function should not be left at the mercy of the hard ware. (Key informant, Ministry of Gender, Labour and Social Development)

³⁸ Software is an umbrella term used in the water and environment sector to refer to a package of activities involving awareness creation, community mobilisation, post construction follow-up and community support with respect to community managed water supply and sanitation projects. Hardware activities on the other hand are those that aim at installation of new water sources or repair/rehabilitation of existing ones.

Paradoxically, the study also found out that the small software budget is also not always assigned to its intended purpose by the District Water Officers (DWOs) who tend to prefer investing more in *hardware* as opposed to *software* activities despite the fact that these remain fundamental for the effective performance of CBM. For example, the 2010 sector performance report indicates that expenditure on rural water supply activities and office operations went above the threshold by 2% and 5% respectively, while actual expenditure towards software activities fell by 3% from what had been disbursed to local governments (figure 10). While central government may set ceilings or guidelines on expenditure on certain activities, local governments may at their discretion alter budget guidelines to their convenience, and ‘hurt’ prospects for CBM.

Figure 10: Comparison of guidelines and actual expenditure of DWSDCG in FY 2009/10



Source: Water and Environment Sector Performance Report (MWE 2010 p. 20)

It was acknowledged by key informants that the DWOs who are mainly civil engineers tend to undermine software activities, thereby negatively impacting on the already underfunded *software* activities within the CBM framework.

District water officers are mainly civil Engineers....to them construction of new water sources makes a lot of sense because that is what they are familiar with...Some are beginning to see the importance of community mobilisation, but many are really hard to convince that community mobilisation should take money that would have been used for the construction of another water source (Key Informant, NGO sector)

The engineers need to coordinate with the Community Development Officers who will do social mobilisation with the community that the Engineers can't do.... Budget allocation should be revised in favour of social mobilisation for CBM (Key Informant, Central Government Ministry).

With the low rate of functional sustainability established at only 53% (MWE 2011), the decision to continue allocating larger amounts of the budget to establishment of new point water facilities seems unrealistic for Uganda's rural water sector. Political interference also seemed to worry many actors especially from the NGO sector. They noted for instance that budget management at districts seems to be in favour of what politicians can easily show to their constituents as a contribution. It appears therefore, that allowing an innovative budgeting process whereby equal amounts of DWSCGs are allocated to both *software* and *hardware*, or different amounts switched over a period of time to allow more capacity for CBM and cost recovery for point water facilities seems to be feasible in the current Ugandan CBM system for rural water supply. It seems that for this to happen, there will be a need for a complete change of mind-set among decision makers at the macro and meso-levels of rural safe water service delivery as one key informant observed.

Allocating more funding to software programmes will require a complete change in the mindset of the key decision makers in this country (Key Informant, NGO sector)

These findings indeed confirm what was earlier observed as a gap by the water sector strategic investment plan that (2009-2010) that equity principles in service delivery were inadequately met due to not only the weaknesses in processes followed at the local government level but also in the overall allocation of resources to and within the sub sector (MWE 2009 p. 46)

General Reports of Corruption in the Water Sector and Influence-peddling within LGs

The subject of corruption generally remains a complex and contentious one, especially in the water sector in Uganda. It was not the intention of this study to undertake a detailed scientific analysis of corruption in Uganda's water sector. However, recent studies on public financial leakages and other forms of corruption in Uganda's public sector have not spared the water sector (MWE 2009b, Jacobson and Network 2010). General weaknesses in Uganda's institutional pillars of national Integrity (including in the accountability sector)³⁹, the lack of an independent regulator, institutional challenges and project risks in procurement, and limited

³⁹According to Transparency International (TI), the corruption perception index for Uganda has for the past four years been among the highest, deteriorating from 111th out of 179 countries in 2007 to 143rd out of 182 countries in 2011. See <http://www.transparency.org/>

political commitment to fight corruption are some of the key issues are reported to be increasing the corruption risk in Uganda's water sector (MWE 2009b). Holmberg and Rothstein (2010) also stress the positive relationship between the quality of government and the quality of water (Holmberg and Rothstein 2010). Corruption in the water sector not only compounds the problem of inadequate financing of decentralisation and CBM, but it also undermines efforts for increased budget efficiency in the delivery essential public services. These efforts for budget efficiency in Uganda are among others anticipated to result from the sector-wide approaches (SWAPs) and basket funding initiatives in the water sector.

Despite the macro-level initiatives for increased water sector budget efficiency, most key informants interviewed concurred that these efforts are being undermined by tendencies of corruption and influence peddling at key decision making points in the sector especially at district local government level. It was found out in this study that tendencies by district local governments to re-allocate the rural water budget in favour of funding new water sources were not restricted to the fact that DWOs (civil engineers) were less interested in *software* activities within CBM as earlier mentioned. There were also reports of corruption and influence peddling on such decisions, particularly from politicians whose interests are mainly about political popularity. These reports featured rather prominently in interviews with stakeholders at the meso-level, as it did with interviews at the national/macro level. Some politicians seeking votes could pay for the repair of water sources creating an impression that they could continue doing so which they don't. Other politicians were also said to put all the blame on district technical people for not using the funds provided by government but ask people to contribute, while others put pressure on the council or DWOs to construct water sources in their constituencies which perpetuates levels of inequitable access⁴⁰.

Political pressure to do things the way politicians want is not a problem in the water sector alone. It is almost becoming the norm across all the other public service sectors in the country... Our policy says that the community should contribute. But if a politician repairs a borehole, then his opponent would also be under pressure to repair another or do something for the community. It breeds dependency and affects sustainability of these water sources (Interview with Senior Officer, MWE)

⁴⁰ Interview conducted September 2011

Nevertheless, the findings of this study point to the fact that the WSS sector could still achieve great successes in functional sustainability of rural point water facilities even with reduced budget. Importantly, mechanisms that enhance budget efficiency in the rural water and sanitation sub-sector need to focus beyond good financial accounting that view community based management as both a means and an end to budget discipline. Instituting deliberate measures to promote a culture of integrity, transparency and accountability mechanisms at all levels of service delivery, and more particularly building the capacity of rural communities served by point-water facilities to demand for social accountability are key strategies that could potentially leverage the impact of limited funding in service delivery. While an increase of the budget ceiling for software from the current 11% would be a much better option, addressing the problem of ‘internal budget switching’ from software to hardware activities would be another positive step toward a much better impact of decentralised financing on CBM and functional sustainability of rural point water facilities.

In addition to ‘political demands’ for budget switching in favour of new water point construction as opposed to CBM *software* activities, key informants also concurred that unsolicited *contract-variations* were also happening at district LG levels. Although contract variation affected mainly rehabilitation or construction of new point-water sources as opposed to *software* activities, it contributed to financial leakages in the already poorly funded local government services. Occurring under the popularised public-private partnerships arrangements in the NPM, unsolicited contract variations practices further question the extent to which inter-governmental decentralisation and decentralisation to the market could enable the effectiveness of CBM to support sustainable rural water supply.

The failure by LG actors to adhere to the financial and budgetary guidelines provided by the centre show that the creation of autonomous decision making bodies may serve to ‘empower’ some of the decentralised units to act in ways that are contrary to national interests and plans, and may perpetuate corruption and public resource mismanagement. One of the major criticisms of NPM and governance agenda has indeed been the assumption that, by decentralising authority to lower level governments, services are not only brought closer to the people, but also that consumers of services are enabled to participate in important decisions that affect their lives (Batley 1999).

Recognising good governance as an important enabler in ensuring sustainable service delivery, the Good Governance Working Group (GGWG) was formed in 2007 as a sub-group of the Water and Sanitation Sector Working Group (WSSWG)⁴¹ and tasked to identify and recommend measures to promote and monitor transparency, accountability and good governance in the water and sanitation sector. However, an analysis of the findings on the performance of the GGWG indicates that while it has been able to undertake some studies that informed the first joint action plan intended mainly to address corruption and public resource mismanagement in the sector, the implementation of the plan has not been wholly effective due stakeholders' apparent failure to perform the tasks assigned to them in the GGAP.

There are worries that the implementation of the Good Governance Action Plan (GGAP) is not happening at its best.... The initiative is very good but it will need to be funded by government if the sector has to see good results from it. For example, the representatives of the group are already busy with their work and will therefore need to hire some people to run day-to-day the activities (Member of the GGWG).

The failure by the different stakeholders to undertake the tasks prescribed in the GGAP and to work towards curbing the problem of financial leakages raises questions as to whether central government as the lead agency for all these initiatives is sufficiently committed to enabling the sector achieve its policy target of 'increased access to rural safe water supply from 63% in 2010 to 77% by 2015' (NDP 2010 p. 271). An analysis of the GGAP also shows that more emphasis has been placed on ensuring financial discipline by the different levels of accounting in the water sector and less on empowering communities to engage with service providers and leaders to demand for accountability. This capacity building strategy is strongly advocated in the NPM and decentralised service delivery as one surest way of enhancing good governance and downward accountability (Mugumya et al. 2008, Mayntz 2003, Nyalunga 2006a).

Politics and supplementary sources of revenue for local government financing

My findings indicate that the 'politics' of creating new district local governments by the central government, and the scrapping of the graduated tax severely affected funding opportunities for

⁴¹ The WSSWG comprises representatives from MWE/DWD, the National Water and Sewerage Corporation (NWSC), MH, MES, MFPED, the Ministry of Agriculture Animal Industry and Fisheries (MAIF), MGLSD, Donor representatives and NGOs (UWASNET as representative). It is chaired by the Permanent Secretary Ministry of Water and Environment to provide policy and technical guidance for sector developments in the country and meets at least every quarter (GOU 2007).

activities related to CBM. Graduated tax, which constituted the major source of internally generated revenue for all rural local government jurisdictions, was in 2001 scrapped by a presidential pronouncement during the presidential campaigns. The initial argument was that the cost of collecting this revenue was higher than the amount of revenues collected. However, until today, local authorities complain that the decision has severely affected service delivery in their localities. According to the local authorities interviewed, revenues from graduated tax would be utilised to solve problems such as those experienced in the rural domestic water supply services.

It was from local graduated tax disbursements to communities (villages/parishes) that community problems such as the repair of water sources, public toilets and other projects would be funded ... The villages used to receive 25 percent of the taxes collected in a sub-county, but this is now history, and that is why almost all community projects depend on community contributions (Local Official at the Sub-county)

The local authorities interviewed seem to converge on the idea that the presidential pronouncement was purely intended to 'woo' male voters rather than cutting on costs for revenue collection. Similarly, the move by government to create many new districts in the country is also considered not only to have exacerbated the availability of locally/internally generated revenues to support service delivery in some communities, but has also negatively impacted on when and how much is disbursed from the centre, affecting local government capacity for effective service delivery. While politicians view and justify new district creation on grounds that it takes services closer to the people, on the contrary, it has bred more capacity difficulties especially with regard to sustainability of programmes that require sufficient funding for extension work.

The creation of new districts from existing ones has come with it, more complex issues and needs for supporting CBM in the already poorly capacitated districts... It is a welcome development for politicians because it may promise those political positions or support, but where is the money to fund these districts (National level Respondent, NGO sector)⁴²

When a new district is carved from an existing one, the first problem you experience is staff instability...the lower ranking staff begin to look for higher positions in the new districts creating an artificial staff vacuum ... The new districts also take long to recruit and fill-up the necessary positions because they don't have the money as it was Lwengo district (Technical Staff, TSU)⁴³

⁴² Interview undertaken January 2012

⁴³ Interview undertaken October 2012

These political tendencies and decisions indeed serve to demonstrate that the ability of NPM to guide the provision of equitable and sustainable services in communities is vulnerable to central government politics. The findings of this study on decentralised financing of the rural water sector not only underpin the importance of eliminating bureaucratic bottlenecks to financial disbursements to lower levels of governments, but also question the circumstances that led to the scrapping of the graduated tax. This tax benefitted local governments in the provision of basic services including rural water supply and sanitation, which is no longer the case. Theoretically, NPM responds to the growing demand for a change from hierarchical governance to empower front-line service providers including local governments (Akif Ozer and Yayman 2011). However, rather than promote the ‘centrality’ of beneficiaries of public services as ‘customers’ deserving good quality and timely services, political actions such as those that reduce revenues for financing local services undermine rather than promote principles of equity. Good governance also promotes democratic decision making ideals. However, the findings of this study point to this gap. In addition, the findings point to the fact that effective consultations with local authorities on the need to scrap graduated tax were likely to inform the decision to the contrary. In the context of local government financing for rural safe water services in Uganda these political tendencies and actions have indeed led to competition for scarce resources from the centre and affected the quality of service delivery (Awortwi, Helmsing and Oyuku-Ocen 2010).

Weak Local Government (LG) Technical Capacity and Challenges in Central Government Support

Many initiatives at the macro level have indeed been carried out to enhance the coordination and performance of the rural safe water supply sub-sector. The Sector-Wide Approach (SWAP) to planning for the water and sanitation sector is one of such efforts that helped in streamlining the financing of local governments through the *basket fund* (funds from government and development partners). A water policy committee and multi-stakeholder working groups have also been established at the macro-level to provide policy and technical guidance for sector development. This study established, however, that while these are good initiatives for enhancing sector performance, their impact is yet to be felt in lower levels of service delivery and in rural communities struggling to operate and maintain their improved water sources. This study

identified problems related to conflict in roles between and among key water sector personnel at LG level. These problems were found to affect both directly and indirectly, the effectiveness of CBM in enhancing opportunities for operation, maintenance and sustainability of point-water supply facilities as further elaborated in the subsequent sections.

Conflict in roles and sidestepping of LG Extension Staff over CBM activities

At district and sub-county levels, the water and sanitation sector is technically led by a District Water Officer (DWO), assisted by an Assistant District Water Officer in charge of community mobilization, one technical officer per county in the district and a Borehole Maintenance Supervisor. In addition, to this core team, the Departments of Health and Community Development at the district are expected to work in partnership with the DWO in executing tasks related to software such as health and hygiene education, community capacity building for operation and maintenance of point-water facilities and together participate in District Technical Planning Committees (DTPCs). In essence, while they are regarded as support staff, health officers and community development officers (CDOs) are part of the technical team directly responsible for rural safe water and sanitation. However, this study found out that while these structures and positions may be fully filled with the respective personnel, their levels of involvement in rural water service delivery activities usually depended on the DWO's discretion. Both meso and macro-level informants concurred that tendencies by DWOs to deliberately disregard community development staff in spearheading *software* activities for rural point-water facilities, sometimes in preference for hand-pump mechanics, because these can 'easily be manipulated' as noted in one of the key informant interviews:

HPMs are very easy to cheat because of their low education status... Community mobilisation and training is a broad package of activities that should be delivered by a well-informed person whom I don't see among the kind that HPMs are...most if not all HPMs are of very low caliber... Others cannot even write properly [Regional Technical Support (TSU) Staff].

The above was corroborated in an interview with one of the hand pump mechanics who confirmed that despite being engaged by the district on temporary terms, he performed several other functions.

I am required to train water user committees at every new shallow well that I construct... I also rehabilitate those with breakdowns and then submit reports to the District Water Officer, as well as keep records for such activities (HPM, Ndagwe Sub-county)

Some of the water sector actors appreciated that the HPMs can be a 'possible alternative' in filling the human resource gap created by the under-funding of CBM activities. However, they also cautioned that this was only helpful after the HPMs have been exposed to some training in community mobilisation.

If HPM are to be involved, they then have to be trained very seriously on participatory methodologies and their payment has to be streamlined to ensure that it is not the same DWO who has frustrated the existing extension staff (Regional TSU Staff)

While community mobilisation is a role that is largely entrusted to NGOs in the sector, the NGOs also occasionally sought support from the HPMs particularly on aspects related to routine operation and maintenance of hand pumps. The key informants also reiterated however, that training alone may not solve the gap since the HPMs themselves cannot work without being financially rewarded.

HPMs can also easily get demoralised... If this happens, then using them will not solve the problem of inadequate follow-up support to communities... Personally I would not recommend engaging HPMs to do community mobilization (Regional TSU Staff)

Inadequate funding or budgetary processes for decentralised service delivery, as earlier noted, are significant issues in disabling decentralised rural water supply services in Uganda. However, the findings of this study suggest that this may sometimes be used as an excuse for officials holding authority over financial resources to undermine the in-put of those they ought to work with, as noted by one respondent from the sub-county⁴⁴.

We usually incorporate follow-up activities for supporting water and sanitation committees in our work plans but they are never funded by the district...and it is not possible to do anything useful without transport facilitation to be able to cover all the communities in this sub-county.

The tendency not to involve the technical staff responsible for software activities reflects not only the lack of capacity by DWOs but also directly impacts negatively on functional

⁴⁴ Interview conducted in September 2011

sustainability levels for improved rural point-water facilities, as one official from the NGO sector observed:

The District Health Inspector and the Community Development Officers are supposed to create awareness in communities on water, hygiene and sanitation issues but they are not facilitated. Awareness should be created involving issues of governance and management for sustainability of water facilities. The community needs to be engaged continuously and consistently, but local governments are not doing that (Key Informant-UWASNET).

The community mobilization package of the MWE has been designed in such a way that it is participatory in nature, with participatory rural appraisal methods and tools employed at almost all stages. Owing to this, the ministry guidelines stipulate that community mobilisation should be undertaken by CDOs, Community Development Assistants (CDAs) and Health Assistants (HAs) or Health Inspectors (HIs) in the districts and sub-counties as was noted in one of the interviews with officers from the regional Technical Support Unit (TSU)⁴⁵.

It is understood that as part of their technical training and experience CDOs/CDAs and HAs have been exposed to the use of participatory methodologies for adult learning as opposed to lecture methods that other officers are likely to use.

Furthermore, HAs and CDAs not only form part of the sub-county extension services workforce, but are also members of the sub-county Technical Planning Committee (TPC). As members of the TPC, they are responsible for identifying community needs using participatory planning methods. This makes them the most qualified and eligible team for prioritisation while implementing *software* activities for the water and sanitation work in the districts and sub-counties. Related with inadequate utilisation of these HAs and CDAs, a respondent from one of the central government ministries regarded this as unfortunate for the sector.

Unfortunately, due to various reasons such as failing to pay for their services (allowances for transport and lunch), the extension staff are demoralised and do not deliver, despite the fact that they are the most competent to do this job (TSU Staff).

New public management and governance perspectives assume that partnerships and collaborative networks of different professional groups and actors would enhance efficiency (Page 2005, Nguyen 2010), but as this study indicates, individual interests of some of the public officials

⁴⁵ Interview conducted in October 2012

could undermine rather than enable CBM's capacity to yield desirable effects on the sustainability of rural point-water facilities. The findings of this study show that policy prescriptions on CBM of rural point water facilities can be frustrated by personality behaviours and attitudes that shape working relations within and among key district water sector staff and politicians. Poor working relations among staff at the meso level are indeed a threat to the effectiveness of CBM and sustainable rural domestic water supply, more particularly because LGs are closer to communities. Hence, by virtue of their position in the institutional framework for rural domestic water supply, the water sector staff in LGs ought to bear and execute the greater part of the overall responsibility for ensuring functional sustainability of rural point-water facilities.

Technical Support Units and the challenge of enhancing LG capacity for CBM

In 2002, Technical Support Units (TSUs) were introduced within the institutional framework for the WSS, representing an enabling action by the Ministry of Water and Environment and the Directorate of Water Development to build the technical capacity of lower level governments and other actors (private for profit and not for-profit actors) for rural safe water supply. Among the key priorities of these regional bodies is ensuring that national sector guidelines and standards are adhered to by all actors at the intermediate levels of water policy and programme implementation. Arguably, the absence of adequate capacity among lower level actors directly affects communities, including the quality of community participation and management of water facility infrastructure. Results from the inquiry into the performance of the TSU initiative in the sector reveal on one hand that TSUs are indispensable institutions at the meso level with a strong influence on the district water sector performance. On the other hand, the initiative of TSUs is viewed by some of the LG actors as interfering with the autonomy of decentralised LG entities, as one respondent observed:

Sometimes it is a struggle obtaining the attention of DWOs... They are still fully empowered both by the overall decentralisation framework and sector guidelines to carry on their activities without the direct involvement or interference of the TSUs (Regional TSU Staff).

Furthermore, the terms of reference for the TSUs only allow them to have a say on district sector activities ‘when invited’ by the district. The belief is that districts can, on a regular basis, identify their capacity needs and approach the TSUs for technical support in filling the gaps. However, this study found out that there are instances in which TSUs are totally disregarded by district water officers even when such districts visibly have technical gaps in implementing rural water supply activities including support for CBM.

Community-based management in rural domestic water supply in Uganda falls within the country’s current decentralised service delivery framework designed to transfer decision making powers from the center to lower levels. The intervention of the TSUs in ensuring that ministry guidelines regarding who undertakes community mobilisation and training for WSS activities are therefore susceptible to some form of ‘resistance’ from some district officials, largely because the decentralised system of service delivery and decision making ‘cushions’ these district local government officials from ‘undue interference from outside’. While explaining this conflict, an official from the regional TSU illustrated how their interventions to prevent the use of hand pump-mechanics in undertaking community mobilisation has in some cases been ignored.

HPMs were engaged in *Bukomansimbi* (another local authority) to do community mobilization against our wish ...the result was that the messages were delivered while turned upside down and communities were confused (TSU Official)

It appears from these findings that unless the terms of reference for TSUs are revised to ensure a more direct link to communities, they may not deliver a fast and sustainable remedy to problems afflicting functionality of community-managed rural point-water facilities. Paradoxically, while TSUs were set up as temporary structures funded through the Joint Partnership Fund (JPF)⁴⁶ to support capacity building to districts, this study found out that the process of having them fully integrated into the sector was underway. This integration on one hand appears as an enabling strategy by government to enhance sector performance. But, on the other hand, it shows that decentralisation and NPM in Uganda are still faced with daunting challenges in leveraging their promised service delivery dividends. It is argued further that the integration of TSUs in the water

⁴⁶ In Uganda, the Joint Partnership Fund (JPF) uses a centralised project approach for delivering water supply systems in small towns. It helped to halt fragmentation of funding in the urban sub-sector and was more aligned with the urban department structure than previous projects. However, it does not use government systems beyond being reported in the budget and appearing on the agenda of the Ministry contracts committee (ODI 2008).

Uganda's institutional framework for the water sector may also risk turning them into parallel structures with semi-autonomous district LGs, which may trigger undue tensions particularly if it has negative implications on the flow of funds to district LGs.

Furthermore, this study found out that the burden of responsibility for TSUs is exceptionally high, particularly if all the districts under their jurisdiction 'simultaneously demand for their services' as one key informant from the district remarked. Despite the big number of new districts created in the past five years, the number of TSUs has remained 8 since their formation in 2004. With the current 112 districts, the implication is that each TSU is primarily in charge of 14 districts. The TSUs are expected to regularly report to the Directorate of Water Development (DWD) in the ministry on their activities with districts and other actors in their jurisdictions. This makes the TSUs remain more of central government institutions and less for decentralised governments. As the literature indicates, political enablement requires not only a strong state, but also one that effectively responds to contextually emerging demands (Awortwi 2003, Baskaran 2011, Enikolopov and Zhuravskaya 2007). In contexts like Uganda, powers accruing from decentralisation to local governments can easily be abused or misused because of a weak monitoring system and limited central government involvement in local/grassroots development.

On the whole, based on this study's findings, it appears unrealistic for the Ugandan water sector to speculate that TSUs will enhance the performance of LG water sector actors and cause a positive (trickle-down) effect on communities. Restricting the services of TSUs to a demand responsive approach by LGs may be a good decentralisation principle, but which suffers contextual weaknesses. The findings extend the debate about whether public officials work in the best interest of the people they serve and whether decentralised governance frameworks can ably demystify boundaries and bureaucracies of a 'reduced state'. The findings also confirm those of earlier studies in Uganda and elsewhere which indicated that self-seeking behaviours of actors in decentralised government entities remain significant disablers of policies or programmes meant to promote well-being of the rural and marginalised communities (Allen and Hasnain 2010, Mosca 2006, Steiner 2006, Tumushabe et al. 2009).

Limited Local government capacity to monitor service delivery activities

An effective system of monitoring the performance of any sector constitutes an enabling effort to enhance public sector efficiency and effectiveness (Helmsing 2001, Awortwi 2003). Through a joint sector monitoring endeavour, Government of Uganda and Development Partners undertake annual technical and financial performance assessments on specific indicators including; household access to a safe water source, functionality of water sources, quality of the water and the functionality and effectiveness of WSCs. Annual performance reports are produced and circulated to stakeholders as a tool for informing new strategies. This is indeed, an important enabling feature for functional sustainability of point-water facilities. However, findings from interviews with key rural water sector actors indicated that much of the data-bases on which levels of functionality of point-water sources are based, are not reliable enough.

We are invited once a year to technically support them do monitoring... One of the things the sector needs to do if it has to enhance the participation of the communities in operation and maintenance of water facilities is not to wait for a year to collect data on some indicators... I don't even believe that the data is reliable enough... It is subject to mistakes and could be manipulated especially at lower levels (Senior Civil Servant, Ministry of Gender, Labour and Social Development)

The technical capacity to manage data is affected by limited availability of equipment, competent and well-motivated technical staff. Further, the focus of the joint monitoring assessments also tends to put more emphasis on accountability for funds released to districts and less on *software* issues that directly affect the performance of CBM systems for rural water supply.

At district level, the annual inter-district meetings (IDMs) and District Water and Sanitation Coordination Committee (DWSCC) also act as monitoring platforms for the water and sanitation sector as well as a vehicle for changes in the sector based on district specific experiences and lessons. In addition to discussing experiences, the IDMs allow TSU staff an opportunity to deepen stakeholder understanding of sector policy guidelines including adherence to budget allocations for *hard* and *software* activities for rural point water interventions. However, while these coordination meetings are critical for ensuring stakeholder participation in sector monitoring activities at the meso-level, this study found out that it is hard to understand the influence and impact these specific coordination meetings have on community based management. Besides, as one key informant observed, politicians dominate the meetings with

requests for new water sources in their localities'. In addition, convening of DWSCC meetings or follow-up on any decisions taken in the meetings is (usually) the sole responsibility of DWOs, who for many reasons including inadequate funding may not usually be in position to convene the meetings, or make an effective follow-up on issues discussed in the meetings.

Following the decentralised service delivery structure, sub-county executive committees (EC) are, in addition to overseeing implementation of public programmes, expected to initiate, mobilise people, material and technical assistance for self-help projects spearheaded by both state and non-state actors. They are expected to serve as the communication channels between central government, the district council and the community, and generally monitor activities undertaken by the central and local governments and non-governmental organisations in their areas, and report to the district council⁴⁷. However, owing to limited financial facilitation, the technical capacity for most of the members of the sub-county executive committee remains inadequate.

Local politicians especially councilors representing various constituencies largely depend on district technocrats for national policy interpretation... These politicians lack the skills and will need regular training for them to undertake effective supervision of service delivery in their communities... But the budgets do not allow (TSU Staff).

New public management and the concept of enablement emphasise the importance of building local leadership capacity as a key ingredient for enhancing the effectiveness of local authorities in supporting community-level initiatives such as CBM (Helmsing 2002, Smith 2000). This limited capacity by the local actors to effectively supervise local projects disables prospects for the effectiveness of community-managed projects that would benefit so much the local leadership capacity to mobilise and sensitise users of services on their roles and responsibilities such as those embedded in CBM or operation and maintenance of rural improved point water facilities.

Private Sector Participation and CBM of Rural Point-Water Facilities

In NPM, private sector participation in form of partnerships or contractual arrangements between public and the private sector actors occupy the vital space in the search for a more enabling and

⁴⁷ Please refer to figure 2 for these actors and their functions and relationships.

efficient public authority (Barungi et al. 2003, Pérard 2008, Prasad 2006). As corporate entities, Sub-county and district local government (LG) councils in Uganda can enter into contract with a private provider of a service following well laid out policy guidelines. In the context of this study, public-private engagements for rural safe water service delivery are undertaken following two forms of decentralised service delivery namely, inter-governmental or *vertical* decentralisation and market or *horizontal* decentralisation. Private companies, individual technicians or mechanics and spare parts dealers (SPDs) constitute the main actors in the private sector that support rural safe water supply in Uganda. Regarding CBM of point-water facilities, both the SPDs and especially the hand pump mechanics (HPMs) are critical in supporting communities. This study established that the existing spare-parts distribution chain that remains informally established by an ad-hoc relationship between HPMs, SPDs and the community poses a lot of challenges for the effectiveness of CBM especially because of the difficulties in regulating such a highly informal relationship as reflected in one of the interviews.

As far as I know, there isn't any deliberate effort by the government to supply spare parts for hand pumps. Spares are obtained informally from Kampala by HPMs and water and sanitation committee members. However some HPMs are also stocking a few fast moving parts, although these fellows are limited by lack of adequate capital to keep large stock (Key Informant, MWE)

Owing to this, duplication and other forms of fraud were reportedly common and unabated practices in the point-water source spare parts business in Uganda.

People fabricate spare parts especially *pedestals* and sell them as original parts... They can also issue receipts bearing our logo because they know that parts from our store are genuine and trusted...No genuine spare parts are made in Uganda, but they are many on the market (Spare parts dealer, National Level).

Regarding whether the 'genuine' spare parts dealers had taken any initiative to seek government protection from the 'dubious' dealers, the spare parts dealers expressed fears that such a move was risky and could lead to loss of their businesses.

I cannot engage in that, I prefer to preserve the safety of my building and business. I do not care if someone goes for a cheaper part or not, because these people can harm you and yet lose nothing! (Spare parts dealer, National Level)

In the country side, very few shops, mainly motor-vehicle spare parts dealers occasionally stock spare parts for water systems. Although limited capital was pointed out as the major cause for the

limited availability of well stocked shops in the country-side, very limited demand for the spare parts in the country-side even presented a bigger problem. Poor demand especially resulting from competition from other small dealers, was also reported to have discouraged earlier efforts by the ministry of water and environment to engage or forge partnerships with bigger firms to establish spare parts warehouses/outlets in different regions of the country.

We contracted *Buyaya technical services* (a private spare parts company) on condition that it sets up outlets in districts, but it also failed. The problem was that most people had access to Kampala, thus they could hardly buy from these outlets... The outlets failed because they couldn't make good business for these dealers (Key Informant, MWE)

In addition to facing competition from small spare parts dealers operating in the country-side, the public-private partnership efforts were also undermined by delayed payments to companies for supplies made to the regional outlets.

The ministry had previously contracted us to distribute spare parts to districts, but we always got problems with delays in payment for the supplies (Spare parts dealer, National Level)

Perhaps the more serious problem associated with the sustainability of spare parts outlets was related to political pressure from politicians who wanted the limited spare parts to serve their constituencies as observed by a senior official interviewed from the ministry.

Efforts by the ministry to establish regional supply stores failed because of political interference... Some politicians could interfere with the processes sometimes demanding that their constituencies be served first even when they were comparatively not needier than others.... such scenarios prompted the decision to leave the distribution of spare parts to the market and anyone interested in buying spares in bulk quantities has to get them Kampala (Senior Official MWE)⁴⁸

Based on the findings from this study, any innovative and sustainable means of enhancing availability of spare parts for improved point-water sources would indeed constitute an enabling strategy for enhancing the effectiveness of CBM. The study shows that some NGOs including the Medical Missionaries of Mary (MMM) in Makondo Parish had succeeded in buying and storing spare parts in bulk and would supply communities at highly subsidized rates/prices. *Plan Uganda*, another NGO operating mainly in the eastern part of Uganda is reported in 2011 to have

⁴⁸ Interview conducted November 2012

initiated a systematic supply chain for spare parts in Kamuli following dialogues between stakeholders including WSCs from their target communities, hand pump mechanics, the district water office staff as well as the spare parts dealers (MWE 2011bp. 188). It was also found out by this study that *Comboni Missionaries* have also put up big warehouses in *Gulu, Pader, Kitgum*, districts, and were engaging with government to negotiate a public-private partnership with ‘for-profit’ actors to stock and sell spare parts to communities at subsidized prices. It appears therefore that efforts to enhance the effectiveness of spare parts supply chains lie in forging strategic public-private partnerships between key stakeholders including the community, HPMs, spare parts dealers. Such efforts will inevitably require the direct involvement of both central and local government. The efforts would also prioritise strategic partnerships between government institutions especially at the local level with NGOs, the private for-profit sector and the community as espoused by Skelcher (2005).

The findings of this study on the way communities were made to work with HPMs also stress the need for an effective regulation of the relations between HPMs and the community to avoid ‘injuring’ community interest to participate in operation and maintenance of their water sources. Contrary to policy guidelines, this study found out that there a private HPM was ‘officially’ allocated to Ndagwe Sub-county by the District Water Office to support CBM efforts in the communities provided the communities would be able to hire his services. Although ‘officially’ allocated to the sub-county, the HPM was not an employee of the local government, nor did he have an official contract with the local authority or any of the communities he supported, implying that the communities were free to work with any other HPM in case they so wished. However, while communities had this as an option, they were not only limited by the lack of information on the availability of other HPMs in the region, but also exhibited limited knowledge of the actual relationship the HPM had with the local government as a private actor. Indeed, an earlier report also indicated that WSCs in Uganda have difficulties contacting HPMs whenever their water sources break down (Mommen and Kulanyi 2009). Besides, the earmarked Ndagwe sub-county HPM ‘knew the quality and prices’ of spare parts for point-water source technologies and was hired and paid by the community for his labour and any spare parts he supplied them. The inevitability of HPMs and the challenge posed in letting them work directly

with the communities is known to sector actors. However, they too express their limited options in streamlining the work of HPMS and how the latter relate with the communities they serve.

We know there is a serious governance issue here... HPMS over-charge communities, but unfortunately, we are out of the policy of stocking spare parts and selling them (Senior Official MWE)⁴⁹

An earlier study by the MWE also pointed out that sub-county LGs had poorly performed their designated roles of regular selection and training of HPMS, supervising and monitoring of their work in communities and providing custody of tool kits for repair of pumps (MWE 2011a p. 43). Difficulties in the regularisation of the activities and relations of the HPMS with communities is one of the limitations for the success of CBM systems for the sustainability of Uganda's rural point water supply facilities. It is also indeed a weakness engrained in the NPM's promise for efficient markets or customer-oriented public services. In the context of Uganda's rural safe water supply, this challenge calls for an enabling action by central and local government to ensure that the market works to make these indispensable actors work better. Interviews with officials in the MWE and with national-level NGOs indicated that there were initiatives underway to support the formation and registration of Hand Pump Mechanics Associations HPMA as an enabling strategy to build their capacity as well as regulate their work with communities. It is assumed that the associations will improve their reputation as well as leverage their work as organised sector stakeholders with a legal status allowing them to even be awarded contracts on a competitive basis, enable them to do 'better business' and support the communities. However, some of the HPMS interviewed viewed the initiative with some cynicism as they were seemingly not sure whether the associations would operate in their interests.

We are trying to form a HPM association in Lwengo district... However, it is already being corrupted by some members (HPMS) who have visibly indicated that they are interested in certain specific leadership positions in the association (HPM, Lwengo)⁵⁰.

While the idea of establishing HPMA is in the framework of enabling markets to work, membership to the association remains optional to individual HPMS whose activities remain largely informal. As another study noted, 'the situation is exacerbated by central government failure to ensure availability of spare-parts in the country and to nurture the young private sector'

⁴⁹ Interview conducted November 2012

⁵⁰ Interview conducted in June 2011

(MWE 2011a p. 43). While issues around community capacity gaps in dealing with HPMs are discussed in more detail in Chapter Six, it appears that any efforts to augment the effectiveness of HPMs in CBM systems will need to be effectively complemented by strong capacity building activities targeting the communities they serve. Such trainings would aim among others at improving their knowledge of the relevant market dynamics associated with O&M of their water sources including their understanding of the key parts of the water technologies or systems that serve them. Hence the findings of this study stress the need for central and local government authorities to establish an enabling environment that would enhance the effectiveness of HPMs and the spare parts supply chain. In addition, the feasibility of PPP models combining private-for-profit and not for-profit actors will need to be further explored to ascertain if they can provide a viable alternative to the supply of spare-parts. This is indeed what is advocated in the conceptualisation of an enabling government under the realm of the NPM paradigm (Helmsing 2002, Smith 2000).

Differing NGO and Government Approaches: Philosophies yet to be aligned in Support of CBM?

NPM and governance perspectives support the participation of NGOs or private not-for-profit organisations and private for-profit actors in the delivery of public services. In Uganda, NGOs support rural safe water supply both in direct provision of services or through policy and advocacy support networks/activities. Clear partnerships or networks arrangements exist at the national level addressing policy development, budgeting and sector performance monitoring, with both local and international NGOs (including donor representatives). However, while the national level relations between NGOs and public institutions seem better coordinated, interactions at the lowest/micro level in the community are not as effective. Yet, this is the point at which good collaboration initiatives for water and sanitation between NGO and local governments would promise a greater direct impact on CBM and functionality of point water facilities.

However, it is worthwhile noting, as is reported by the MWE that there are indeed NGOs whose activities in water and sanitation have led to great improvements in functionality of WSCs as

well as the water facilities such committees take care of. The 2011 annual sector performance report singled out NGOs such as *Caritas*, *Network for Water and Sanitation (NETWAS) Uganda*, *Divine Waters*, *African Medical Research Foundation (AMREF) Uganda*, and *Action Against Hunger* as having played a big role in training both communities and HPMS to improve management and functionality of rural water facilities (MWE 2011b p. 188). However, the report also notes key challenges that continue to undermine opportunities for activities of civil society organisations supporting CBM. The challenges noted included among others an existing dependency syndrome by communities, local government reluctance to enforce bye-laws on O&M, a rise in the price of spare parts due to inflation and the proliferation of new districts resulting into increased costs in service delivery (MWE 2011b p. 198-199). An earlier study also noted poor working relations between local governments and NGOs as impacting on the effectiveness CBM of water point sources and affecting functional sustainability of water facilities (Quin, Balfors and Kjellén 2011). In the subsequent sub-sections, this study brings out further evidence to demonstrate how the unaligned service approaches of NGOs and public institutions especially LGs continue to undermine the effectiveness of CBM. It also examines how difficulties in collaboration and networking at lower levels of service delivery may complicate opportunities for replication and scaling-up of some of the good practices of NGOs.

Approaches of NGOs and LGs yet to be aligned for CBM effectiveness

Within Uganda's institutional framework for rural safe water supply, lower local governments largely rely/depend on NGOs for community mobilisation and sensitisation. In the NPM philosophy of 'networks and collaborations', this implies that NGOs and local governments have to work together in drawing plans and logistics to support CBM, or at least regularly and consciously collaborate in ways aimed at sustainability of point-water facilities. However, the findings of this study show that desirable collaborative efforts between NGO actors and the local authorities in support of CBM are among others threatened by skepticism on both sides. Interviews with NGO actors operating in the 'greater Masaka'⁵¹ region, and the local government actors in Lwengo district indicated that NGO relations with district and sub-county local authorities over support for CBM are not always strong enough to promise desirable

⁵¹ The region from which over three district local governments were curved in 2010. It includes Lwengo district in which *Makondo* Parish is located.

results. While both actors believe that supporting CBM functionality is the most effective way for enhancing long term sustainability of rural safe water supply, their programmes and activities are yet to be aligned in support of CBM of point-water facilities.

On the one hand, NGOs blame local authorities whose mandate is to promote effective service delivery for ‘neglecting’ their roles as duty bearers, and at times failing to provide the necessary technical and ‘political’ back-up for their activities in the community. The NGOs also complain of unnecessary bureaucracy and high expectation for financial rewards or facilitation by local authorities who presumed that NGOs always have ‘better’ budgets.

Local governments always expect that their time in supporting NGO programmes in their localities has to be paid for... But they forget that we are actually supplementing their efforts to fulfill their mandates (NGO worker, National level interview)⁵²

On the other hand, the local authorities blame NGOs of breeding high levels of dependency among communities by ‘not doing what the policy stipulates’ as roles of the community in CBM. Among the actions of the NGOs that local authorities thought undermined CBM was the practice of waiving community contribution to capital cost or demanding less than was supposed to be contributed as capital cost to the establishment of water sources. Furthermore, the local authorities blamed NGOs for at times hurrying water projects without always reporting to the districts. Hurried project implementation, was in fact, for some of the local authorities related to their belief that NGO actors at times took themselves to be more pro-people than governments.

The NGOs sometimes think that they are more ‘for the people’ compared to government ... They want to be felt by the community as more caring and end-up making mistakes (Interview with a civil servant, Lwengo DLG).

The NGOs were also blamed for being so ‘closed’ when it came to sharing their budgets or activity plans with local authorities, which according to the local government water sector actors affects alignment and harmonization of sector activities.

I don’t know why they are always slow at sharing with us their plans...you might plan to construct a certain shallow well in an area having already informed the Ministry but only to find that so and so (meaning NGO) has already constructed it, then you go into the hassle of explaining to the ministry what happens. Thus we always emphasize that they should inform us earlier on (District Official, Lwengo DLG)

⁵² Interview undertaken in November 2011

The NGOs, however, indicated that sharing of activity plans or budgets tended to become important to local authorities when they expect that the NGO budgets carry some allowances for the local authorities, the lack of which would demoralise them. The NGO actors interviewed also complained that sometimes they may be asked to channel funding to communities or activities that meet ‘political interests’ of the local authorities contrary to their plans, resulting into unnecessary tensions.

We rarely involve district technocrats in our activities because they always want to be highly facilitated (paid)... We used to work with the District Water Board for the first water sources that we constructed. However, one Officer became corrupt and we lost interest in working with them (NGO worker, Lwengo District)⁵³

With such counter accusations and blame apportioning, the need for deliberate efforts to enable effective collaborations that support CBM systems for rural safe water supply remains paramount for the rural decentralised water supply service delivery. It is one thing to register the existence of multiple actors in a sector under the NPM and governance framework and another to have the interventions of such actors produce desired service levels for the communities they target. The concept of an enabling authority places responsibility for the effectiveness of non-state actors on local authorities or government (Helmsing 2002, Smith 2000). However, their enabling role may not be effective if their interests are not well aligned with those of the NGOs or not-for-profit sector as the theoretical literature also indicates (Young 2000). Thus the success of CBM indeed depends on the extent to which communities are supported by frontline service providers. Collaborative efforts of CBOs, NGOs and local government actors especially from the sub-county would in the context of Uganda’s rural safe water supply produce good results for sustainability. But how best can such collaborative efforts get engineered for CBM effectiveness? How best can the good work of NGOs in bringing about stakeholder engagement on issues of operation and maintenance in some parts of Uganda be scaled up in other regions?

NGO perspectives on advocacy initiatives related to CBM and the water sector in general

This study notes that initiatives such as the formation of the Uganda Water and Sanitation NGO Network (UWASNET) in 2001 have provided an opportunity for a more effective NGO and government collaboration and engagement on issues of policy and sector governance. However,

⁵³ Interview conducted September 2012

UWASNET and her members are not completely immune from a complex and potentially disabling public policy environment that threatens their advocacy and service delivery roles in communities. It was for instance found out that some members of the network were worried that salaries for staff of UWASNET came from government.

We know that most of the activities of UWASNET are funded by development partners such as DANIDA... It is difficult for UWASNET to effectively play their advocacy role when government pays their staff salaries...’ Their independence in questioning government actions that affect communities is questionable...they have to plead to government for their salary! If UWASNET members do not raise any issue, the donors will not... (Key Informant, NGO sector).⁵⁴

Although it was found out from the UWASNET secretariat that plans by development partners to fill the funding gap were nearly finalized, it was not possible to ascertain whether if this alone would guarantee UWASNET a higher policy and ideological on government. Regarding NGO advocacy strategies in support for CBM systems in rural water supply sustainability, key informants at UWASNET pointed out various challenges ranging from persistent unfavourable government budgeting for *software* activities over supply or *hardware* interventions to the attitudes and levels of commitment from local government actors over CBM activities.

The allocation of 11% for the rural water supply budget is very small funding for capacity building and *software* activities in communities... The government may provide water facilities to communities but with no clear means to prepare people on how to manage these water facilities [Policy Analysis and Advocacy Specialist, (UWASNET)].

Other macro-level problems affecting the network related to the growing trend in neo-patrimonial politics, corruption and a growing trend away from original poverty eradication agenda to an export oriented strategy that has increasingly led to channeling resources away from service sectors including water and sanitation (O’Meally 2011). District local governments (DLGs) are responsible for monitoring activities of NGOs and CBOs in their jurisdictions, however, this function according to UWASNET seemed to stop with ‘courtesy call meetings’ and no follow-ups in the communities or at offices of the NGOs or CBOs. This study indeed noted a limited direct contact between Lwengo district water office and the water programmes of the Medical Missionaries of Mary (MMMs) in the district’s parish of *Makondo*. Despite challenges to functional sustainability of safe water sources in Makondo Parish, the perception of

⁵⁴ Interview conducted November 2011

the district water office was that Makondo Parish was doing very well because of the presence of the MMMs.

Challenges in replication and scaling-up of NGO best practices for CBM

This study found out that unlike government, NGOs are increasingly shifting their focus of activities and investment in rural water supply towards supporting communities to operate and maintain existing infrastructure rather than the supply of new water sources except in emergency and more deserving situations. Interviews and the review of reports with NGOs directly involved in activities to support CBM for rural water supply indicated that the NGO sector is indeed largely out to prioritise support for CBM as one best way to enhance sustainability of rural safe water supply.

There is need for all actors to understand and follow the same principle in their work that it is not the number of boreholes that matter but also the sustainability of these facilities and services that will bring benefits to communities (Key Informant, NGO sector)

Consequently, some NGOs are undertaking a range of innovative practices in the country to enhance learning and knowledge sharing on the best practices that could leverage the effectiveness and functionality of CBM. *Triple-S* (Sustainable Services at Scale) Uganda, a learning initiative of the International Water and Sanitation Centre (IRC) in partnership with other actors has in the past two-three years spearheaded a range of innovations to enhance the effectiveness of CBM. *Triple-S* seeks to pilot and test new ways of working for the delivery of rural water services in Uganda by identifying key challenges and bottlenecks currently confronting the sector. It has over the past 2-3 years identified outstanding innovations and good practices for enhancing the effectiveness of CBM in the regions of *Lango* and *Rwenzori*. As a result of the success of their pilot activities, they note in their report that:

‘Community members are increasingly assuming the responsibility of managing their sources, particularly operation and maintenance. ...there is more self-determination at source-level and water users have a more positive and progressive attitude towards their facilities. ...if effectively sensitised, community members exhibit willingness to take up the responsibility of managing their sources’ (Nabunnya et al. 2012 p.5).

Among the innovations piloted by *Triple-S* Uganda include activities designed to enhance the effectiveness of HPMs as private sector actors such as the use of mobile phones as tools for enhancing the flow of information between communities and service providers, notably the

HPMs and district water office. Other innovations have focused on enhancing community mobilisation for meetings related to CBM as well as those intended to promote the effectiveness of community bye-laws in support of CBM. Other initiatives have explored the use of monthly financial contributions to improve community livelihoods by starting a loan scheme for community members (Nabunnya et al. 2012).

It is important to note that in the context of the NPM and governance agenda, the emphasis for networks and cross learning is made for enhanced service delivery (Jennings Jr and Ewalt 1998, Krebs and Pelissero 2006, Bache 2000), and more so for the water sector (Böge 2006, Rogers 2006). In relation to this, initiatives to support the scaling-up of innovative practices of NGOs in support of CBM become paramount. For instance innovations such as the use of modern information and communication technologies (ICT) seem to be taking center stage in informing new ways for an enhanced government and service delivery framework, but uptake of such innovations continues to vary from place to place (Ionescu 2011a, Dunleavy, et al. 2006, Lodge and Gill 2011). Whereas the use of mobile phone technology initiated by Triple-S Uganda is regarded as success story it works under certain conditions. Many of these conditions are community based, but the others, and possibly more critical are found at the meso and macro level. Among the conditions identified include: Functional Community Based Management Systems (CBMS); WUCs must be performing their duties; users of water should be paying their monthly fees; the spare parts supply chain should be functioning; and users must have the right attitude especially with regard to ownership of the source (Nabunnya et al. 2012 p. 11).

The NPM and governance agenda emphasise the blurring of boundaries between and among development actors (Stoker 1998 p.17, Akif Ozer and Yayman 2011a). This view in the water sector suggests that, in the pursuance of collective goals, water sector actors have to work closely with one another to maximise results for their service beneficiaries, who, in NPM are best described as ‘customers’ (Buček and Smith 2000, Helmsing 2002). The replication and scaling-up of any of the documented good practices of NGOs in support for CBM is accordingly undermined by dynamics at national, sub-national or local government levels, and within the communities themselves. Communities can easily be swayed by politicians with opinions that may not be supportive of local development initiatives. At the micro level, the initiatives may be heavily undermined by community reluctance to contribute financially to O&M, and more

severely by the ineffectiveness of the WSCs. The ineffectiveness of WSCs is largely a function of the governance dynamics taking place at the meso and macro levels of policy implementation. Hence, an enabling environment for CBM calls for actions that not only allow continuous learning between and among public, private-for-profit and not-for-profit stakeholders, but also the application of knowledge to scale up good practices that benefit rural water user communities in fulfilling their O&M roles. I argue that this replication can only happen to benefit CBM across the country if central government and her LG entities are willing to appreciate and take-up NGO innovations, thereby completing the cycle of networks as advocated in the NPM and governance paradigms.

Conclusion

Following NPM policy frameworks of decentralisation and local governance, the rural water policy and institutional framework rightly places water users at the centre of the responsibility for enhancing the sustainability of point-water facilities under ‘the banner’ of CBM. However, as this chapter has revealed, individual behaviour and institutional governance dynamics in financing, coordination and decentralisation play an important role in shaping and maintaining relationships of different actors that support the effectiveness of CBM system. As a policy alternative for sustainability of rural water supply, CBM is envisaged to promote equitable and sustainable services to the rural peripheral communities. However, this chapter has shown that power dynamics and bureaucracies around distribution and utilisation of (financial) resources for rural water supply may serve disable opportunities for policy implementation, negatively impacting on desired results. As an outcome of the NPM and good governance paradigms, CBM prescriptions assume that governments will play their roles as adequately as possible to maximize the economic benefits that accrue from reduced state controls and hierarchies. This chapter has shown however, that delayed disbursement of funds to local governments from the centre, conflict of interest in allocation of funds for extension work and for new water source construction, weak sector coordination mechanisms at local government level and weak systems for monitoring remain among the key meso and macro level disablers of the good policy intentions within CBM. In reference to the concept of political enablement, this chapter has also confirmed that politics and ‘politicking’ remain significant disablers of the opportunities brought

about by decentralised budgeting and financing of rural safe water services in Uganda and sub-Saharan Africa in general.

The NPM paradigm and the new governance agenda also call for the blurring of boundaries between development actors in order to tap from each other's strengths for better results (Batley 1999). But these boundaries have persisted as this chapter has revealed. While government institutions 'may be happy' to have service delivery models that 'invite' allow strategic partnerships with a multiplicity of development actors, their levels of interest and determination to make partnerships work to serve communities remain weak as this chapter has shown. Efforts to enable replication of NGO best practices for improved service delivery are not only frustrated by bureaucratic frameworks but also a weak culture of inter-organisational learning.

In its emphasis of state withdrawal, the NPM paradigm and the concept of market enablement emphasise the important roles of central and/or local authorities in ensuring that markets, communities and voluntary agencies (or the third sector) operate very effectively along with the right political or decentralised environment (Helmsing 2002, Smith 2000). Such activities would entail aspects of capacity building in form of strategic 'public-public, public-private, private-private' partnerships, including those targeting communities. But as this chapter has shown, central and local government authorities are inadequately ensuring that such collaborative engagements/capacities are built and sustained. Private actors in NPM are believed to enhance quality and efficiency in service delivery, however, the dynamics surrounding the participation of HPMs and spare parts is still inadequately regulated to favour goals CBM systems of service delivery. Chapter Six examines micro-level dynamics that undermine the effectiveness of CBM but which have either remained unknown or ignored due to weaknesses at the macro and meso levels of rural water service delivery.

Chapter Six

Micro-Level Dynamics Disabling Community Based Management of Point-Water Facilities in Makondo Parish

Introduction

Under the NPM and governance framework, an effective CBM system for rural point-water facilities is a measure of a community's capacity to positively contribute to national policy objectives for safe water supply. Understanding the dynamics that influence community capacity to effectively play their dual role as 'providers' and beneficiaries of public services under the CBM framework remains central to efforts aimed at leveraging community contributions (in-kind or cash) towards service delivery. In Chapter Five I examined macro and meso level dynamics that directly or indirectly impact on CBM systems for rural water supply in Uganda. In this chapter I examine community/micro-level dynamics that challenge the NPM premises embedded in the CBM model of rural domestic water supply, based on the case study of Makondo Parish. More specifically, the chapter presents and discusses study findings on community-level dynamics affecting community participation in operation and maintenance (O&M) of improved water facilities in Makondo Parish. It also examines the operational effectiveness and organisational capacity of Water and Sanitation Committees (WSCs), regularity and effectiveness of community meetings over O&M and the nature of interactions or relations between frontline service providers and the community of water users. In essence, the chapter draws from theoretical assumptions and contextual realities in order to highlight micro-level issues that may remain unknown, ignored or untapped by policy and programme actors, but which remain fundamental to the success of CBM systems for rural water supply in developing country contexts. To place the discussion into the primary context, the chapter begins by examining the community's history of contribution to general local development initiatives and to domestic water supply in particular.

History and Dynamics of Community Contribution to Local Development Initiatives

Community contribution to local development initiatives in Uganda is not limited to rural water supply alone, although the dynamics associated with this new approach to public service delivery may vary from one sector to the other, and from time to time. The status of a community's past participation in a variety of local community development initiatives can help in understanding current and future opportunities/challenges to the provision and sustainability of improved water sources in the current CBM framework. This study inquired into whether the community in Makondo had ever contributed to community development initiatives in their localities and the forms such contributions took. The findings as presented in table 6 show that more than half (302 or 55%) of the household survey respondents had ever contributed to some community development activity/project. Most (69.2%) of the contributions made were in-kind compared to cash contributions (30.8%). Labour was the main form (45.2%) in which households provided their contribution compared to cash and all the other forms of in-kind contributions (table 6).

Table 6 History and form of community contribution to development initiatives (N=305)

Activity/Project to which contribution was made	Form of contribution household had ever made							
	Financial	Labour	Ideas/ meetings	Land	Local Materials	Other	Total	
Water and sanitation	N	62	97	18	2	14	1	194
	%	66.0	70.3	56.3	40.0 [n=2]	41.2	50.0	63.6
School Development Project	N	12	3	4	0	0	0	19
	%	12.8	2.2	12.5	0.0	0.0	0.0	6.2
Health Promotion Activities	N	9	22	19	1	11	1	63
	%	9.6	15.9	59.4	20.0	32.4	50.0	20.7
Security/safety of life and property	N	8	20	9	2	5	0	44
	%	8.5	14.5	28.1	40.0	14.7	0.0	14.4
Community road/bridge/culvert	N	13	28	0	1	1	0	43
	%	13.8	20.3	0.0	20.0	2.9	0.0	14.1
Construction of place of worship	N	23	6	1	0	1	0	31
	%	24.5	4.3	3.1	0.0	2.9	0.0	10.2
Other	N	15	27	3	0	6	0	51
	%	16.0	19.6	9.4	0.0	17.6	0.0	16.7
Total	N	94	138	32	5	34	2	305
	%	30.8	45.2	10.4	1.6	11.1	0.6	100

It is also important to note from the results that only 5 people (1.6%) contributed land to community projects with only 2 of these contributing it towards water and sanitation. Furthermore, the bulk (63.6%) of the contributions across all the forms of contributions was

made towards water and sanitation activities. This was followed by health promotion activities to which only about 20.7% of the households contributed. Based on this history of community contribution in Makondo Parish, the results indeed suggest that community development proposals that demanded direct contributions from the beneficiary community in Makondo Parish may not be perceived by the community members as alien. However, while this may be true, it does not adequately address the question of why water users in Makondo Parish were willing or unwilling to make financial contributions to operation and maintenance of their point-water supply infrastructure. The results further suggest that the potential for people's willingness to directly contribute to community development initiatives may exist but remain inadequately developed to leverage greater community enthusiasm for self-development. With nearly half (242 or 45%) of the household survey respondents mentioning that they had never contributed towards any community development initiative, the results further suggest a community that has largely been dependent on external support, or one that has been poorly mobilised and/or sensitised on issues of community participation. These issues are further examined in the subsequent sections of this chapter.

Most of the contributions households had ever made were towards water and sanitation or health promotion activities compared to what was contributed to security, education, village roads or developments at places of worship (see table 6). Hence, the findings suggest that safe water supply and its close relationship with health promotion was more likely to attract community contribution compared to other community development projects or activities. Using a logistic regression model, factors that influence household contribution towards community development projects in Makondo Parish were examined (table 7). The results from the model show that reported contribution towards community development initiative was significantly associated with the safe water service provider that household respondents perceived to be the most important in the community. According to these results, household respondents who considered Medical Missionaries of Mary (MMMs) as the most important safe water service provider in their community were 2.49 times more likely to say that they had in the past contributed towards community development initiatives compared to households that mentioned government. The trend was the same for households which considered other NGOs as the most important safe

water service providers, although their odds ratio⁵⁵ was not statistically significant due to the fact that respondents pointing to this were very few. These results indeed reflect the fact that more efforts to enhance community participation in Makondo Parish have in the past been invested in the delivery of water and sanitation services, mainly spearheaded by the MMMs or other NGOs compared to other development activities in the community such as those intended for school development, developments at places of worship or roads and culverts (table 7). Other statistically significant household factors associated with contribution to community development interventions were gender, household size, estimated household monthly income and use of water vendors for domestic water supply. The results show that male household respondents were 1.75 (p-value = 0.005) times more likely to say that they had contributed towards a community development initiative as compared to female household respondents.

Table 7 Results of the logistic regression model for contribution towards community development initiatives

Variable	Odds Ratio	p-value
Gender (Reference = Female)		
Male	1.75	0.005
Level of education (Reference = None)		
Primary	1.12	0.638
Secondary +	1.32	0.448
Household size (Reference = One person)		
Household size	1.53	0.000
Estimated household monthly income (Reference = <10,000UGX)		
10,000 - 50,000 UGX	1.65	0.017
50,000 UGX or more	4.22	0.000
Main source of drinking water for household (Reference=Unprotected source)		
Protected source (Shallow well, Bottled water, Deep /Protected well)	1.13	0.612
Household buys water from vendor (Reference = No)		
Yes	1.84	0.004
Who is considered as the most important safe water service provider in the community? (Reference = Government)		
Medical Missionaries of Mary (MMM)	2.49	0.001
Other NGOs	1.35	0.325
Who funded the construction of main water source (Reference = Government)		
NGO	1.22	0.417
Community	1.07	0.789

⁵⁵ Odds ratio is a measure of effect size, describing the strength of association or non-independence between two binary data values

Household size also significantly influenced reported contribution towards community development initiatives in a sense that the bigger the household was, the more likely it reported having made a contribution towards a community development project in the past; households with more than one person were 1.53 (p-value = 0.000) times more likely to say that they had contributed towards a community development initiative as compared to those with only one person. This is possibly due to the fact that households with fewer members are more likely to be constrained both in terms of income or labour supply to be able to make a cash or in-kind contribution towards community development projects as opposed to households with more members capable of pooling their incomes, or which have a higher labour supply to deploy as earlier studies have indicated (Munro 2005). The other factors included in the model in table 7, but which did not return statistically significant results were the level of education of the household respondent, the source of the household's main source of drinking water, and the service provider that funded the construction of main water source.

With regard to income, households with an estimated monthly income between 10,000 and 50,000 UGX⁵⁶ had a 1.65 (p-value = 0.017) odds ratio or 1.65 times more likely to report having ever contributed towards a community development initiative compared to those with monthly incomes estimated to be less than or equal to 10,000 UGX. Furthermore, households with an estimated monthly income of 50,000 UGX or more were 4.22 (p-value = 0.000) times more likely to say that they had contributed towards community development initiative as compared to households with monthly income less than or equal to 10,000 UGX. In addition, households that reported buying water from water vendors for their domestic water supply needs also had significantly high odds (1.84 with p-value = 0.004) of saying they had contributed towards a community development initiative compared to those which reported not buying water from vendors. These results suggest that the income status of a household was more likely to influence its willingness to contribute to community development initiatives. As discussed later in this chapter, qualitative findings indicate that households that engaged water vendors for their domestic water supply needs were more unlikely to make cash contributions towards repair and maintenance of improved water facilities. However, given that many of these were located in trading centres or along roads, as presented in table 8, they were more likely to support other

⁵⁶ The exchange rate estimated at 2500 UGX for 1 US dollar

development interventions using both cash and in-kind contribution methods. It is also important to note that some of the people who are largely involved in small scale off-farm income generating activities may prefer to contribute in-kind rather than cash towards community development projects. This is partly because such households survive on a cash economy and are unwilling to ‘dispose of’ some their cash for activities they could contribute to using in-kind methods such as labour.

Table 8 Household use of water vendors and location in the village

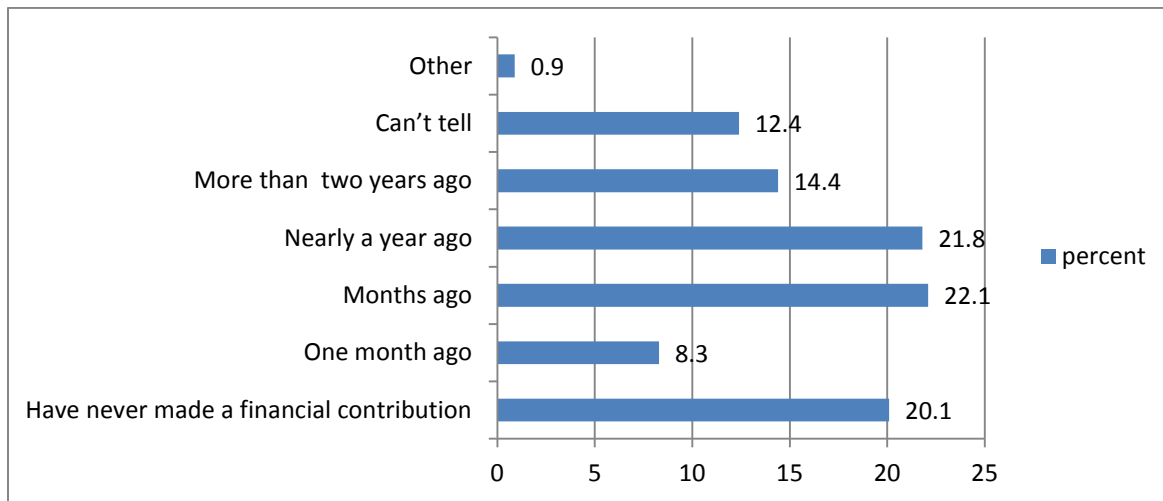
Household use of water vendors for their water needs		Location of Household in the village			Total
		Within a trading centre	Along a road, but not in the trading centre	Completely off the Road	
Never at all	N	38	169	167	374
	%	50.7	65.0	78.8	68.4
Sometimes, in wet and dry seasons	N	8	16	11	35
	%	10.7	6.2	5.2	6.4
Yes, only in the dry season	N	26	56	23	105
	%	34.7	21.5	10.8	19.2
Always	N	2	8	8	18
	%	2.7	3.1	3.8	3.3
When children are not at home	N	1	11	3	15
	%	1.3	4.2	1.4	2.7
Total		75	260	212	547

Household Income and Financial Contribution Towards O&M of Improved Point-water Facilities in Makondo Parish

The literature has consistently shown that the success of CBM models in ensuring functional sustainability of point-water facilities largely depends on the ability and willingness of water users to participate in water related community development initiatives, especially by making financial contributions to meet the initial cost of construction, major repairs and routine O&M (Carter and Rwamwanja 2006, Lockwood and Smits Stef 2011, Jones 2011). Regardless of whether there is a breakdown in functionality of point water facilities or not, Uganda’s rural safe water supply policy context of CBM requires that monthly financial contributions towards O&M of water facilities are collected from water users. These financial contributions, which are supposed to be managed by WSCs are in turn utilised and accounted for whenever water sources break down. However, findings from the analysis of qualitative and quantitative data obtained through interviews and discussions at the community level show that financial contributions

towards the provision, operation and maintenance of improved water facilities in Makondo Parish were not only irregular but also did not adequately follow national policy guidelines. Results from the household survey indicate that 20% of the respondents had never contributed financially to O&M of improved water facilities. Only about a quarter (23%) reported that they made a financial contribution a few months back, while the rest made financial contributions about one year (22%) or more than two years (14%) ago (Figure 11).

Figure 11 Last time household made a financial contribution to O&M of their water source (N=533)



Household income and expenditure patterns have often been used in much of the literature on community participation and service delivery to examine willingness and ability to pay for services (Gertler and Glewwe 1990, Whittington, et al. 1990, Jones 2011). The assumption held by many of these studies is that low income households are more unwilling to pay for services because of issues of affordability. However, both qualitative and quantitative findings from this study confirm that willingness to pay for services is but not always dependent on household/individual incomes or their ability to pay. Using a logistic regression model (table 9), further analysis of the household survey findings shows that households with monthly incomes estimated between 10,000 and 50,000 UGX had a 1.14 odds ratio of saying they had ever made a financial contribution to operation, maintenance or repair of their main water source compared to households with monthly incomes estimated to be less than or equal to 10,000 UGX. Furthermore, households with monthly incomes estimated at 50,000 UGX or more were 1.46 times more likely to say they had ever made a financial contribution to operation, maintenance or

repair of their main water source compared to households with monthly income less than or equal to 10,000 UGX. It is important to note however that these odds ratios were not statistically significant. This lack of significance implies that factors other than household incomes play a big role in influencing household willingness to make a financial contribution to O&M of improved water sources in Makondo Parish.

Results from focus group discussions, informal conversations and key informant interviews also indicated that willingness rather than (financial) ability accounted for the limited financial contributions to O&M. Respondents pointed out for instance that most households could afford Uganda shillings 500 per month [or 6000 UGX (about 2.3 US dollars) per year], which according to them was the maximum amount they expected a household to contribute on a monthly basis in all villages served by improved point water facilities. They also argued that most people in the Parish were involved in relatively economically viable farming which would enable them to raise the 500 UGX.

Five hundred Uganda shillings as a monthly contribution is nothing considering that the many of the households in Makondo Parish have banana and coffee plantations that could fetch tens of thousands of shillings in a month (Focus Group Interview with local leaders).

Similar remarks were made in qualitative interviews and discussions which underpinned the significance of other locally contextual factors other than household incomes in shaping the dynamics around which users of improved point water supply facilities are willing to participate or make financial contributions towards safe water service delivery, and more specifically towards O&M of their established water facilities, as observed in interviews and discussions:

We have not usually had problems with people raising money to contribute to the initial cost of construction, even for boreholes that are more costly....why then do the people stop supporting the sustainability of a project they initially supported...the point then is that people in the community can afford but you have to make them trust you with their money....It is we the leaders to do that (KII, Community development Worker).

People are completely able to contribute to the initial cost of establishing a water source and to routine operation and maintenance, but the moment they feel that their money is not being put to good use, they will be reluctant to contribute...Ten thousand Uganda Shillings is nothing! (In-depth Interview, Community Member).

There is a culture that is developing in the community, that leaders everywhere are corrupt which is not always true. This belief is severely affecting community

participation even when some of the leaders are very transparent and hard working. The problem is the difficulty in mobilising everyone in the village to attend meetings and listen to the discussions (KII, Local Politician)

Results from the logistic regression model presented in table 9 also underpinned the significance of community mobilisation and sensitisation on sustainable utilization of safe water in the community and the existence of an active water user committee in influencing household financial contribution to operation and maintenance of their water facilities.

Table 9 Detailed results of logistic regression model for household's financial contribution towards O&M or repair of a water source

Variable	Odds Ratio	p-value
Household sensitized on Sustainable utilization of safe water in the community (Reference=Not sensitized) sensitized	2.03	0.008
Estimated household monthly income (Reference =<10,000UGX) 10,000 - 50,000 UGX	1.14	0.577
50,000 UGX or more	1.46	0.260
Who is considered as the most important safe water service provider in the parish/community? (Reference = Government) Medical Missionaries of Mary(MMMs)	1.37	0.162
Other NGOs	0.54	0.391
Existence of water user committee meetings (Reference = Committee non-existent) Committee meets more than once in a year	8.79	0.000
Committee meets once in more than a year	1.83	0.025
Who usually mobilizes households to make a financial contribution to operation, maintenance or repair of your main water source? (Reference = Have never been mobilized) Local Council committee	29.89	0.000
Water user committee	63.47	0.000
NGO/Project staff	17.15	0.006
Main source of drinking water for household (Reference=Unprotected source) Protected source (Borehole, Bottled water, Deep /Protected well)	1.57	0.072

The other factors incorporated in the model but which did not return statistically significant results included who the household respondents regarded the most important safe water service provider in the community, and the household's main source of drinking water (table 9). The rest of this chapter examines these factors in detail covering among others approaches in collection and management of financial contributions to safe water service delivery, community experiences of the frequency of water source breakdowns, community perceptions about the quality of the water, and capacity for self-supply. Many other factors related to community

leadership and organisation, trust and perceptions about service providers are also examined as contextual determinants of CBM effectiveness that have seemingly remained ignored or unknown to sector policy and programme actors.

Other Dynamics Affecting CBM of Improved Water Facilities in Makondo Parish

As founded within in the NPM, governance and neoliberal policy paradigms, CBM as a service delivery approach advocates state withdrawal from direct public service delivery and an increased involvement of non-state actors including the users of safe water services (Pollitt and Bouckaert 2011, Akif Ozer and Yayman 2011). In Uganda's rural safe water supply sub-sector, a community of improved point water users is viewed as part of the institutional framework for the delivery and sustainability of safe water supply services. Part of their contribution to the delivery of services is to participate (variously) in activities and processes that ensure sustainable utilisation of safe water supply facilities. As earlier highlighted in this chapter, this participation includes but is not limited to a cash contribution to the capital cost or routine O&M of their water supply facilities and is affected by a range of contextual factors. Based on the analysis of qualitative and quantitative findings from the present inquiry, I examine micro-level issues influencing community contribution to O&M and to overall functional sustainability of improved water facilities in Makondo Parish.

Actual and perceived quality of safe water service delivery

The actual and perceived quality of safe water service delivery (access to, and functionality levels of water sources) was in this study found to potentially have an effect on the motivation of the community to participate in O&M of improved water facilities. Despite the ranking of safe water service provision as top priority by the majority (96%) of household respondents in Makondo parish, the motivation to make a financial contribution to water source repair, operation and maintenance was found to be low because of the perceived and actual quality of service delivery in the community. Household survey results indicate that access to safe water in Makondo Parish would have been higher when compared to average national coverage, but is undermined by low levels of functionality of improved point-water sources in the area. While almost all survey participants were within a one kilometre radius of an improved water source,

several of these sources were non functional. As can be seen from the map in figure 12 below, more household survey participants, notably from the west and east of Makondo Parish (the survey area) are located in a more than one kilometer catchment area for a functional improved water source⁵⁷, constituting 47% of all households (Macri et al 2013). When compared with Uganda's recommended minimum distance of 1.5 kilometres, the results suggest that many households are still moving long distances to collect safe water, the burden of which was found to potentially impact on willingness to contribute to O&M of water sources in distant locations. In addition to the burden of the distance covered to collect water, the nature of the terrain and the quantities of water required at household level which determine the number routes water collectors have to make exacerbate the challenges of access to water.

The hilly roads and the long distances covered are all a big problem because water sources are usually located in valleys, so when you add a hill to the distance, and the amount of water someone has to carry per day it becomes a big burden especially to women and children who sometimes suffer from backaches, nosebleeds and other forms of illnesses due to the burden of water collection (FGD, General Community)

The above findings are further elaborated in an earlier publication based on the present study and another study that focused on gender and water management in Makondo Parish (Asaba, et al. 2013).

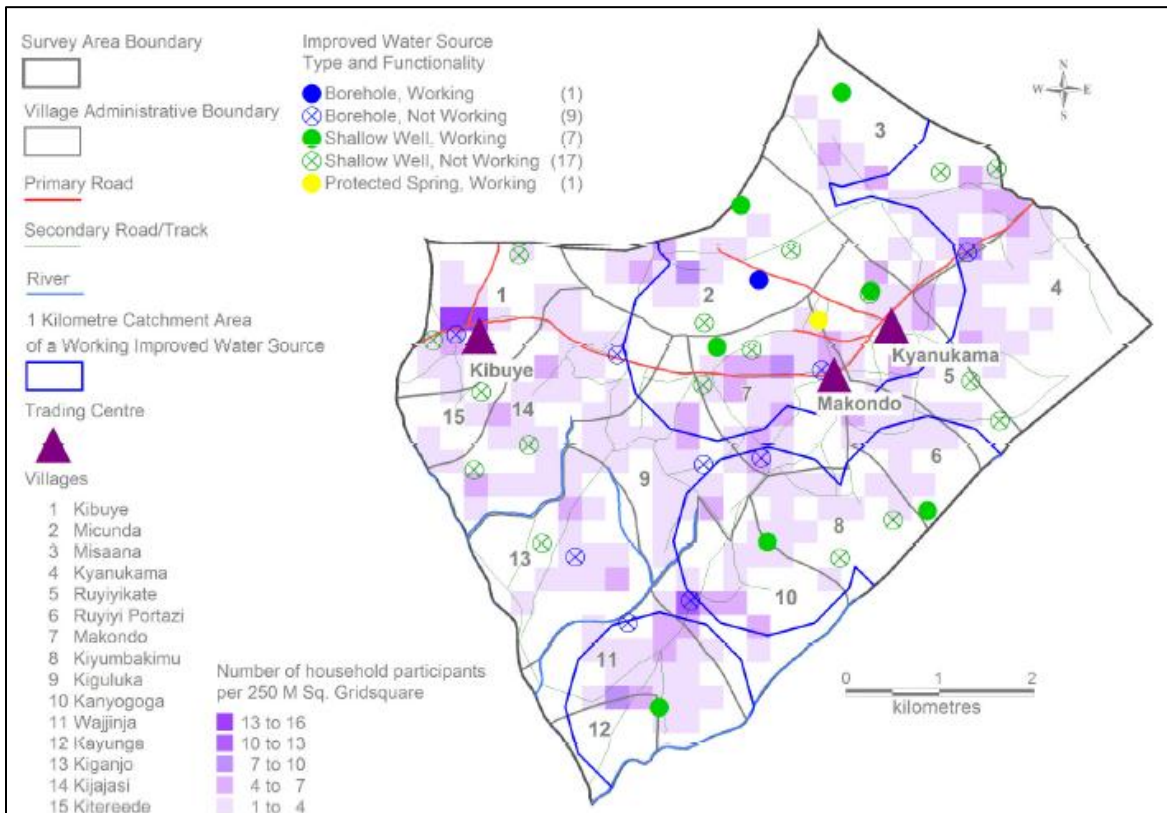
Owing to poor functionality of improved point-water supply facilities, safe water coverage in Lwengo district is estimated at 61%, slightly above the sub-county average of 58% (WSDD) of Lwengo district (WSDD 2011). Whereas the coverage for functional improved water sources in Makondo parish rose slightly higher as a result of my fieldwork activities⁵⁸ and those of other doctoral researchers under the Water is Life (WIL) project in the community, it was much lower at the time of my reconnaissance visit in January 2011. This coverage is expected to have further improved due to the countrywide borehole rehabilitation activities that took place mid 2011 (WSDD 2011). At reconnaissance time, only 11 out of 35 improved water sources (34 hand

⁵⁷ Map based Geographical Information system (GIS) database compiled by the Water is Life project in 2010 and the mapping of households survey participants using GPS in September and October 2011

⁵⁸ As part of the research process, to observe the dynamics of community participation in some of the water activities, support was sought from the Sub-county Hand Pump Mechanic, water user committee members and village leaders in three villages, and two of the non-functioning hand pumps were repaired with the guidance of the water sector policy guidelines.

pumps and one protected spring) in Makondo Parish were functional. Nonetheless, despite the improvement in functionality rates by the end of 2011, none of the water user committees (WUCs) in the entire parish met the standard criteria to qualify as functioning⁵⁹. In addition, both at reconnaissance and during my fieldwork, it was observed that communities simultaneously use both protected and unprotected water sources depending *inter alia* on seasonality, water source functionality, distance to the nearest safe water source, congestion at the source and (to some extent) specific water needs e.g. washing or watering animals versus cooking and drinking.

Figure 12 Map of households within and outside of a one kilometre area of functional improved water sources



Source: A Social-Spatial survey of Water Issues in Makondo Parish, Uganda (Macri et al 2013 p.25)

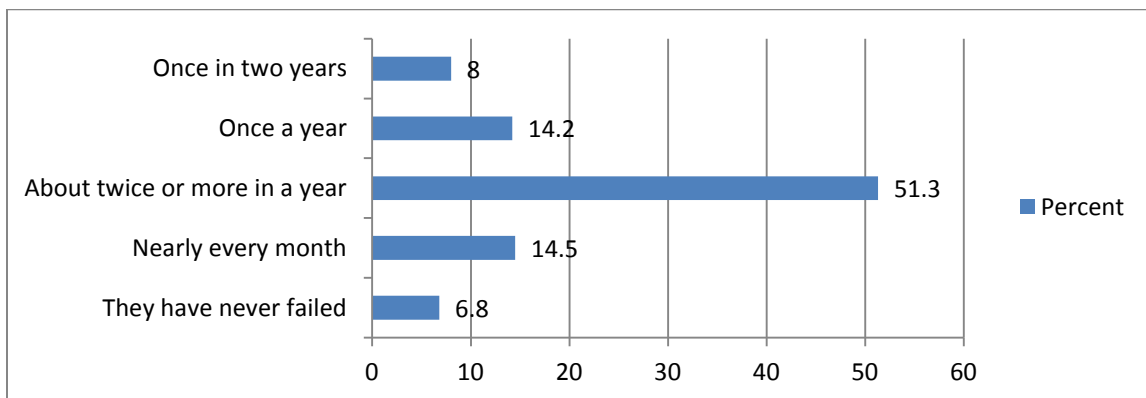
⁵⁹ WUCs are said to be functioning if they meet all of the following standards: hold meeting on a regular basis, collect operation and maintenance fees from the water users, undertake preventive maintenance and minor repairs on the water sources and if they promote proper hygiene and sanitation around the water source (GOU 2011b).

Community interest to contribute was said to gradually decline and eventually collapse in situations where water sources repeatedly broke down as mentioned in one FGI:

Even if people are willing to contribute to the maintenance of a water source, the moment it keeps breaking down they will lose interest (Member of a WSC)

In the context of this study, this problem poses as a disabler to O&M, particularly because the rate of pump failure was considerably high. Based on the data from the household survey, only about 7% of the 377 households with hand pumps in their villages reported that their hand pumps had never failed, while the rest reported that their pumps failed nearly every month (14.5%), about twice or more in a year (54%) or once a year (15.6%) as can be seen in figure 13 below. Some of the non-functional water sources had taken too long without being repaired and had turned out to be ‘land marks’ in the villages as some of the respondents remarked.

Figure 13 Reported frequency of hand pump failure



Pump failure/breakdown was partly attributed to bad pumping especially by the children who happen to be the main water collectors in the community, but also due to limited availability of alternative safe water facilities, resulting into high levels of congestion (photograph 1). According to policy guidelines for CBM in Uganda, every water and sanitation committee (WSC) ought to appoint a *Water Source Caretaker* charged among others with the responsibility of supervising hand pump usage/operation, especially at peak hours. However, these caretakers were not readily available to play this role mainly due to weaknesses in the wider CBM system as will be discussed later in this chapter. The ineffectiveness of the caretakers and the WSC also affected routine maintenance that helps to minimise the risk of hand pump break-down. Focus Group Discussions with the community about their roles in ensuring that water sources are

maintained through their contributions often led to indications from participants that the existing water sources were inadequate during water collection peak hours (evenings and mornings) as noted in one of the discussions:

Our shallow well is used by so many people.... We have to wake up early or go in the evening and return very late in the night.... This is even dangerous for the children who are the main water collectors... Sometimes we are as if we do not have an improve water source! (FGD, Community Members, Misaana Village).

Photograph 1 Children queuing at improved water points in the community



Source: Author's photographs

Results from the inquiry into the relationship between hand pump functionality and the dynamics around household contribution to O&M also show that some (28.4%) of the household respondents that reported having no hand hand-pumps in their villages had never made a financial contribution towards water source operation and maintenance (table 10). The same applies to 23.4% of the households who reported that the water sources in their villages broke down nearly every month. The results also suggest that some households in some villages may collect water from sources in other villages where they do not contribute towards the O&M of water sources in those villages. Results from the logistic regression analysis presented in table 9 also indicate that households whose main source of drinking water was protected were 1.75 times more likely to contribute financially towards operation and maintenance of water sources compared to those whose main drinking water source was unprotected, although this relationship was statistically not significant (odds ratio = 1.75; p-value = 0.075). The results indeed

emphasize the fact that poor safe water service delivery affects community willingness to contribute towards operation and maintenance of improved point-water facilities in Makondo Parish.

Table 10 Last time household made a financial contribution and how often hand pumps fail (N=533)

Last time household made a financial contribution to a water source operation and maintenance		Frequency of pump failure							Total
		They have never failed	Nearly every month	Twice or more in a year	Once a year	Once in two years	Have no hand pump	Not sure	
Have never made a financial contribution	N	2	11	24	6	3	59	2	107
	%	9.5	23.4	14.2	13.0	11.5	28.4	12.5	20.1
One month ago	N	1	3	15	5	4	15	1	44
	%	4.8	6.4	8.9	10.9	15.4	7.2	6.2	8.3
Months ago	N	5	16	46	7	8	30	6	118
	%	23.8	34.0	27.2	15.2	30.8	14.4	37.5	22.1
Nearly a year ago	N	4	10	40	16	4	40	2	116
	%	19.0	21.3	23.7	34.8	15.4	19.2	12.5	21.8
More than two years ago	N	4	3	24	6	5	33	2	77
	%	19.0	6.4	14.2	13.0	19.2	15.9	12.5	14.4
Can't tell	N	5	4	19	5	2	28	3	66
	%	23.8	8.5	11.2	10.9	7.7	13.5	18.8	12.4
Other	N	0	0	1	1	0	3	0	5
	%	.0	.0	.6	2.2	.0	1.4	.0	.9
Total	N	21	47	169	46	26	208	16	533
	%	3.9	8.8	31.7	8.6	4.9	39.0	3.0	100.0

Qualitative findings inquiry also indicated that due to frequent water source breakdown in functionality, community leaders always found it difficult to approach households for contributions towards operation and maintenance or repair of water sources.

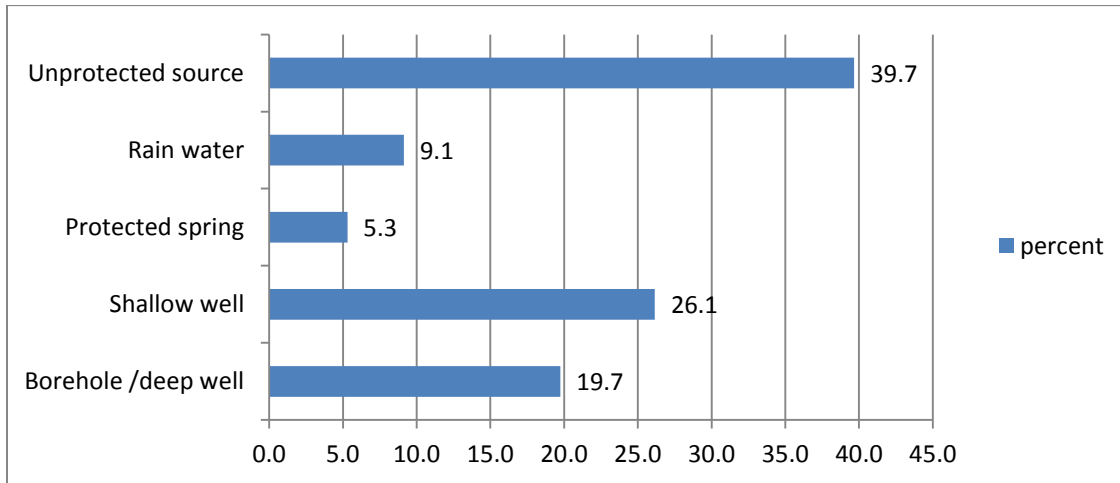
People complain a lot whenever they are asked to contribute in short interval periods due to frequent breakdowns... Many think that the last pump mechanic to repair the water source could have done sub-standard work (FGI, Village Leaders).

It is usually difficult to explain to community members to contribute towards the repair of a hand pump barely a month has passed since the last contribution was made...Some can even tell you that you are doing business with their money just to push you away even if they know that the water source is actually broken down (In-depth interview, WSC member).

Despite the fact that improved water facilities remain the main source of safe drinking water for the majority of the households in the study community, problems associated with these water

sources compelled nearly 40% of the households to depend on unprotected water sources for their drinking water needs (figure14).

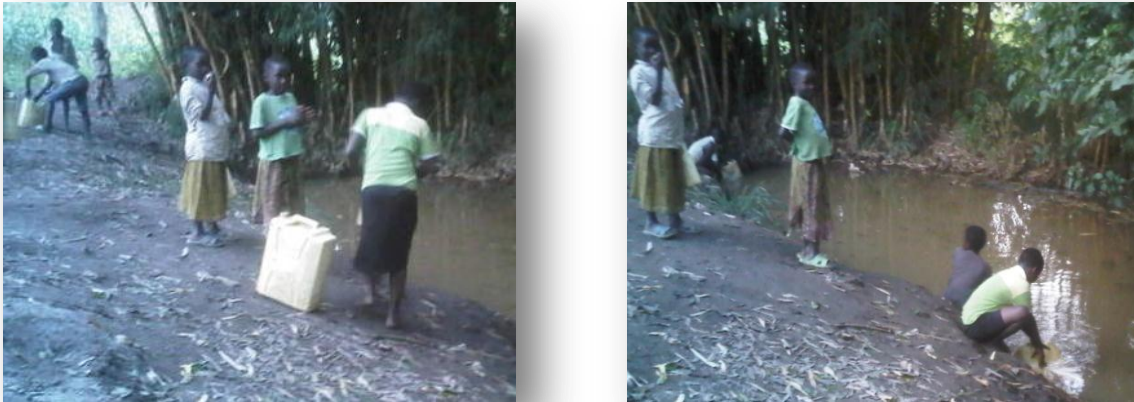
Figure 14 Main source of drinking water for household survey participants (N=547)



An inquiry into factors that influence household choice of the source of their drinking water in Makondo Parish also reveals that most people choose a source for their drinking water needs because it is nearer (37.8%) as opposed to whether the source provides good quality water (23.9%). Seasonal variations and their impact on reliability of water sources, as was the case with the only protected spring in *Makondo* village, also influence the choice of where households go to fetch water for drinking. These results emphasise the fact that a household's perception of water quality, and its proximity to an improved water source not only influenced its decisions on where to collect water, but also on whether to contribute towards operation, maintenance or repair of improved water sources. Results further indicate that open water sources (such those depicted in photograph 2) were attractive to some households because they were completely free of any financial charges while other households collected water from such sources to meet other needs such as cleaning and washing (figure15). Evidence from qualitative interviews also indicates that some households opted to use unprotected sources because they served as an immediate remedy to the long distances and queues in use of improved sources.

Most people prefer the open water source if they need to be back home early because of the distances to functional water sources and sometimes because of long queues (FGD, Community Members).

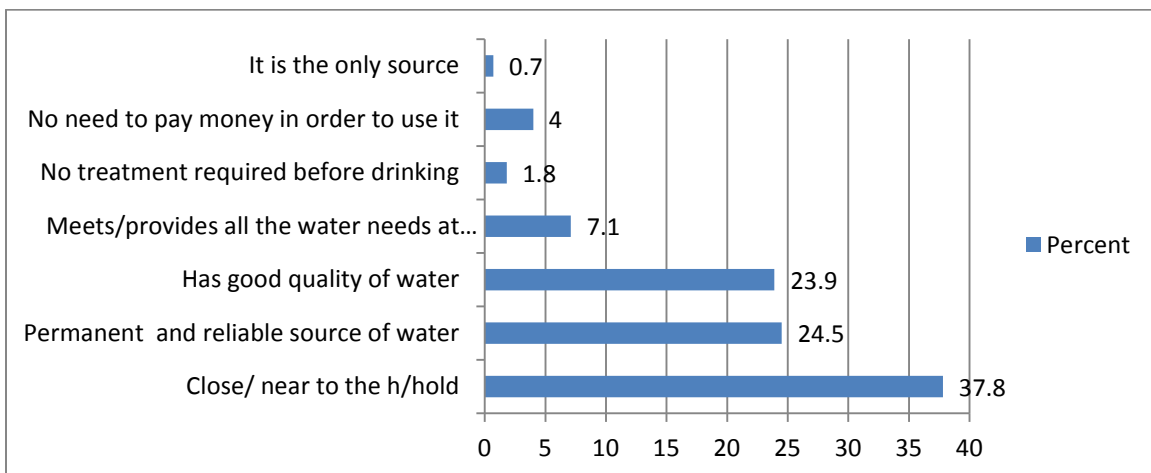
Photograph 2 children collecting water from an open water source in Kanyogoga village



Source: Author's photographs

Results in figure 15 indicate that majority (37.8%) of the household respondents chose the source of their drinking water because it was closer to their households. Such households were likely to be less motivated to contribute towards O&M of water sources they perceived to be far away from their households. Hence, the results suggest that any efforts to enhance household willingness to contribute to service delivery need to be preceded by those aimed at instilling a positive change in water user perception of the quality of safe water service delivery in the community.

Figure 15 Main reason for preferring water source as main source for drinking water



A long experience with poor functionality of improved water sources was compounded by low or intermittent water yields of the few water sources that were functional especially in dry seasons, affecting people's willingness to make contributions towards repair of such water facilities. Similarly, community perceptions about the quality of the water from some of the functional improved water sources, mainly in terms of its colour (turbidity) or taste (alkalinity) were also important issues mentioned in qualitative interviews as critical issues affecting willingness to contribute towards O&M or repair of improved water sources. In Kibuye village for example, a non-functioning shallow well provided by the MMMs could not be repaired primarily because its water was 'salty' according to community members.

We did not see it necessary to continue contributing money for the maintenance of that shallow well...it worked for only three months after construction and before it stopped working, many people had already stopped contributing because the water was bad...it was dirty (turbid) and salty (high alkaline content) [FGD, community members].

The leaders indicated that in such circumstances, they faced difficulties in convincing people to make their contributions towards repair of such water sources. It also emerged from this study that at times communities perceived contractors hired to construct water sources not to value or respect their views and opinions regarding the location of a water source⁶⁰. Findings from FGDs with community members in some villages indicate not only that community members are not always 'ignorant' but also that some contractors may lack the necessary competence required to make CBM systems succeed.

We showed him (the contractor) where we preferred to have the water constructed but he changed to another location very near the eucalyptus forest...that is why it worked for only three months and later there was no water coming out of the ground because the eucalyptus trees drained it out! (FGD, Community Members).

The findings indeed emphasise the challenges of private sector participation in safe water provision (Barungi et al. 2003, Carter and Danert 2003). On one hand they underpin the importance of enhanced technical efficiency of the contractors, and on the other, they point to the

⁶⁰ The location of a water source depends mainly on the ground water potential (yield) as well as the chemical and biological quality of the water at a given site.

gap in the supervisory capacity of local authorities over private contractors in ensuring that services are delivered in ways that promote the goals of CBM. This is particularly because poor water yield or quality at constructed water sources may always be interpreted by the community as failure on the part of service providers and/or the technical incompetence of the contractors. As a result, any future efforts to involve communities in CBM activities risk yielding unsatisfactory responses from the beneficiary community as CBM demands.

The foregoing discussion confirms earlier assertions that enhancing poor people's ability to participate in demanding for better services requires providing the very services that people lack (Krishna 2007). Promoting CBM requires providing better quality services that promote equity and sustainability goals. Building on existing local knowledge to enhance service delivery is one important phenomenon that service authorities in rural domestic water supply may need to advocate. Reducing the distances that water collectors have to walk, or the time they have to queue at a water source indeed helps in motivating people to contribute to operation and maintenance of services they perceive to meet their basic needs. This is because they could easily understand that service authorities are determined to meet their needs. However, providing physical services alone will not help to optimize chances for CBM effectiveness. More evidence from this study underpins the significance of other micro-level dynamics which remain critical for the effectiveness of CBM.

Ad-hoc arrangements in financing O&M of point-water water facilities

The findings of this study indicate that as a result of the ineffectiveness of WSCs, ad-hoc approaches to financing O&M have almost formally replaced the policy recommended monthly contribution to O&M. A financial contribution each household should make is determined whenever there is a breakdown. In most cases, the HPM estimates repair cost covering for instance spare parts, transport charges and professional fees for repair. On determining/estimating the amount, the community leaders decide on the modality for raising funds from the community. The common practice was that water user households are counted and the total cost of repair divided by the number of households known to collect water from the water source in order to determine the amount each of the households should contribute.

We would consider the cost of repair including spare-parts and the charges of the mechanic, then divide this cost by the number of households. We then collect that money and repair the machine or pay the HPM in case he repairs on credit. If there is a balance, then it would be used for other services upon the community's decision (FGI, Local Leaders).

Ability to pay was thus also influenced by the number of households per water source, as this determined the amount each household would contribute in case of a breakdown or contribution to capital cost of establishing a new water source⁶¹. The village executive council (VEC) leaders together with some of the active members of the WSC (in communities where they exist) take it upon themselves to move from household to household demanding for the contribution. The leaders argued that this method was increasingly becoming popular for O&M. According to them, collecting money for actual breakdown was more trusted and effective because people would know that there is 'a problem to be solved'. In view of this ad-hoc method, households in water user communities with fewer households were likely to contribute more compared to those that had fairly more.

Whereas this ad-hoc approach has an in-built incentive as the qualitative findings indicate, it is not only unsustainable, but also perpetuates inequities that decentralisation and subsidiarity are meant to address. The policy recommended 300 persons per 'public water point' may appear to be a good move for enhancing equity in access (GOU 1999 p. 17), but in contexts where communities are struggling to maintain water facilities using such ad-hoc means as it is in Makondo parish, it becomes very challenging for the CBM model of service delivery. As an input towards enhanced equity of service delivery, the standard monitoring indicators for rural domestic water supply, a hand pump in Uganda should serve 300 people while 200 persons should be served by a protected spring (MWE 2009 p. 31). However, adherence to this recommendation as a means for achieving equity remains problematic due to contextual differences in rural areas such as settlement patterns, geography, politics and other dynamics in decentralised service delivery in Uganda. My study found out that community leaders would at times consider certain household/individual vulnerabilities to determine exemptions or 'subsidies' for some community members over their contribution to O&M. But, such exemptions

⁶¹ The upfront contribution is always set as a standard usually 100,000 UGX or USD 40 for a shallow well, 200,000 UGX or USD 80 for a bore hole or 45,000 UGX or USD 22 for a protected spring (MWE 2009 p. 20)

or 'subsidies' did not follow any standard criteria by the general community and were likely to be poorly enforced, causing reluctance on the part of other community members to contribute.

Families headed by young children or widows do not pay this money. The chairperson of the village and his/her committee always top-up on behalf of these two groups (Focus Group Meeting with Village Chair persons)

The arguments for the increasing adoption of the ad-hoc approach in community financing of safe water service delivery relates in part, to accountability and efficiency questions on funds collected. However, there is also a great potential for this approach to breed conflict and confusion within the community. The study shows that the responsibility to determine how much each household was to contribute depended on the estimated cost of repair whose precision and objectivity many people tended to dispute. There were also no clear mechanism identified on how the funds collected in excess of the actual need would be kept or utilised, nor was it easy for leaders to convince community members to contribute more to take care of the balance in case of a deficit in financing.

I would prefer the monthly contributions because if there is any breakdown, it can be repaired on time. People can spend many days without water if they contribute as and when the facility breaks down! Sometimes the money needed cannot be collected in time because it is a lot! (KII, Community Development Worker)

It was also found out in this study that the burden of responsibility for ad-hoc financing was almost entirely that of the village executive council leadership rather than the WSCs, who in the CBM framework are the community structures directly responsible. In some cases, the VEC leaders would borrow money in order to pay the mechanic after work. They would then go on to collect contributions from the community which they would use to cover the debt. It was also found out in qualitative interviews that in some situations, the VEC leaders would negotiate with the HPM who would accept to repair on credit, and later be paid after contributions have been collected from the community. These approaches were reported to have been problematic because when approached for contributions, some community members would argue asking why more money was being demanded when the water source was already repaired, while others would ask for more time to observe the functionality of the repaired water source before paying.

This time one village member gave us money for the rehabilitation of our borehole...but we are getting challenges of paying him back because many of the people we approach

ask us to first give them time to see what happens with the water source (Interview, Village Leader)

On a rather positive note, the HPM could accept to repair on credit and give leaders an opportunity to collect community contributions in order to pay at a future date as a way of mitigating the pressure leaders would have to endure collecting community contributions in a single round in their villages. However, this was not a good culture for the community to adopt as eventually the burden of payment was seen to be borne by the village leader who directly bore the pressure from the HPM. In addition, where payment was not forthcoming as expected, the HPM would be reluctant to respond to calls for help, thereby negatively affecting the relationship build based on trust. Based on the above, despite the ‘convenience’ ad-hoc methods gave to community leaders, the extent to which such methods helped in building the much needed community trust over the way their O&M contributions are handled is highly questionable. This limited community trust not only undermined community willingness to pay but also worked against the ideals of CBM and long term service sustainability.

Household capacity for self-supply and dynamics associated with water vending

Study findings from the qualitative inquiry indicate that some of the households that were able to supply themselves with water were reluctant to contribute towards O&M or repair of improved water sources. Such households mainly included those that were able to buy water from water vendors or those that had put in place rain water harvesting technologies at their homes. Those that paid for water from water vendors argued that by paying for O&M, they would be paying double and did not care where the vendors obtained the water they sold to them. Both qualitative and quantitative findings indicate that these were also mainly households that lived in trading centres.

Some of the households in trading centres of *Kibuye, Kyamukama* and *Makondo* villages buy water from water vendors, or simply ‘contract’ some individuals to fetch water for them on a daily basis (KII, Community Development Worker).

Survey results also indicate that there were more households paying for water but which were not located in trading centres, although this may also have to do with the fact that there were relatively few trading centres in the study community as already indicated on the map in figure

12. In addition, slightly more than half (50.7%) of the household respondents who indicated that they never use water vendors lived in trading centers. In addition, while the use of water vendors depended on factors such as weather, not all the households that reported always using water from water vendors were located in trading centres (table 11).

Table 11 Household location and use of water vendors

Times when household using water vendors for their water needs	Location of Household in the village				
		Within a trading centre	Along a road, but not in the trading centre	Completely off the Road	Total
Never at all	N	38	169	167	374
	%	50.7	65.0	78.8	68.4
Sometimes, in wet and dry seasons	N	8	16	11	35
	%	10.7	6.2	5.2	6.4
Yes, only in the dry season	N	26	56	23	105
	%	34.7	21.5	10.8	19.2
Always	N	2	8	8	18
	%	2.7	3.1	3.8	3.3
When children are not at home	N	1	11	3	15
	%	1.3	4.2	1.4	2.7
Total	N	75	260	212	547
	%	13.7	47.5	38.7	100

Whereas qualitative findings indicated that households that had self supply options were reluctant contribute towards operation and maintenance of improved water sources, results from the regression analysis of household survey data indicated that such households, especially those that reported buying water from water vendors contributed to general community development initiatives (table 7). It was also mentioned in qualitative interviews that some of the households that depended on water vendors and/or those that had water harvesting tanks sometimes contributed to O&M of improved water sources because such households would also occasionally use protected water sources especially in long dry periods or when they held big functions such as wedding parties or funerals.

Some households who have rainwater harvesting tanks are difficult to approach for money when our shallow well breaks down. They shout at you saying that for them they have their tanks, yet when such people have funerals or weddings their water cannot be enough. Others are however, willing to support financially by even giving more than what everyone else is supposed to pay because they have a good heart (KII, Village Leader).

Some leaders in villages where water vending was common e.g. in *Kyamukama*, *Makondo* and *Kibuye* were beginning to transfer the burden of paying onto the water vendors by charging them more money compared to what everyone else had to pay. In order to keep in business, some vendors comply while others pay for a few months and then default because of a weak monitoring capacity by the leaders. Besides, the water vendors also expressed concerns that such fees would require that they too increase prices, which their customers would complain about and possibly find other suppliers willing to offer cheaper services:

For me I am happy to pay 5000 Uganda Shillings per month provided the water source keeps working. My only problem is that it has not been possible to increase the price of a Jerrycan of water to meet these costs... My customers will not accept paying a high fee and they can also easily find a cheaper supplier (Water Vendor).

Some community members in these villages where water vending was common also complained that the water sources had been taken over by water vendors who according to them were ‘selling the water’ and ‘should repair’ their water source as mentioned in some of the FGDs. Interestingly, some of the water vendors interviewed believed that their businesses would allow them to ensure that the water sources keep functioning, which would be to their benefit and the general community.

We are many water vendors I had proposed that as water vendors, we should contribute a certain fee towards the water facility maintenance, but this wasn't accepted by some village committee members for fear that we would eventually own the water, which was not the case (Water Vendor)

In *Luyiyi Kaate* village for example, the conflict was compounded by the fact that the main water vendor was also the caretaker of the water source, who some community members felt that ‘he owned the water source’ as one of the village leaders observed, causing considerable challenges in mobilising contributions from water users for repair whenever the water source broke down. Paradoxically, however, other community members took the same care taker as a great resource in keeping the water source clean and free from damage by children who liked playing with the pump:

He lives near the water source but also fetches the water more than anyone else because it is his business, but some people are not happy with him selling water... He is the only one capable of keeping the water source safe by ensuring that children do not litter around it or play with the pump (In-depth Interview, Community Member)

These results not only confirm arguments that water is increasingly becoming a commodity even in rural areas (Bond 2004), but also confirms the fact that achieving equity in access to safe water services in rural sub-Saharan Africa is still a challenging goal (Cleaver and Hamada 2010). In addition, contrary to the belief that water vending is an activity exclusively practiced in urban settings, rural households that afford the cost of services are capable of engaging water vendors to meet their safe water supply needs. But the same households could also support activities meant to enhance O&M of improved water facilities. As past studies have indicated, households which pay for water from water vendors end up paying more than they could pay for O&M of water facilities (Whittington, Lauria and Mu 1991). The results also point towards the need for enhancing cooperation between vendors and the general community of water users, well as consumers of the services of water vendors. This would ensure that conflicts emanating from their diverse interests do not severely affect overall safe water service delivery in the community.

Declining community trust in local leadership capacity to steer CBM

The success of CBM greatly depends on the extent to which local leaders demonstrate commitment to service delivery through strategies that build trust and cohesiveness at the community level. Building trust in the CBM service delivery framework is indeed a measure of how WSCs and the VEC leaders are exemplary in working together as a team to serve their people as the literature on community enablement has emphasised the importance of leadership as a precursor for community participation (Mulwa 1994, Smith 2000, Helmsing 2002). In the context of this study, elected WSCs and the village executive council (VEC) leadership indeed remain very crucial institutions for CBM effectiveness. Survey results on community perceptions about how much say certain categories of people or institutions in their locality have in getting government to address issues of interest to them indeed indicate that leaders, i.e. politicians (70.5%), village/community leaders (65.3%) were believed to have a higher likelihood to engage local government authorities over issues related to service delivery in their localities.

Table 12 Categories of people/institutions and community perception of their influence in getting government to address issues of interest to them

Categories of people/Institutions		A lot	Some	Little	None	Don't know	Total (N)
Children	N	104	78	57	201	105	545
	%	19.1	14.3	10.5	36.9	19.3	100
Youth	N	88	116	141	100	99	544
	%	16.2	21.3	25.9	18.4	18.2	100
The elderly	N	52	56	128	211	93	540
	%	9.6	10.4	23.7	39.1	17.2	100
The educated	N	229	117	53	67	71	537
	%	42.6	21.8	9.9	12.5	13.2	100
The uneducated	N	20	24	66	311	106	527
	%	3.8	4.6	12.5	59.0	20.1	100
Politicians	N	377	90	23	16	29	535
	%	70.5	16.8	4.3	3.0	5.4	100
Civil servants	N	386	80	14	23	32	535
	%	72.1	15.0	2.6	4.3	6.0	100
NGOs/CBOs	N	318	117	22	28	56	541
	%	58.1	21.4	4.1	5.2	10.4	100
Religious groups	N	311	99	63	21	47	541
	%	57.5	18.3	11.6	3.9	8.7	100
Village Leaders (civil and political)	N	357	105	36	15	33	546
	%	65.3	19.2	6.6	2.7	6.0	100

Paradoxically, qualitative findings suggested that local politicians seeking political popularity often discouraged people from making any contributions towards O&M arguing that water was provided freely by government. The findings further indicate that the capacity of VEC leaders to effectively monitor service delivery at the community level was getting weaker due to overstay in office⁶² and the subsequent ‘increase in loss of recognition and respect from some of the community members’ as some of leaders observed. Consequently, some local leaders were reported to have resorted to taking community decisions in consultation with a few village elites without convening community meetings as the law requires. It was commonly observed in interviews and discussions with the community and other stakeholders that the conduct of some of the leaders was derailing prospects for successful community based interventions.

The main issue constraining community willingness to contribute to O&M is lack of transparency regarding the funds they collect. ...and it should not matter whether the money is contributed monthly or whenever there is breakdown (KII, Lwengo District)

⁶² The expiry of their five year term occurred in 2001 and since then government has failed to organise fresh elections.

Some leaders took advantage of breakdowns to ‘earn’ money, and in extreme cases, they were reported to premeditate some of the breakdowns in order to defraud unsuspecting water users.

In one of the villages, the person who was trained to do simple repairs on a borehole would connive with the local leader to periodically remove the chain of the pump so as to collect money from water users for its repair and eventually share the money after replacing the chain... (KII, Community Development Worker)

In rural contexts such as Makondo Parish, the problem of premeditated water source breakdown is compounded by the lack of vigilance by community members which limits their ability to quickly detect and /or report such fraudulent practices. While there was an official HPM allocated to the community under the sub-county local government public private partnership arrangements, it was still unlikely that such unscrupulous conduct by some caretakers would be detected. In some instances, community members that would accept to contribute would also do so ‘grudgingly’ because they did not adequately trust their leaders.

Community people are not always sure about what usually goes on... People have lost the spirit of serving others without exploiting them... If an expensive spare part is fitted in a broken down hand pump without proper explanation, people may become suspicious and fail to contribute money for its repair (KII, Local NGO)

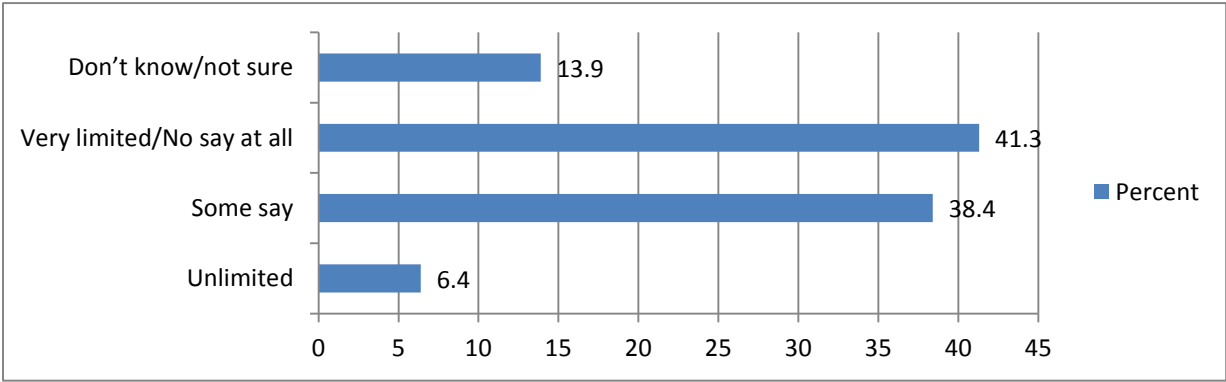
These results confirm on one hand, that the capacity and competence of local leadership, and politicians at local or national governments is critical for the mobilisation of the general public to engage service providers on the quality and adequacy of service delivery. However, on the other hand, the gradual decline in the way the leaders are perceived by the community as trusted service providers working in the best interest of the community suggests that these institutions may not be adequately prepared to steer local level development initiatives in Uganda’s current rural context. This was compounded by the fact that community members are also not quite enthusiastic to attend village meetings as elaborated later in this chapter.

Community perception of right to services and declining trust over government responsiveness to needs

CBM is conceived from the wider concepts of demand responsive approaches (DRA) to service delivery and community empowerment (Whittington, et al. 2009, Schouten and Moriarty 2003). Hence, it ought to thrive among communities that are not only capable of knowing their rights but also initiating the demand for such rights or services among others through self-organisation.

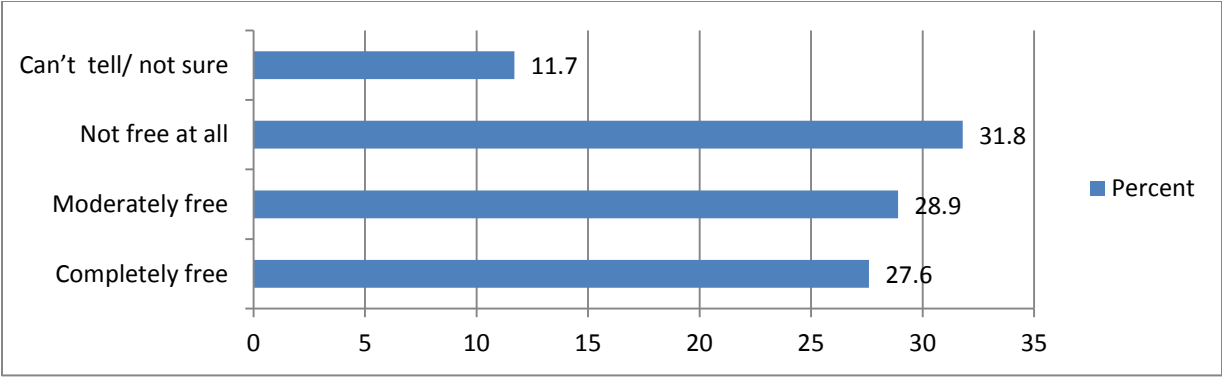
Both qualitative and quantitative findings demonstrate a low community perception of their right to engage government institutions over the delivery of improved safe water services in their localities. Survey results show that only 6.6% of the household survey participants indicated that they had unlimited rights, while most (41.3%) mentioned that they had no influence, or very limited say (38.4%) in making government to address issues of safe water service delivery in their localities (figure 16).

Figure 16 Respondent perception of individual right to demand for improved water services from government



The results further indicate that only 27.6% of the household respondents knew that they were completely free to express themselves on safe water issues without fearing government reprisal, while 31.8% indicated that they were not free at all (Figure 17).

Figure 17 How free household respondents felt they were to express themselves on safe water issues in their community without fearing government reprisal



Results from the household survey corroborated well the observations made in some of the key informant interviews in which respondents rated quite low, the capacity of communities to adequately engage with government over the quality of services.

As far as people's awareness on their rights such as clean water, education and health is concerned, I can rate Makondo Parish at forty percent...mainly because of poverty and poor politics that keep people confused and looking at politicians and their constant promises (KII, Civil Servant).

Based on the above, it can be argued that rural communities in Uganda are largely still recipients of services and less capable of aggressively engaging with actors such as government over planning and delivery of services. Therefore, in the NPM framework, efforts to enhance CBM in rural safe water supply ought to focus among others on building the capacity and confidence of communities not only to engage with government but also other service providers in more collaborative/partnership arrangements. Past studies have indeed shown that collective action helps to mitigate transactions costs inherent in service delivery (Carr, LeRoux and Shrestha 2009, Bel, Fageda and Mur 2012), and this is not a concern exclusively true of formal cooperative arrangements between institutions. CBM is a form of cooperation between the water users and service providers.

Community capacity building on rights not only enhances processes of downward accountability, but also builds the much needed trust and cooperation among the different actors engaged in CBM for rural safe water supply efficiency and sustainability. This study found out that the extent to which communities trusted that government will perform its service delivery duty in their best interest was quite limited. Some of the observations made in FGDs and in-depth interviews with the community clearly reflect this limited trust.

We trust that government will deliver services after we have actually seen the services. They always make promises and promises...towards elections they are very serious, but after elections you will have to wait for another five years (FGD, Community Members, Misaana Village)

We normally write to the sub-county but they do not get back to us... During election time, politicians make a follow up on such requisitions and/ or work on the faulty boreholes. However, they don't last long before getting spoilt again (Chairperson, Village Executive Committee).

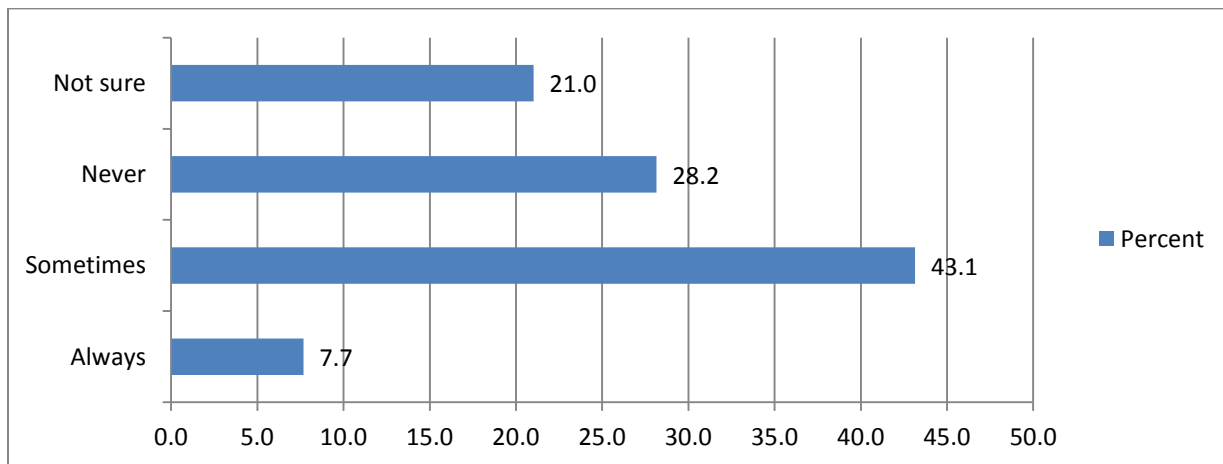
These observations indeed emphasise the experiences communities have had with regard to the inadequacies government actors/institutions have in responding to community needs. Such community attitudes and experiences serve to compromise levels of motivation by the

communities to participate in government programmes including those related to CBM. Further qualitative evidence from the community also indicates that government actors were believed to be more dishonest in the way they implemented water programmes compared to actors from the NGO sector.

Government used to store faulty spare parts and later use them to repair boreholes... The MMMs (a Project of the Catholic Nuns in the Community) have a good system of repairing breakdowns because for them they purchase these parts from Kampala (Uganda’s Capital) [FGD, Community Members]

Results obtained from the analysis of findings from the household survey also underpin the issue of limited community trust in government to deliver services to the community. Only 7.7% of the household respondents mentioned that they trusted that government was interested in the service of their communities. About three quarters (43.1%) mentioned that they sometimes trust government, while over a quarter (28%) mentioned that they never trust that government service delivery systems will ever be in the best interest of the people (figure 18).

Figure 18 Extent of community trust in government service delivery



In the NPM and governance framework, public and community collaborations are highly emphasised strategies for ensuring service delivery efficiency and sustainability (Skelcher 2005). However, these collaborations are largely based on trust building. Hence, community trust and confidence in the capacity of service providers is an important pre-condition for meaningful public-community collaborations. The evidence generated from this study shows that these partnerships and collaborations, which are crucial for CBM and functional sustainability of rural domestic water supply infrastructure are being threatened by fading trust. While the NPM policy

framework calls for a new set of actors in public service planning and delivery, the role of government in direct service delivery remains crucial for communities in developing contexts such as Uganda. But this role is being undermined by limited government effort to consciously build such trust. Recent experiences especially in Africa have also shown that citizen perception of an unresponsive government in terms of service delivery not only lead to limited ownership and sustainability of community based programmes, but also radical declines in trust and the consequent wide spread civil uprisings. The civil uprisings in North Africa provide the most recent example.

Community interface with contradictory government programmes and policies

Compounding the problem of a declining community trust of government programmes and their willingness to participate in such programmes is what communities perceived in this study as policy inconsistencies or contradictions. Throughout the FGDs and interviews, communities always asked why they had to pay for water when primary and secondary education services and some immunisation programmes were provided for free. This they mentioned in reference to Universal Secondary and Primary Education (USE/UPE), and mass immunisation programmes for polio and measles for children that were provided freely by government.

Very often people ask why it is water that they have to contribute to as opposed to other government programmes which, according to them were as important as basic access to safe drinking water (In-depth Interview, Local Leader)

The suspension of graduated tax collection in 2001 is another government decision found to be impacting negatively on CBM, despite its popularity among the male populace. Community leaders indicated that they were grappling with this challenge whenever they wanted to justify the need for financial contributions both to the initial cost of construction and for routine maintenance or repair of water sources. They particularly argued that ‘the policy’ was not only deligitimising cost-sharing, but also reduced local government revenues that would have otherwise filled some of the funding gaps in central government conditional grants. According to them, such funds would be utilised to solve problems such as those experienced in the rural domestic water supply services.

It was from local graduated tax disbursements to communities (villages/parishes) that community problems such as the repair of water sources, public toilets and other projects would be funded especially if there was an emergency...The villages used to receive 25 percent of the taxes collected in a sub-county but this is now history and that is why almost all community projects depend on community contributions (FGI with Village Leaders)

These perceptions on policy contradictions also underpin the need to explore mechanisms for guaranteeing regular community education on government approaches to service delivery. Communities in rural Uganda and sub-Saharan Africa tend to depend so much on a few elite members in their localities for policy interpretation. These elites are however not always able to provide such interpretation with minimal subjectivity. Consequently, this often requires that service providers and politicians invest more time and other resources in explaining why government policies may sometimes look contradictory even if they may not intend to depict themselves as such. Empirical literature has shown that provision of timely and reliable information to citizens can enhance the quality of public service delivery (Krishna 2007), more especially in the water and sanitation sector (Jacobson and Network 2010)

Weak and de-motivated WSCs and gradual transfer of their CBM roles to Village Executive Council Leaders

In the context of Uganda and the study community, village executive council (VEC) leaders and WSC members constitute primary actors on whom CBM of point-water facilities depends. While both committees are important, the WSC remains the most critical under CBM. According to water sector guidelines for Uganda, a functional WSC should have an operation and maintenance plan, it ought to collect, keep and account for monthly contributions from water users, have a signed contract with a hand pump mechanic, meet regularly and quickly report water system breakdowns whenever they occur. A WSC should also have in place well-articulated bye-laws with clear sanctions to non-compliance by the water user community. The WSC should routinely carry out O&M of the water facility including cleaning the site and should have a tool kit kept by the sub-county chief or a member of the WSC (MWE 2011). However, based on the findings of this study, it none of the improved water sources in Makondo parish had a WSC that met the above parameters. It also was found out that WSCs tend to be active immediately after

inauguration of newly constructed water sources, but later lose the interest as was observed in a number of interviews with key informants.

These committees tend to be very active initially after they have formed...I do not know whether they develop expectations which eventually end up not being fulfilled...because after one year or a number of months of forming they start disintegrating, leaving the work to the caretaker or the LCs (Local village executive councils) [KII, Lwengo District].

The WSC is very important if it is well trained and has members who are patriotic... But they tend to lose morale with time. That is why they need continuous training (Key Informant, Local NGO)

Results from the household survey findings on the community's perception of the performance and functionality of WSCs also indicate a somewhat average perception, with most of the respondents who reported having WSCs rating the performance of their committees as very good (15.2%), good (40.5%), and fair (29.8%) [table 13]. However, an analysis of the reasons respondents provided in favour of the performance of the WSCs produced mixed results including reasons that contradicted Uganda's rural water policy expectations. For instance, some (19.5%) of the household respondents rated their WSCs as good because they did not harass/mistreat or impose sanctions on people or households that defaulted contributing to the initial cost of construction or to O&M of water facilities (table 13). This contradiction clearly reflects policy competence gaps within the community partly because of the irregularity of community meetings, and undermines CBM ideals. Indeed, a limited percentage of those who felt that the performance of WSCs was poor complained about irregular meetings (42.1%), lack of transparency by the members (10.2%) or general failure to perform their stipulated roles and responsibilities (68.4%).

Compounding the problem is the fact that CBM models as stipulated in the policy are silent on when the community should replace an existing WSC regardless of whether it is functional or not. As reflected from the experiences of stakeholders in Makondo Parish, water source breakdowns are not quickly attended to when WSCs are de-motivated or disintegrated. In addition, as indicated in table 13, when water sources are attended to, the methods or approaches used in their repair often fall short of the laid out policy guidelines for CBM, resulting into weaker prospects for functional sustainability of water facilities.

Table 13 Community rating of the performance of WSCs and reasons for the rating

Reasons for rating of the performance of the WSC (Multiple responses were allowed)		Rating of the performance of the WSC					Total
		Very good	Good	Fair	Poor	Can't tell	
Regular meetings	N	7	8	1	0	0	16
	%	25.0	10.8	1.8	0.0	0.0	8.7
Transparent	N	11	10	6	0	1	28
	%	39.3	13.5	10.9	0.0	12.5	15.2
Give feedback to community on their deliberations	N	11	21	16	0	1	49
	%	39.3	28.4	29.1	0.0	12.5	26.6
Financially accountable	N	2	9	3	0	0	14
	%	7.1	12.2	5.5	0.0	0.0	7.6
Takes good care of the water source	N	17	47	15	0	0	79
	%	60.7	63.5	27.3	0.0	0.0	42.9
Do not hold regular meetings	N	0	0	11	8	0	19
	%	0.0	0.0	20.0	42.1	0.0	10.3
Are not transparent	N	0	0	2	2	0	4
	%	0.0	0.0	3.6	10.5	0.0	2.2
Do not perform their stipulated roles	N	0	2	14	13	0	29
	%	0.0	2.7	25.5	68.4	0.0	15.8
Do not harass/ mistreat/deny water access to fees defaulters	N	4	33	21	0	2	60
	%	14.3	44.6	38.2	0.0	25.0	32.6
Total	N	28	74	55	19	8	184
	%	15.2	40.2	29.8	10.3	4.3	100

Owing to weak and disintegrated WSCs, O&M of point water facilities has tended to rely heavily on village executive councils (VEC) especially their chair persons of the villages in which a particular water source is located. However, the level of commitment of these leaders also seemingly depended on their future political ambitions, or how ‘connected’ they were to other politicians and/or service providers. In nearly all the villages in Makondo, the village executive council had almost replaced the WSCs regardless of whether the members of WSCs partially existed in their respective villages or not. In a limited number of cases, such as in Kiganjo and Makondo villages, fairly active members of the two groups (VEC and WSC) worked together, although they also exhibited low levels of motivation. Nevertheless, results from the regression analysis presented earlier in table 9 show that households which were mobilized by VECs were 29.89 (p-value = 0.000) times more likely to say that they had ever made a financial contribution to operation, maintenance or repair of their main water source compared to those households which were not mobilized at all. While households which were mobilized by water user committee were 63.47 (p-value = 0.006) times more likely to say that they have ever made a

financial contribution to operation, maintenance or repair of their main water source compared to those households which were not mobilized at all.

It should be noted however, that community members were not always able to distinguish between VECs and WSCs at the community level, as these seemed to play CBM roles interchangeably. In some isolated cases, only caretakers of water sources remained working very closely with the chairpersons of the VECs in taking responsibility for O&M of their water sources. Caretakers tended to remain active more than the rest of the WSC members mainly because, by CBM design, priority for their selection is given to their proximity to the water sources. Some of the caretakers who remained working after the disintegration of their committees were reported to have started demanding for a financial compensation from the community and the village leaders arguing that ‘the work was too much for an individual’. For example, during one of the revitalisation meetings in Misaana village, the caretaker of the shallow well made it explicit to the village members that he needed to be paid, arguing that ‘the water source operation and maintenance had been left to him alone’.

Whereas the village executive leadership may remain a useful ‘temporary’ replacement of disintegrated or de-motivated members of the WSCs, the study also found out that their legitimacy was growing weaker as a result of their overstay in office, having missed elections thrice since 2001⁶³. Besides, there is an inexplicable gradual decline in government support for fully enforceable bye-laws at the community level to ease the work of village councils. While such bye-laws would help in ensuring community compliance with public policies and service delivery models that demand user contributions as is required in the CBM model of rural safe water supply, the legitimacy and local government support for the development of enforceable community bye-laws had almost diminished.

It is believed in the rural water sector in Uganda as it is in the literature that having female members occupying key positions on the WSC such as the positions of chairperson, treasurer and secretary enhances opportunities for functional sustainability of improved point-water sources

⁶³ There is an ongoing belief in Uganda that after endorsing multi-party politics, the ruling National Resistance Movement (NRM) government became cautious on allowing village level electoral politics for fear of dividing communities along party-lines without mechanisms of mitigating the likely conflicts that would potentially emerge from the process (Kaheru 2013)

(MWE 2009, Cleaver and Hamada 2010, Asaba, et al. 2013). However, the results of this study show that none of the existing WSCs in the study community was chaired by a woman. The results further show that although relatively more women occupied the position of treasurer (45.8%) or secretary (28.1%), their participation in this position was still lower than that of men (table 14).

Table 14 Gender participation in water management committees

Position on the Water and sanitation Committee		Gender Composition of Existing WSCs			Total
		Male	Female	Not sure/ Can't tell	
Chair person	N	129	14	5	148
	%	87.2	9.5	3.4	100
Vice chair person	N	44	35	19	98
	%	44.9	35.7	19.4	100
Secretary	N	63	32	19	114
	%	55.5	28.1	16.5	100
Treasurer	N	59	60	12	131
	%	45	45.8	9.2	100
Care taker	N	117	3	10	130
	%	90	2.3	7.7	100
Ex-official	N	45	9	26	80
	%	56.3	11.3	32.5	100
Advisor	N	41	4	32	77
	%	53.2	5.2	41.6	100
Information/Public Relations Officer	N	70	15	12	97
	%	72.2	15.5	12.4	100

The results show that prospects for CBM effectiveness to benefit from the existence of women on WSCs for their functionality remain limited. Besides, Uganda's water policy itself does not explicitly state whether women should be chairpersons of the committees, nor are there deliberate and regular WSC revitalisation exercises conducted in which communities would be advised to elect female chairpersons.

As earlier elaborated, the concept of enablement emphasises the significance of an effective community leadership system (Smith 2000, Helmsing 2002). In the context of CBM, an effective system of local leadership ensures that regular community sensitisation meetings and follow-up support to WSCs and the general community of water users are undertaken. Frontline local government service providers in partnership with the private for-profit and not-for profit actors are best placed to provide this support to communities. However, as this study has shown, this important CBM function is not effectively being carried out.

Irregularity of community/WSC meetings and a growing culture for people shunning community meetings

One of the indicators of a functional CBM system is the ability of WSC to mobilise the rest of the water user community for meetings over their roles and responsibilities in water and sanitation issues (Montgomery, Bartram and Elimelech 2009, Brikké 2000). Regular community meetings not only provide an opportunity for community leaders to sensitise members on the need for safe water, but also allow leaders to make the necessary clarifications on community contributions to O&M as was observed in one of the WSC revitalisation meetings in Makondo and Kibuye villages (photograph 3). It is also within such meetings that accountability for previous contributions are made, which help in strengthening community trust for the WSCs in managing their funds. However, findings from this study show that WSCs are still faced with challenges of effectiveness not only in organising general community meetings but also their own management meetings over O&M.

Photograph 3 Community leader and the hand pump HPM clarifying roles of the community and the WSCs in Makondo and Kibuye villages

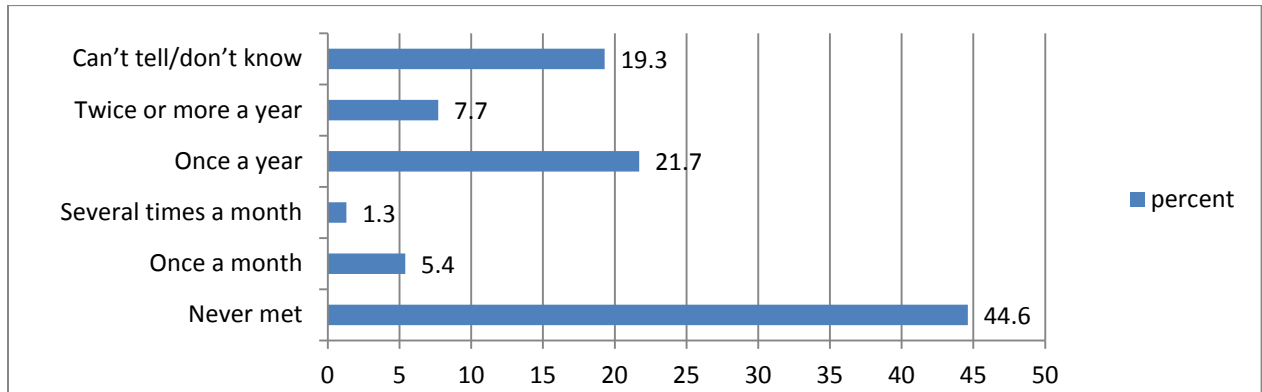


Source: Author's photograph

Household survey results show that nearly half (44.6%) of the household survey participants had never heard or personally witnessed any community meeting being convened by the WSCs to discuss water related issues. Only a quarter (21.7%) of the respondents mentioned that meetings

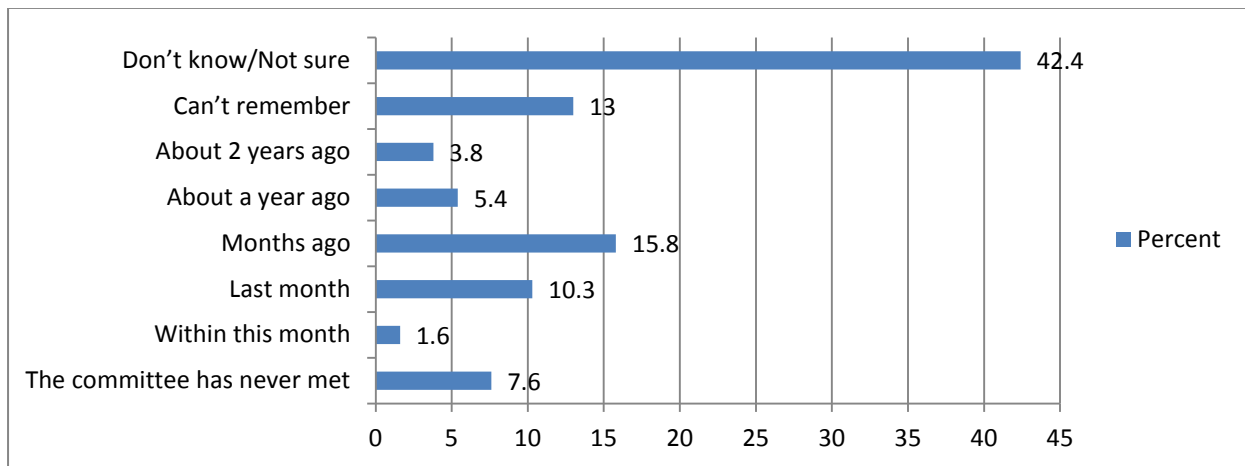
were taking place at least once a year, while 19.3% could not tell whether the meetings had been taking place or not (figure 19).

Figure 19 Frequency of general community meetings over safe water supply water issues (N=533)



Furthermore, the results show that nearly half (42.4%) of the household survey participants who reported a presence of WSCs in their communities (N=184) were not sure if any WSC meeting had ever been convened, 13% could not remember, while only about 30% mentioned that WSCs met within months ago or the previous month (figure 22).

Figure 20 Last time the WSC is known to have met (N=184)



To further illustrate the importance of regular meetings in impacting on the O&M systems for improved point-water facilities, results from the regression analysis presented earlier in table 9 indicate that households whose main water sources had their WSC holding meetings more than once in a year were 8.79 (p-value = 0.000) times more likely to say that they had ever made a

financial contribution to operation, maintenance or repair of their main water source compared to households whose WSC had never met at all.

The general loss of interest by the community to attend community meetings not only reflected the weaknesses in capacity and performance of WSCs but also gradually impacted negatively on people's perception of the importance or relevance of CBM systems. Qualitative findings from interviews with leaders indicate that people hardly attend community meetings unless the meetings concern security matters in their localities. As such, it was almost official among the community leaders that for every community meeting organised, security issues had to be a priority on the agenda. As a coping mechanism, the leaders also try to ensure that there is a security personnel (usually a police officer) to speak on security issues in the area before allowing the rest of the time for the discussion of 'other issues', with priority given to the actual purpose of the meeting.

If you want a high attendance for a community meeting, security must be number one on the agenda...and people will come in big numbers when they hear that there will be police....some people will fear that if they do not come they will be the first suspects in case anything happens (Local Leader).

While this coping strategy was found to be preferred by the leaders, it remained a temporary measure that is also potentially likely to 'delegitimise' future calls for water related community meetings, more particularly when security issues are no longer able to attract attention. Compounding the problem is the fact that bye-laws and sanctions for people who deliberately dodge community meetings have for a long time not been supported at village level as they were in the past.

As earlier elaborated, gender participation in CBM systems is widely believed to leverage opportunities for the sustainability of services. Using a gender lens, qualitative interview results indicated that men were more likely to shun meetings about O&M of water facilities compared to women. The results underpinned men's tendency to prefer activities where they could earn an income as opposed to attending community meetings, leaving meetings to the women or children, although it was considered by women as men's usual pretence.

The men pretend to be busy doing 'more important things' and will always have no time for meetings that do not bring any money to them at the end. They always claim that they

have to go and work for money because they must provide for their families...So they always ask their wives or children to go for the meeting (FGD with women)

Some men do not even know where the water sources are located in the community. Women and children fetch water. When meetings are called upon, the highest percentage attendance is the women. ...and some men start leaving even before the meeting has ended. (Female FGD participant)

Based on the household survey, the reasons provided for this gender disparity in attending water related meetings related to the generally held beliefs that care most about the water needs in their households (51.2%), or because they are more affected when there is scarcity of safe water supply in the households (24%) including bearing the cost of treating members in their households who may suffer water related ailments (Table 15)

Table 15 Respondent knowledge and perception of gender differences in attendance of community meetings and reasons for the gender disparities

Reasons why women/men attend/don't attend community meetings regarding water		Attendance of community meetings by Gender					Total
		Both men and women equally	Mainly women attend	Mainly men attend	Can't tell	Don't know	
They care most about water in the household	N	9	66	6	1	2	84
	%	36.0	51.2	15.4	14.3	28.6	40.6
They are affected most when water is not available	N	3	31	1	0	0	35
	%	12.0	24.0	2.6	0.0	0.0	16.9
They spend/incur expenses when water-related diseases attack household members	N	0	0	13	0	1	14
	%	0.0	0.0	33.3	0.0	14.3	6.8
Are more educated than women	N	0	1	1	1	1	4
	%	0.0	0.8	2.6	14.3	14.3	1.9
They do not care about water or its availability in the household	N	2	7	1	5	1	16
	%	8.0	5.4	2.6	71.4	14.3	7.7
Spend money on repair and maintenance of water pump/source	N	3	0	8	0	1	12
	%	12.0	0.0	20.5	0.0	14.3	5.8
Men send women/their children to represent them in the meetings	N	0	17	0	0	1	18
	%	0.0	13.2	0.0	0.0	14.3	8.7
Are responsible for attending the meetings	N	8	7	9	0	0	24
	%	32.0	5.4	23.1	0.0	0.0	11.6
Total	N	25	129	39	7	7	207
	%	100.0	100.0	100.0	100.0	100.0	100.0

Other observations made during the study indicated that the men already know that the meetings are about financial contributions towards O&M which they cannot make unless they are given time to go and work for the money.

They believe it is better their wives go for the meetings because they believe that their role is more to do with paying money on repair and maintenance of water sources, although women in many cases are the ones who pay the money from the sale of their harvests (In-depth Interview, Community Leader)

Paradoxically, it was mentioned that when there are ‘very pressing issues’ in the community, the men are even more likely mobilise one another to turn up in bigger numbers to express themselves to the leaders or ‘pin-down the officers’ as one community leader stated it. Also, what is discussed or prioritised at the meetings, the convener as well as moderator at the meeting may matter a lot for the effectiveness of the meetings, and of the future of the CBM of rural domestic water supply. It was observed during field work that meetings convened by village leaders were likely to attract more people than those called by members of the WSCs in communities where they still existed.

Photograph 4 A WSC revitalisation meeting in Kibuye village



Source: Author’s Photographs

The loss of this enthusiasm is indeed a disabler to CBM. In a WSC revitalisation meeting organised during fieldwork in *Kibuye* village (photograph 4), it was observed that many people continued to carrying out their activities in close proximity to the meeting place, despite being given reminders. Many pledged that they would attend but could not show up or would simply tell the mobilisers that they will go by the decisions at the meeting giving different excuses. One of the men in *Kibuye* trading centre was for instance heard saying; ‘I will give them whatever they will decide as a contribution. There is no need to close my shop’. Men were indeed seen walking away in the middle of the meeting and could not return.

Inadequate community knowledge of the role of WSC in convening regular meetings also greatly undermines CBM. Community knowledge of this role and others is not only important for trust, respect or confidence building between the community and their leaders, but is also an important aspect for accountability over funds for O&M. Results from interviews with household survey participants suggest that the community in Makondo Parish was not completely ignorant of the roles and responsibilities of their WSCs. Most respondents mentioned collecting funds for operation and maintenance (59.7%), cleaning around the water source (30.9%) and supervising pumping (25%) as the functions of the WSCs. A considerable percentage also mentioned reporting of breakages (22.2%) and routine maintenance/oiling and greasing (14.6%) as other roles (table 16).

Table 16 Respondents’ knowledge of the roles and responsibilities of WSCs (N=184)

Knowledge and Roles and responsibilities of WSCs	Frequency (<i>multiple response allowed</i>)	Percent
Collecting money for Operation & Maintenance	110	59.7
Cleaning the source	57	30.9
Routine maintenance	27	14.6
Supervising water source operation	46	25
Undertaking minor repairs	11	5.9
Reporting major breakages	41	22.2
Organising community meetings over O&M issues	28	15.2

It is important to note from the above that overall, communities largely understand the roles and responsibilities of WSCs. However, the WSC function which holds the key to effective performance of other roles namely that of organising regular community meetings over issues of O^M of their improved water sources was mentioned by only 15.2% of the respondents. These findings point towards the need for community level strategies/innovations that would help to build the interest and motivation of the general community to respond to calls for community meetings. Addressing the underlying factors that undermine community interest towards local development initiatives in the context of this study seems to require not only education and sensitisation strategies targeting the community but also those that would revitalise village/community level bye-laws to reinforce adherence to collective development initiatives and strategies pertinent in the rural domestic water supply. This is because CBM thrives much on collective effort, effective communication and positive attitude of the members.

Absence of authentic and enforceable village bye-laws on O&M

In a context daunted by a remarkable reduction in interest by communities to voluntarily participate in public programmes and activities, as this study has revealed, innovative ways to sustainably revitalise community interest to appreciate the roles they can play in achieving desired levels of service delivery become very critical. This study found out that CBM was highly disabled by the fact that bye-law development in relation to O&M of water sources was inadequately given attention. The local government act empowers sub-county or village council to make bye-laws provided such bye-laws are not inconsistent with the national constitution, any law enacted by parliament, or an ordinance or a byelaw passed by a higher council. Bye-laws made by village councils are forwarded to the sub-county council for verification, while those proposed by sub-counties are forwarded to the district council for verification. Bye-laws and ordinances made by councils may prescribe penalties agreed in terms of fees, charges, fines or a term of imprisonment once breached. However, in the context of this study, a clear lack of higher local council support towards development and legalisation or ratification of village level bye-laws that impact positively on CBM of rural point water facilities was noted.

There is a time when failure to attend a community meeting called by the LCs (Village Council Executive) would go with a fine. That time household heads, who are usually men would be responsible. But today even if they find you meeting, they can by-pass you and move on. Also those that come are usually in a hurry going and you wonder why the hurry when you know that they are rushing for bars. I think this government has become so simple on people, and people are abusing this freedom (Local politician)

Reasons related to political influence and some extent of political patronage seem to be accountable for the loss of popularity or usefulness of bye-laws as engines for enforcing community compliance to collective decisions. Cases of local politicians disenfranchising communities over the latter's collective decisions on their safe water source governance were reported as uncommon.

We had committees here that were working well and people were willing to contribute but one day the LC III Chairman (political head of a sub-county local government) sent orders from the sub county stopping caretakers from collecting money and people were happy not to contribute, and some were almost asking that their money be paid back.... But we now hope for the better because he lost an election and will never come back as LC III (Village Leader)

It was also found out that despite the inadequate support from government on more legally binding community bye-laws, community leaders would take some corrective actions against erratic community members based on what may suddenly emerge as critical for their social fabric. In some cases it did not even matter if such actions flouted other laws of the country, risking undermining the much needed community cohesion and underpinning the need for community support in the development of bye-laws as is reflected in the case study in box 2

Box 2 Case study on challenges in implementation of some of the community bye-laws

In *Misaana* village, a bye law existed in which if any member of the village abused or insulted the water source caretaker while executing his/her roles and responsibilities at the water source, the head of that household where that person belongs would be made to pay a fine of 10,000 Uganda Shillings (about 4 Us Dollars). During fieldwork, a 14 year old girl was guilty of the offence but the bye-law could not be enforced as it was stated because the girl was not apologetic before a community meeting that was called to implement to discipline the girl and implement the decision based on her conduct. This community was more furious with the girl because they believed from those who witnessed the incident that the girl was guilty over insulting their caretaker because of his commitment to his work. The father of the girl was very apologetic to the caretaker and the community over his daughter's socially erratic behaviour but his daughter's disrespectful responses in the meeting made matters worse when she was asked to apologise before the elders and village leaders in the meeting. A female elder quickly stood up at the meeting and ruled that the girl be given five strong strokes of the cane, and her father was quick to say he would do it himself, which everyone in the meeting supported and consequently no fine was paid by her household.

It appears from the above case study that the need to 'correct' the behaviour of the 'errant' girl overtook that of implementing the community's earlier collective decision i.e. fining her household 10,000 Uganda Shillings because of the seemingly socially distressing conduct of the girl. In addition, the idea of caning a child contravenes Uganda's laws on child protection and puts the community at the risk of facing the action of child protection advocates in the country if any concerned person pursued a community action on the girl, who in legal terms would only be a suspect possibly requiring parental guidance and counseling. In an endeavour to reduce the extent of pump failure, village leaders in one of the focus group meeting proposed punishing of children or the parents of children who cause damage to the pumps while collecting water, but

such proposals would not only meet resistance from higher resistance from the community but also from higher local government authorities because of their potential to clash with other laws especially around child protection.

In my opinion, since children are the future leaders, they should be punished first, instead of their parents. Grown-up children between the age of 14-15 years can differentiate between what is wrong and bad! They can be given community service as a punishment (Focus Group Meeting with village leaders).

Other attempts to put up community bye-laws related to O&M, but which would lack a legal support to enforce sanctions against non-compliance were also mentioned in villages such as Kiganjo. In this village, community members agreed that households that would host big functions such as parties would have to pay some money towards O&M to the WSC/village leaders (although the amount was not fixed). They argued that a lot of water would be collected throughout the function, which according to them was not only risky for the pumps but also inconvenienced regular collectors. Watering animals at a water source or fetching water for brick making were in most of the villages prohibited but with no clear fines/sanctions for non-compliance.

In sum, the legal framework for the development and implementation of the bye-laws exists to serve as a good intention for effective CBM and functional sustainability of rural point water facilities, but its usefulness in leveraging CBM has not been effectively attended to. This study confirms that some members of the community may fail to contribute to O&M of water sources not because they cannot afford, but because they do not expect any sanctions against them and hence choose to 'free-ride'. Hence, despite the powers given to local authorities to develop and implement bye-laws, local governments have continued to rely on the centre for major decisions. This is exacerbated by the fact that nearly all funding for local government programmes comes in form of conditional grants from the centre. In addition, they have always had to rely on the centre for major capacity building needs for both human and material resources. Thus, while it may require a considerable amount of time, effort and innovation, revitalising the perception and effectiveness of bye-laws in Uganda's rural communities could serve to not only reverse the current glaring trend towards total dependency by communities on external support in the operation and maintenance of point water sources, but could also broadly serve to revitalise the hitherto reliable and now seemingly fast-fading African culture of mutual support and collective

self-reliance. This might take not just a change in the mind-sets of national politicians and public institutions, but also those of local level politicians and the general civil society as one key respondent noted,

‘building awareness on the importance of bye-laws should be a considered a priority before developing and enforcing any law to ensure that communities and leaders know the benefits from having water and sanitation related laws and what they are expected to do’.

In addition, once used as compliance tools, the enforcement of such bye-laws should remain consistent over a long period of time so that they may become permanent community practices that eventually shape community behaviour and culture. Findings further suggest that supporting communities to establish and enforce legitimate community bye-laws is important for building and sustaining the confidence of WSCs and other community leaders in using them as ‘useful tools’ for enforcing compliance to O&M.

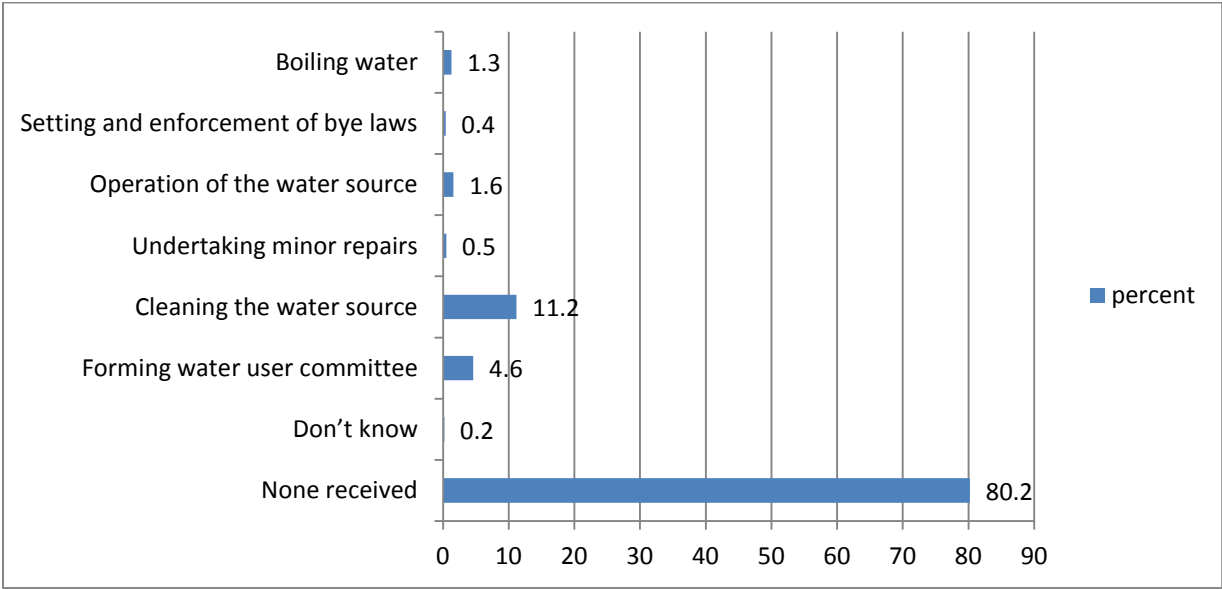
Limited training and sensitisation initiatives for communities on CBM issues

Support to water user communities aimed at enhancing their levels of participation in the management and sustainability of rural point-water facilities is fundamental to the overall success of rural water supply programmes in resource poor settings in Africa. It is surprising as this study reveals, that this important determinant of CBM success is not given adequate attention by service authorities and agencies seeking long term sustainability of services. Household survey results indicate that 80.2% of the respondents had never received any sensitization or training on safe water service delivery in their communities. While the guidelines for an effective CBM for improved rural point-water facilities demand that training and sensitisation on the roles of WSCs, revitalisation of community knowledge of O&M as well as their roles in what is sometimes termed as ‘support supervision’ should be undertaken on a regular basis, the findings of this study indicate that this has not been the case, ‘especially in communities served by government departments’ as observed in one of the key informant interviews at the district.

The few (N=109) community members who reported having ever received some form of training mentioned election of WSC members, sensitisation on roles and responsibilities including

financial contributions to O&M, and development and enforcement of bye-laws as some of the issues on which they were trained (figure 21). Results from the logistic regression analysis presented in table 9 emphasise the importance of community sensitisation and training on CBM effectiveness. The results show that households which reported having ever been sensitized on sustainable utilization of safe water in the community were 2.03 (p-value = 0.008) times more likely to say that they have ever made a financial contribution to operation, maintenance or repair of their main water source compared to those households which were not sensitized at all.

Figure 21 Form of sensitisation received in the past on safe water service delivery (N=109)



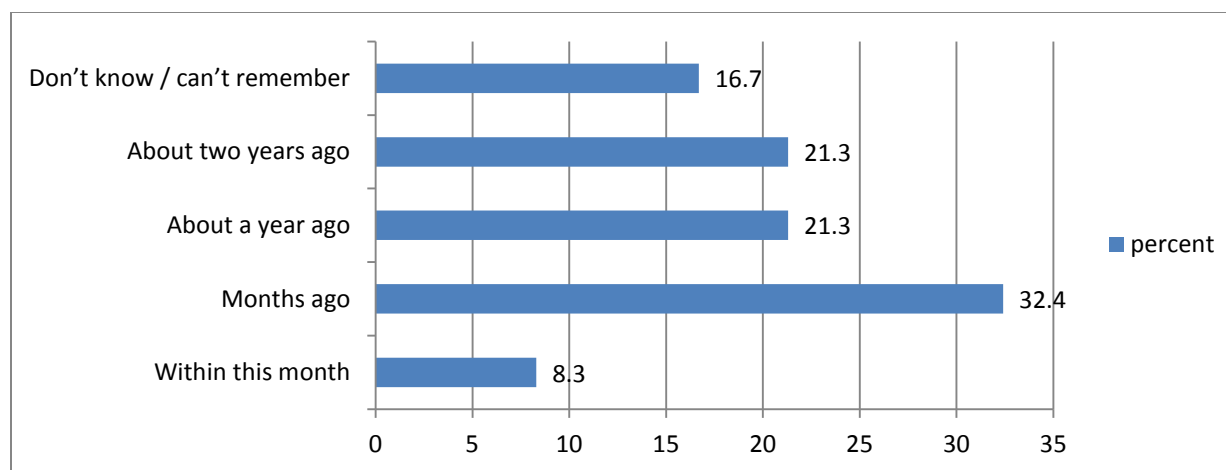
Within the CBM framework, WSCs are also expected to mobilise and sensitise communities on issues of O&M. However, study results show that WSCs did not feature among the categories of people/institutions that provided any training and sensitisation on issues related to safe water services, although some of the respondents could not tell who the service provider/actor could have been (table17). From the results, NGO actors constitute the major service providers reported to have provided training and sensitisation in all the aspects of training and sensitisation received. This may be partly because in the context of Uganda, NGOs are expected to supplement or assist local governments in direct provision of safe water supply sources but more so in undertaking mobilization, sensitisation and education activities within communities.

Table 17 Training received and service provider giving the training

Training Received		Training Provider				Total
		Government	Local Politician	NGO/Project Staff	Can't tell	
Forming water user committee	N	1	0	32	2	34
	%	2.9	0	91.2	5.9	100
Cleaning the water source	N	3	1	41	5	50
	%	6.0	2	82.0	10.0	100
Undertaking minor repairs	N	0	0	11	1	12
	%	0.0	0	91.7	8.3	100
Operation of the water source	N	3	3	21	2	29
	%	10.3	10.3	72.4	6.9	100
Management of cash contributions	N	0	1	13	1	15
	%	0.0	6.7	86.7	6.7	100
Forming& enforcing bye laws	N	1	4	16	1	22
	%	4.5	18.2	72.7	4.5	100

While it is necessary that messages pertinent to the success of CBM are regularly provided and made clear to rural communities in a developing context like Uganda, irregularity of such support in training and sensitisation as was the case in Makondo parish threatens the very essence of CBM in functional sustainability of point-water facilities. The findings indeed show that trainings and sensitisations were irregular with most of the respondents mentioning that they last received such trainings about one year (21.3%) or over two years (21.3%) back, while some (16.7%) of the community members could not even recall (figure 22).

Figure 22 Last time training on operation and maintenance was received



Qualitative findings also show that some of the training/sensitisation meetings communities referred to were only provided after the decision to construct water facilities had been taken, and immediately after construction/at handover to the community, which is clearly outside the

standard procedures/policy framework for CBM and functional sustainability of rural point water facilities as observed in a focus group discussion with water users in one of the villages:

We were invited to attend a meeting before the construction of our shallow well...The problem however is that after construction we are left alone by the service providers who never come back to check on us. The leaders rarely call for meetings. All we see is them coming to demand for money from us for paying the mechanics that repair the water facility whenever there is a breakdown (FGD, community members).

At handover, the meetings were said to mainly emphasise O&M issues including the election of a WSCs that ought to be elected/formed prior to construction, while discussions on location of the water source included explanations on the need for cooperation between the land owner and the community. Such issues were said to have been given priority in meetings held before water source construction as observed in one of the focus group discussions:

We presented our views on the best location of the water source and they told us they needed to seek permission from the land owner...The leaders explained to the land owner about how it was good for him and the community to allow construction of a shallow well on his land, he agreed.

Household survey results indicated that the limited training and sensitisation support to communities over issues of CBM or community roles on O&M of point-water facilities mainly came from NGO (especially the MMMs) as opposed to government actors (see table 22 above). In Uganda's decentralised service delivery framework, local authorities hold a prime responsibility, as duty bearers to ensure that services are sustainably delivered to communities in their jurisdiction. This responsibility not only involves direct provision of services but also the supervision of the activities and methods of none-governmental bodies.

In the context of this study, the presence of an active NGO in the study community ought to have served as an opportunity for filling some of the service delivery gaps challenges (e.g. financial or human resource) that are afflicting local government institutions, but failure to put this opportunity to use remains a weakness among local authorities. Consequently, as was the case in Makondo Parish, the NGO actors are prompted to do only what they are able to do to supply water with very limited adherence to policy guidelines on CBM. The inability to deliberately nurture community capacity to own service delivery interventions in the rural domestic water

supply is indeed a disincentive to effective community participation and CBM. Limited follow-up and support of WSCs remains largely responsible for the disintegration of WSC. Consequently, as indicated earlier, ad-hoc and unsustainable means of responding to water facility system breakdowns and other O&M interventions have almost replaced the official policy processes.

Dynamics in market oriented O&M of water facilities and community capacity to cope

In the NPM framework, the involvement of the private sector especially the Hand Pump Mechanics (HPM) and Spare Parts Distributors may promise to generate high efficiency levels in terms of quick response to breakdowns of point water sources, but this seems only possible if an effective system of regulation is in place. The literature on private sector participation in the delivery of public services has often highlighted concerns about capacity especially in resource poor settings of the developing world (Delamonica and Mehrotra 2005, Barungi et al. 2003, Pérard 2008). The study found out that it was practically difficult for the community members and their leaders to adjust to changes in market oriented policies and self-reliance. According to national water policy guidelines, HPMs are expected to sign agreements with water users over O& M of their water facilities. This study has in Chapter Six highlighted weaknesses in community capacity to negotiate with HPM and spare parts dealers for effective O&M or repair of water facilities.

While most village leaders had a telephone contact of the HPM, indicating that they could access him whenever there was need, it was difficult to rule out possibilities of connivance between the HPM and village council representatives or active members of the WSC in determining repair costs. The lack of effective WSCs meant in many cases that any negotiations with the HPM were carried out by an active member of the village executive council or any other concerned member in the community. Owing to this management gap, there were fears in the community that the HPM was likely to connive with the leaders or do shoddy work because ‘he single handedly determined the costs for everything including spare-parts’ as observed in one of the focus group discussions in the community.

In addition, HPMs are expected to fix minor repairs beyond the capacity of communities, while the water source care takers undertake routine maintenance functions (oiling and tightening of the nuts). This study found that WSCs had difficulties undertaking the routine maintenance functions due to many reasons including the lack of skill, tools/equipment. This has ‘forced’ the community in Makondo to be totally dependent on mechanics who charge them money for carrying out such functions. None of the WSCs possessed the policy recommended tool-box for undertaking routine maintenance work. Also, based on the household survey results, only 32.7% compared to 67.3% of the households that reported having hand pumps in their villages had ever personally witnessed preventive maintenance activities being carried out on their hand pumps. As indicated in table 18 below, only one fifth (20.1%) of survey respondents could also name at least one of the main parts of a hand pump.

Table 18 Respondents’ knowledge of parts of a hand pump and whether they have ever personally witnessed maintenance activities take place in their communities

Knowledge of parts of a hand pump	N	%
Could name at least one part of a hand pump	110	20.1
Cannot name any part of a hand pump	226	41.3
Have no hand pump in the community	211	38.6
Total	547	100
Ever/never observed preventive maintenance activities take place in the community		
Ever personally witnessed	110	32.7
Never witnessed	226	67.3
Total	336	100

These results seem to suggest on one hand that there have been no frequent hand pump breakdowns in the community, which is not the case as the results have shown. On the other hand the results also suggest that pump repair processes have not followed CBM guidelines that advocate for an adequate involvement and participation of members of the community playing roles including directly assisting mechanics in pump repair processes as can be seen in photograph 5 below.

Whenever there are breakdowns, processes of repair take long, with some not being completed, while some repaired sources take a short interval period before they breakdown again. In

addition, the repair processes follow different criteria or approaches from those prescribed under the CBM approach to service delivery. For example, where there was no active water source caretaker, the community members (water users) who get to know of a breakdown immediately report to the village executive council leaders rather than WSCs as is expected. In many of the cases, on receiving the reports, these village leaders may or may not liaise with existing or active WSC members to contact a hand pump mechanic.

Photograph 5 Community members and the author participating in a borehole repair in one of the villages



Source: Author's Photographs

As elaborated earlier, the HPM undertakes the assessment including the cost for the required repairs, after which the local leaders or members the WSC members available move house to house collecting contributions⁶⁴ from every household that uses the water source. In the ideal/policy recommended approach, the WSC should directly contact the HPM to come and assess the extent of breakdown as well as the cost of repair, after which he would be paid by the WSC using funds collected on a monthly basis.

History of dependency on external support/charity

Makondo parish, like many other rural communities in Uganda has a history of dependence on NGO support, with the most recent and strong actor being the MMMs, the others having been World Vision International Uganda, UNICEF and Kitovu Mobile. While such service providers

⁶⁴ Amount determined using the estimated total cost of repair divided by the number of water user households

have been indispensable in resource poor contexts they have always faced high risks of breeding dependency syndromes among their target communities. In the case of Makondo, nearly all problems were seemingly directed to the MMMs. This was even compounded by poorly clarified roles and responsibilities of the community and their leaders, the absence of by-laws and weak leaders.

Increase in levels of dependency on external support from NGOs, government and politicians seeking to be elected for positions have also served as an impediment to cost recovery strategies embedded in CBM. This has also been compounded by limited education and sensitisation activities targeting communities as well as the absence of functional bye-laws on O&M of community water projects. Evidence from this study suggests that the work of the MMMs has since their presence in the community generated and sustained a reasonable degree of dependence within their target communities. This has mostly affected community willingness to contribute to O&M of point water sources especially shallow and deep wells.

The sisters are so generous. Sometimes they repair water sources without waiting for people to contribute...they also know that the men don't want to pay and it is the women and children will suffer. The MMMs have built houses for poor community members especially orphan headed households and could also put up rainwater harvesting tanks on these houses (Community Development Worker)

While such interventions are purely out of charity and are based on need, the lack of community knowledge of the factors compelling actors to undertake such interventions in the way they do may be misinterpreted by the community, further undermining CBM initiatives.

Some people have the money but don't want to pay...they say that it is the government's role to pay...others say that the pumps were given to us by the MMMs so why are you (WSC members) asking for money from us? (Community development worker)

Some evidence obtained from the community also shows that just as water sources were not well maintained, some of the other government items distributed freely were not being put to proper use, resulting into wastage and abuse of such items. For example during fieldwork, it was observed in about three households in *Misaana*, *Makondo* and *Kiyumbakimu* villages that previously distributed mosquito nets were being used by some households for rearing chicken.

This study also noted that initiatives by the MMMs who have been the main NGO actors in the community to build strong partnerships with the local authority were frustrating. It was found out that the efforts of the MMMs to directly involve local government actors in their implementation of safe water service delivery activities were often frustrated with excuses of time, financial cost or understaffing. Such partnerships would have possibly had greater impact on CBM and sustainable service delivery and eliminated community practices of viewing the MMMs as the panacea to everyday problems of the community.

Conclusion

In contexts where NPM modalities in the provision of public services have taken root, service beneficiaries remain potentially able to support policies that demand their direct involvement provided certain conditions are in place. This chapter has presented findings on community level dynamics that affect community capacity (ability and willingness) to support CBM. It has confirmed among others that the perceptions people have over the quality of the services they receive from government significantly affects the extent to which they are willing to partner with those institutions to improve the quality of services. The chapter has also indicated that limited capacity building in form of training and sensitisation, inadequate support in the development and implementation of bye-laws around operation and maintenance of their water sources, irregular community meetings over O&M and tendencies by the community members to shun the few meetings that are organised are important community level issues that have remained ignored or inadequately supported by the inter-mediate institutions of government in Uganda. In sum, the context and findings generated from this case study community clearly demonstrates that rural water policy implementation in Uganda is heavily challenged by complex and multifaceted community-level issues that owe a lot to weak systems of service delivery and support at national and sub-national levels. The findings hence generate insights on the fundamentals that need to be adhered to by policy actors wishing to build effective synergies with service beneficiaries particularly those living in rural developing contexts of sub-Saharan Africa, and Uganda in particular. Thus the success of CBM as service delivery model under the NPM and governance agenda considerably requires a careful and consistent investment in human resource capacity building strategies targeting not only the community as primary beneficiaries

of services, but also their political and technical leaders at the macro and meso levels. The ability of local politicians and technical authorities to appreciate and play their roles both before and after construction is imperative for the sustainability of rural point water supply infrastructure. Effective cooperation among stakeholders also helps to build a great amount of trust that has a strong bearing onto tangible social mobilisation for CBM.

Chapter Seven

Conclusions: Towards an Enabling Framework for CBM Systems for Point-Water Facilities in Resource-Poor Settings

Introduction

This chapter synthesises the key findings of the thesis and makes reflections on theory seeking to contribute to the wider theoretical and conceptual perspectives on CBM as another alternative to sustainable safe water supply in resource poor democracies. The ultimate aim of the study was to examine the dynamics and circumstances under which new public management and policy models which give responsibility for operation and maintenance of rural water supply schemes to beneficiaries of services may serve to disable rather than enhance prospects for the sustainability of services. Specifically the study examines governance dynamics at the macro, meso and micro levels of rural safe water service delivery in Uganda, with emphasis on how they specifically impact on the potential for CBM to leverage opportunities for functional sustainability of rural point-water facilities. It thus examines contexts and dynamics that impact on the credibility and effectiveness of public, private, NGO and community interfaces, and how these affect the overall effectiveness of CBM systems for rural water supply and sustainability.

Community-Based Management (CBM): Remaining Just Rhetorical?

The discussion in chapter one indicated that CBM has emerged as one of the most commonly supported approaches to rural safe water delivery, along with community participation and demand responsive approaches to development. All of these approaches have come in the wake of neo-liberal policy reforms aimed at reducing the size of the state and reflected in policies that aim at ‘re-inventing government’, by introducing multi-actor, demand driven and participatory service approaches as fundamental shifts from the hitherto supply-driven, bureaucratic and

inefficient models. More than three decades of this transition from supply to demand driven development may have meant that development actors and service providers adequately know the strengths of community-led development, and addressed all manifest and latent bottlenecks to it but the realities show that such a response is yet to be realised. As elaborated in Chapter Two, policy directions and strategies for achieving progress in the rural water supply sub-sector clearly exist, with community management of point water facilities being one of such clearly stipulated policy options for achieving functional sustainability of point-water facilities in rural peripheral communities. But, CBM or CM in rural water provision is premised on the fact that it leverages among others; equity, sustainability and cost recovery in projects and programmes that target the poor and marginalized (Cleaver and Toner 2006b, McCommon, Warner and Yohalem 1990). Its philosophy as applied in the rural safe water supply is that when communities take responsibility for operation and maintenance, they own the facilities, and in turn, prospects for sustainability of the facilities are enhanced. With special reference to the rural water sector in sub-Saharan Africa and elsewhere, CBM is indeed premised on the idea that a community which benefits from an improved water source, plays a major role in its development, ownership, operation and maintenance, also contributes to its long-term sustainability, service delivery and cost recovery (Amerasinghe and Carmin 2009, Carter and Rwamwanja 2006, Lockwood 2004). Communities either volunteer their time and labour resources or are left to provide themselves services because of the absence or limited availability of alternatives.

The policy prescriptions normally stipulate clearly that beneficiary communities must form committees to take responsibility for the management of facilities particularly in ensuring that the wider user community roles and responsibilities are fulfilled. The key tasks of the elected committees often include setting and collecting periodical community (financial) contributions as well as ensuring routine operation, maintenance and repair of the facilities. But as Mitlin observes, such service delivery mechanisms raise new and interesting challenges for the regulators (2004 p. 333). As already highlighted in the discussion of the empirical literature in Chapter Three, CBM as a model has worked for some countries and not in others, particularly in Sub-Saharan Africa, including Uganda (Lockwood and Smits Stef 2011). Also, significant differences in levels of success exist in application of CBM as a model for sustainability of rural point water facilities. All these facts point to the importance of understanding context specific

differences in application and emphasis of CBM if it has to achieve desired degrees of success. These facts have for long generated questions seeking to address such discrepancies, but until today, the implementation of proposals as answers to these questions remains inadequate, and as new challenges emerge, one is left to wonder why the good policy prescriptions inherent in CBM that are potentially capable of leveraging the sustainability of essential services may remain poorly attended to by those promoting them. The arching question is summarised in Lockwood's observation that 'knowing the right way forward is one thing, but achieving the rate of progress needed is quite another' (Lockwood and Harold 2004 p.1). This study contributes to answering this question. In the subsequent sections, more discussion and reflection is made on the key findings from this study. Theoretical and practical implications of the results of this study on CBM and sustainable rural safe water supply are also discussed.

Macro and Meso-level Disablers of CBM and Functional Sustainability of Point-water Facilities

The findings of this study clearly show that the challenge to improving service levels in rural water supply in Uganda is not the lack of a policy direction, but the lack of the 'right action' especially with regard to enabling actual policy implementation at different levels of service delivery. As elaborated in Chapter Five, in the CBM policy framework for rural water supply, central and local government actors (at the macro and meso level) remain very significant players in the decentralised and bottom up approach to service delivery. It is arguable however, that as far as CBM of point water facilities in Uganda's rural water sector is concerned, their actions have remained largely fragmented at different levels and do not reveal if there has been any learning or 'unlearning' from experiences of a range of problems that afflict the rural safe water sub-sector and CBM in particular. Findings from the analysis of sector documents and reports indicate that sector coordination efforts may exist both at the national and district level, but the activities/actions of these institutions and bodies are not sufficiently anchored within and among communities struggling to operate and maintain their water supply systems.

The *inter-ministerial coordination committee* and the *good governance working group* at the national level all have agendas that potentially support community-based management, but they remain 'far detached from communities' as one respondent from the NGO sector remarked. In

addition, in Uganda's context of decentralised service delivery, the impact of these institutions on CBM management systems for water almost entirely depends on the individual behaviours and actions of meso level actors particularly in districts. A senior officer in the MWE equated the need for continuous support to communities to the way '*Coca-Cola* has never stopped advertising even when it is the most consumed soft drink'. By this, he particularly meant that even if some water sources may be functional at full capacity, they are bound to suffer sustainability problems unless communities served by these facilities are not 'abandoned' by the service providers. Carter and Rwamwanja based on a study in southwestern Uganda also indicate that a credible CBM system should be ready to support and work with communities in no limited time frame if it has to achieve real functional sustainability (Carter and Rwamwanja 2006).

Views have been advanced by Leach and Barnett (1997 p. 39-40) on structural or organizational choices that promote decentralized control through a wide variety of alternative service delivery mechanisms including quasi-markets, with public and private service providers competing for resources from policy-makers and donors, and more managerial delegation and autonomy to make decisions. While such views are reflected in Uganda's rural water policy and implementation framework, as this study has shown in Chapter Six, poor execution of roles and responsibilities related to CBM at the meso and macro level greatly undermines CBM and NPM goals. Support to communities as incorporated in Uganda's rural water supply programme should be carried out by extension workers under the direction of district water officers (DWOs). Training and support to communities and WSCs for CBM are however not always carried out by extension workers. Consequently, communities and WSCs do not have the needed capacity to carry out their work as expected. They need regular training, support and supervision from extension workers and other service providers especially the NGOs, but this does not usually happen as desired of CBM, except where there may be special programmes directly supported by NGOs.

All sector policy and programme actors are aware of the need to support communities but they also seem to indicate that 'their hands are tied' as the central government does not release funds in time, nor is there a sufficient budget to cover CBM activities such as community mobilisation and sensitisation. DWOs that are charged with the responsibility for managing rural water sector

budgets are also blamed of either misappropriating or mismanaging the funds to meet their individual preferences. All these dynamics question the extent to which government policies inclined towards the NPM and governance paradigms are determined to make CBM work. In addition, conflict of interest and political interference not only cause irregularities in rural water budget management that does not favour CBM activities but also in planning and allocation of services.

As the findings have indicated in Chapter Six, local politicians may influence allocation of new water sources or rehabilitation of others based on how such actions will benefit their political ambitions. Hence, rather than viewing financing public service delivery as an opportunity for improving equity and access to services in communities, local authorities view and utilise rural water supply water supplies as ‘vote banks’ (Goodfellow and Titeca 2012 p. 266). This part of the explanation as to why post construction support in form of community mobilisation and sensitisation are given less attention despite being crucial for CBM effectiveness. The study also shows that some of the politicians even go about discouraging communities from making financial contributions claiming that water is supposed to be freely provided. Similarly, politicians seeking cheap political popularity also tend to undermine bye-laws and sanctions for non-compliance to mandatory contributions to operation and maintenance (O&M) of water sources because such bye-laws may ‘deplete the vote reserves’ in their constituencies. In their critique of NPM, public choice theorists have indeed argued that public actors are not motivated by the ethical doctrine of utilitarianism, but by individual self-interests (Andreoni 1990). In an effective governance framework, water supply decisions should be objectively informed by formal institutional mechanisms rather than informal bargaining power centres. Unfortunately, due to weak institutional capacity local authorities are not only unable to discipline such errant politicians, but are also unable to institute long term mechanisms to thwart such politics that impact negatively on local capacity building for sustainable service delivery.

In their studies about structural adjustments and NPM in developing countries of South Asia, Sub-Saharan Africa and South America, Batley (1999) and Batley and Levi (2004) generally concur that the effect of public sector reforms has been mixed, with some improvements in efficiency and mixed effects on equity, particularly affecting the poor. Based on the challenges of implementing NPM in the developed country context, Batley (1999 p. 75) observes that the

capacity of governments to perform market-sensitive regulatory and enabling roles is weak, requiring that either these roles are strengthened or avoided by instead strengthening user accountability. Batley further argues that the increase of managerial power may represent a gain in the efficient use of resources and in the quality of services, but without an equivalent strengthening in systems of accountability, inequity is likely to grow' (Batley 1999 p. 75). Such arguments and the findings brought out by this study indeed underpin the need for a well regulated market mechanism for CBM to be seen to be in favour of communities that are dependent on point-water supply technologies in rural Uganda.

This study has shown in Chapter Five and Six that private sector roles that directly support CBM are ineffectively regulated by central and local government institutions, despite a policy and legal framework that places this role on them. At the lower level, HPMs still have the power and discretion not only to determine prices but also individually supply hand-pump spare parts to communities. Moreover, the communities demonstrate inadequate technical ability to differentiate between good or bad products (spare parts). The findings have indicated in chapter six that only about one fifth (20.1%) of the household survey respondents who had a hand-pump in their communities could name at least one part of a hand-pump. While availability and pricing problems of hand-pumps stem from macro-economic constraints in the production and distribution chains of spare-parts, an enabling local authority ought to put in place mechanisms to ensure that communities know the range of prices as well as the quality of parts especially those that commonly cause pump failure. Local authorities should also be able to know such parts from their monitoring activities. These findings build into the argument that while decentralisation to local authorities increases their roles and responsibilities in planning, implementation as well as sustainability of services, there is a need for an effective system of establishing and nurturing strategic partnerships or working relationships between central and local governments to regulate the activities of market based actors in order to smoothen the quality of service delivery based on NPM and governance philosophies. Frederickson notes that NPM and decentralisation do not claim that central government should stop performing certain tasks, nor is it about whether tasks should be undertaken or not, but it is about ensuring that things (public administration) are done better and more efficiently (Frederickson 1996 p. 264-265).

This study indeed confirms that privatization in the context of CBM does not automatically lead to free market behavior as past behaviors such as rent seeking and clientelism are still to be found (Easter 2006). Decentralisation of some of the public roles and responsibilities to the market (privatisation) brings with it a new role of ensuring that consumers of hand pump spare parts (the community) are not exploited. This is particularly imperative to local authorities and other not-for-profit rural water supply service providers operating in developing contexts similar to those in Uganda. Information asymmetries on pricing and distribution mechanisms for rural point water facilities tend to favour HPM creating good ground for them to exploit the system. This study has also shown that efforts to mitigate this problem through formalization and regulation of associations of HPMs have also not yet yielded much fruit as many of the mechanics being semi-illiterate are largely unable to come up with credible organisations that could easily regulate individual behaviour.

The discussion in Chapter Three has indicated that NPM and the governance paradigms strongly advocate for the development of networks and collaborations between different actors as a means of tapping from each other's competencies or comparative advantages to leverage service delivery, but practical realities in different contexts continue to show contrary results. As elaborated in Chapter Six, the findings of this study show that collaborations or network arrangements exist between central government rural water supply institutions, national NGOs, and development partners to address policy development, budgeting, finance or sector performance monitoring. However, these partnerships and the impact of their work at the macro level tend to be thin or weak at the meso and micro levels, especially with regard to enhancing the effectiveness of CBM. The findings of this study show that interactions and working relations between local NGOs and lower level government institutions may not be as strong as they may be at national level. Yet, being closer to communities, such collaborations would promise to impact more greatly on CBM and functional sustainability of point-water facilities. Tendencies by the different actors at the meso level to place blame on one another as responsible for failures in CBM are not uncommon. In addition, it is not possible to rule out the tendency for some NGOs to pronounce themselves as more 'for the people' compared to local governments which, despite the realities associated with it may raise some levels of discomfort on the part of the technical staff of the local authorities resulting into some form of resentment that obviously impacts on communities struggling with CBM demands.

Distrust and bureaucratic behaviours in the districts have compelled NGOs to implement their activities without the district involvement. Owing to this, the NGOs are accused of hurrying water projects without always reporting to the districts or undertaking water quality tests and adequate community sensitisation and training before construction. As is indicated in Chapter Six, communities tend to trust NGOs more than government institutions or projects. Thus Initiatives such as the formation of the Uganda Water and Sanitation NGO Network (UWASNET) in 2001 may have provided an opportunity for a more effective NGO and government collaboration and engagement on issues of policy and sector governance, but difficulties in collaboration and networking at lower levels of service delivery not only complicate opportunities for replication and scaling up of some of the good practices of NGOs, but also those that would stimulate community engagement. Local governments are responsible for monitoring activities of NGOs and CBOs, in their jurisdictions, but this function seems to be heavily challenged by attitudes and unfulfilled expectations from both the NGOs and local government side. Results from interviews with NGOs indicated that supervision or support to NGO activities sometimes ‘stops with courtesy calls’ made at the beginning of NGO activities, ‘unless a follow-up is made by the NGO or CBO with the district water office’. These findings confirm the fact that unaligned service approaches of NGOs and Government indeed undermine opportunities for scaling-up rural safe water service delivery (Quin, Balfors and Kjellén 2011). In addition, as earlier observed, networks or partnerships are prone to unhelpful conflicts, and evasion of social accountability by some of members (Wilikilagi 2009), or blame avoidance and scapegoating (Ewalt 2009 p. 9). Hence, in the new public policy and management framework, institutional and governance dynamics play an important role in shaping and maintaining relationships among different actors. Such relationships shape but are also shaped by the way power and authority are distributed within and among different actors at different levels of decision making. The means and dynamics of distribution and utilisation of power may hence serve to enable or disable opportunities for policy implementation and may impact positively or negatively on the desired policy results.

Community/Micro-level Dynamics Influencing CBM effectiveness: Ignored, Unknown or Taken for Granted?

The findings presented in chapter six have shown that the success of CBM largely depends on levels of functionality or performance of leaders towards local development initiatives. In the context of Uganda and the study community, the village executive council and the WSC members are primary actors on whom CBM of point-water facilities depends. But they work on a voluntary basis and can easily lose the much needed motivation to serve in their respective positions in the CBM framework. This study therefore emphasises that importance of innovative strategies that keep ‘the volunteers’ motivated as much of the literature on community development also indicates (Cleaver 1999, Mulwa 2010). While both village leaders and the WSCs are crucial for the sustainable supply of rural domestic water supply the findings of this study show that WSCs remain the most critical for the success of CBM. However, the latter’s effectiveness however depends on a number of factors, many of which have been ignored or taken for granted by the key service authorities. Key informants in the study underpinned among others the importance of training and all other forms of support that could go to the community on a continuous basis. The lack of continuous support and capacity building, and the low sense of community cohesion and organisation have indeed been highlighted in much of the literature on CBM as a critical challenge to CBM and functional sustainability of point-water facilities (Carter and Rwamwanja 2006).

The success of CBM also depends largely on sustainable funding for operation and maintenance of water facilities, more so by communities supplied with such sources. This study has shown that households may be willing and able to contribute (financially or otherwise) to operation and maintenance (O&M) of their safe water sources, but lack the motivation to do so. Whereas it is undeniable that rural communities remain impoverished, qualitative findings from this inquiry have indicated that even with low incomes, communities are able to make the (usually) small financial contribution to O&M, provided conditions such as trust, policy consistency and service delivery are fulfilled to their satisfaction. For example, the logistic regression analysis of household survey findings presented in table 9 showed that households with monthly incomes estimated above 10,000 UGX had higher odds ratios (1.14 and 1.46) of saying they had ever

made a financial contribution to O&M or repair of their main water source compared to households with monthly incomes estimated to be less than or equal to 10,000 UGX. However, the odds ratios were not statistically significant, implying that factors other than household incomes play a big role in influencing household willingness to make a financial contribution to O&M of improved water sources in Makondo Parish. The study indeed confirms earlier findings that household income is a necessary but not sufficient condition that influences willingness to contribute to pay for public services under the NPM framework (Carson and Mitchell 1993, Tan 1984, Whittington, Lauria and Mu 1991). The level of community trust and perception that leaders responsible for the management of finances under CBM is among the key issues this study identifies as influencing micro-level dynamics related to willingness to contribute to O&M of improved water facilities. Community perception of the quality of service delivery, their knowledge and interpretation of other government policies and the incoherencies in them, the absence of well developed and enforceable community-level bye-laws and sanctions for community compliance with all CBM guidelines are the other critical factors this study has identified at the micro-level. While some of these factors are well known to all stakeholders, they have largely been ignored and others taken for granted.

Compounding the challenges to effective CBM at the micro-level is the lack of an information system that would re-build confidence in rural water supply service systems. The study has indicated in Chapter Six that some politicians seeking cheap popularity constrain CBM further by discouraging people from paying contributions. Paradoxically, the institutions these politicians account to may also not be able to impose any sanctions or disciplinary measures because of inadequate levels of institutional capacity and development. Village Executive Council leaders may also be taking over the roles of some of the disintegrated WSCs as this study has revealed, but they too are not competent enough to replace them. The gradual change from monthly contributions to the ad-hoc method of seeking contributions whenever there is a water source break-down is also marred by challenges of mistrust by the community over how figures are arrived at. Consequently the leaders themselves ‘get into trouble’ when the funds are insufficient, occasionally compelling them to ‘borrow from other sources’ but later face difficulties collecting contributions in order to pay back. The absence of an effective system of developing and enforcing byelaws compounds this problem, as community members act on their discretion to contribute or not to because there are no enforceable sanctions to non-compliance.

On a positive note, which in fact, is a window for bye-law enforcement at community level, communities are sensitive to laws but this opportunity has not been tapped by local government and other service authorities by supporting or advocating for the establishment and institutionalization of bye-laws that support CBM. It is noted in Chapter Six, that the challenge to the effectiveness of CBM is not only limited to the absence of authentic community bye-laws but also on the implications of their mode of enforcement. For example actions such as caning errant children by the community may be found socially acceptable by the community but are illegal when viewed in relation to the child protection laws. Such challenges call for more support to communities on how best to develop and enforce bye-laws in the context of CBM and functional sustainability of rural point-water facilities.

Based on one of the key tenets of good governance; the ways and means by which public actors are responsive to the needs of their citizens (Graham, Amos and Plumpre 2003), it is arguable in line with this study's findings that governance as a means of enhancing access and enjoyment of rights through some of its approaches such as community participation or community management may be used to take people for granted. The policy prescriptions embedded in the NPM and governance agenda may appear to be having good intentions, but the attention given to them by its promoters remains poor as seen from Uganda's rural domestic water supply sub-sector. In the context of this study, levels of motivation of community leaders (the WSCs and VECs) are very crucial for CBM effectiveness. Quantitative results from the logistic regression analysis also emphasise the importance of effective leadership in community mobilisation, sensitisation and overall organisation in relation to CBM. The results showed that households which were mobilized by VECs were 29.89 (p-value = 0.000) times more likely to say that they had ever made a financial contribution to operation, maintenance or repair of their main water source compared to those that were not mobilized at all. Also, households mobilized by WSCs were 63.47 (p-value = 0.006) times more likely to have ever made a financial contribution to O&M or repair of their main water source compared to households which were not mobilized at all.

Effective CBM systems can indeed propagate high levels of sustainability of point water sources in resource poor settings. But this will also depend on how a number of governance related constraints at the macro and particularly meso are addressed. Key of such factors includes

consistent prioritisation of government led community enablement activities which value communities as customers in a more consumerist approach to service delivery. It is perhaps until this has been achieved that CBM systems will translate into the desired high levels of technical functionality and sustainability of rural domestic water supply facilities. In the context of Uganda, and sub-Saharan Africa in general, this will take more than just increasing financial resources in the rural water sector, but a real change in mindset of service providers immediate to the community over the latter's rights of access to services. But central government institutions also ought to put their mindsets right in order to undertake people centered and service efficiency supervisory roles. Effective CBM will also take the change in the current flow of information and quality of trust between/among communities and their immediate service authorities. Further, it will also take a different set of cultural values among service providers especially the local government authorities. A new understanding of community level bye-law development and implementation is seemingly very critical in the current CBM frameworks in sub-Saharan African states with a political history and dispensation like that of Uganda. Bye-laws in such a context are critical community level resources not only in facilitating effective community participation in water management systems but could also serve to revitalise the hitherto strong African culture of mutual support and collective self-reliance. However, their popularity and support will depend on the extent to which meso-level actors especially at district local government level understand their importance and support them with urgency. CBM is indeed a service delivery model conceived from the wider concepts of demand responsive approaches (DRA) to service delivery and community empowerment. However, this study has demonstrated that rural communities in Uganda are largely still recipients of services and less capable of aggressively engaging with actors such as government over planning and delivery of services. Thus, while the new governance agenda pre-supposes that public service delivery systems would build community capacity to engage in service delivery programmes that benefit them, the question remains as to whether governments are always willing to boost community capacity through any training or are governments happier when communities are perpetually unable to place any pressure from below?.

Implications for Theory: The Need for a Radical Recasting of the way CBM is Understood and Enabled at Macro and Meso levels

Contribution to knowledge and debates on decentralised service delivery

This study adds to debates and evidence which show that the absence of deliberate commitments by public actors to consciously work towards achieving specific development targets may curtail prospects for the pursued changes (Nyalunga 2006b, McNamara and Morse 2004). This study adds to existing knowledge and therefore extends the debate on the fundamentals that need to be adhered to by policy actors wishing to build effective synergies with service beneficiaries particularly those living in rural developing contexts of sub-Saharan Africa. The study generates more evidence to demonstrate why participation in planning and implementation of rural water supplies in developing countries may not achieve its intended goals if targeted consumers are not deliberately supported by their immediate public service authorities and frontline service providers. Further, the study contributes significantly to the debates around what strategies could ensure that beneficiary communities of collective services remain active rather than passive development partners. In particular, it locates the significant role of lower local government actors in stimulating and sustaining energies of water user communities to effectively play their policy prescribed mandates. By so doing, the study questions the credibility of policies that value the significant role of communities in sustainable service delivery but which at implementation appear to be taking the same communities for granted.

Contribution to knowledge and debates on sustainable water management

The NPM and governance paradigms have successfully shaped water policies of most countries embracing the intersection between public, private-for-profit and not-for-profit sector actors. The involvement of new players in public policy has meant in the NPM that the traditional role of the state as the sole provider of services changes to that of an enabler. Enablement as a new role has also meant many things, but most importantly it has emphasised the vitality of ensuring that services are provided in designs and means that consider citizens as customers. It has also meant contracting out public services to private actors through competitive tendering processes as well as allowing networks of actors (public, private for-profit and not-for-profit) to jointly plan implement and monitor service delivery. All these changes have happened in Uganda's rural

water supply sub-sector in an effort to find means and ways to enhance the sustainability of services.

Following the principles of decentralisation, community participation and subsidiarity as embedded in the NPM and governance paradigms, the rural water policy and institutional framework rightly places water users at the centre of the responsibility for enhancing the sustainability of point-water facilities under the banner of Community Based Management (CBM). However, as this study has revealed, new public policy and management framework, institutional and governance dynamics play an important role in shaping and maintaining relationships of different actors that support the effectiveness of CBM systems for rural point water facilities. Such relationships shape but are also shaped by the way power and authority are distributed within and among different actors at different levels of decision making. The means and dynamics of distribution and utilisation of power and other resources may hence serve to enable or disable opportunities for policy implementation and may impact positively or negatively on the desired policy results. Delayed disbursement of funds to local governments from the centre, conflict of interest in contracting out to the private sector, irregular spending e.g. re-allocation funds for extension work (*software activities*) to supply activities (*hardware activities*), weak sector coordination mechanisms at local government level and weak systems for monitoring among many others are some of the key disablers good policy intentions such as those exhibited in CBM. Several theories for this failure could be borrowed from those that explain the weaknesses inherent in NPM and the new governance agenda, particularly public choice theory and its related theories of collective action and principle agent theory (Buchanan and Tullock 1965, Olson 1965, Braun and Guston 2003).

Just as some critics have commented, NPM is not completely different from earlier approaches and concepts in public administration and management (Kaboolian 1998, Gültekin 2011). Some have indeed argued that NPM is simply 'new wine in old bottles' (Frederickson 1996 p. 269). As the World Bank (1997) also noted, the world's development success stories of today's industrial economies or the postwar growth "miracles" of East Asia show that development requires an effective state; one that plays a catalytic and facilitating role, encouraging and complementing the activities of private businesses and individuals (The World Bank 1997). However, this has to be preceded by real leadership commitment to achieve results. In the rural water sector in

Uganda, the major bottlenecks at the macro and meso level of service delivery range from sector budget ceilings that tend to favour water supply (hardware) against maintenance of existing infrastructure, to delays in procurement and disbursement of funds to decentralised local government units, resulting into hurried implementation of projects. All these imply the need for a radical recasting of the way CBM is understood and enabled at national and sub-national levels of service delivery if it is to enhance equitable access and sustainability of rural domestic water supply.

In theory, policy support for community management of water facilities follows the subsidiarity principle, an organising principle which supports the idea that central authority or government ought to facilitate decentralisation to the extent that its direct role or function in local development matters is a subsidiary one. In other words, central authority should perform only those tasks which cannot be performed effectively by the smallest, lowest or least centralised competent authority (Jordan 2000). In this respect, the community through its elected representatives forms the lowest authority capable of controlling, or at least influencing the development of its water systems with minimal post-construction external support. As an authority, the community of water users ought to be empowered by the policy framework to own and attend to system obligations, legitimately makes and controls decisions and their outcomes. The practical reality based on the findings of this study show that decentralisation of authority could curtail community capacity to play their roles which, in the contrary would have resulted into more sustainable community services. Paradoxically, the problem is not tied to rural water supply sub-sector alone. Districts have continued to yield a lot of power which most technical and political personnel are left to utilise at their discretion without being challenged by the communities. Coupled with the apathetic beliefs within the community or loss in confidence and trust that government institutions and their representatives will care about service delivery to communities, community interest and motivation to participate in government supported programmes has remained less than desired as this study has revealed. It seems therefore that efforts to build trust will have to be initiated by public institutions themselves and if ever purposefully initiated must remain consistent and active. Short of this, the gap between communities and local authorities will continue to negatively affect CBM and its effectiveness of the much anticipated rural water supply dividends.

It has been indicated Chapter Six community level dynamics such as weak leadership and community perceptions about policy contradictions continue to undermine the effectiveness of CBM have either remained unknown or ignored due to weaknesses at the macro and meso levels of rural safe water service delivery. While CBM remains a very important strategy for functional sustainability of rural point water facilities, without the intervention of government actors to re-shape or revitalise this good service delivery model, its potential for success will remain poor. Many would-be incentives for enhancing the functionality of CBM have mainly been ignored and remain untapped in the sector. Thus the CBM project requires ‘renewed’ attention in all contexts similar to conditions prevailing in Uganda if it has to yield the much needed equity and equality in water supply. Contrary to the call for a withdrawn state, the effectiveness of CBM in leveraging functional sustainability of water facilities calls for an enhanced and innovative role of central and local government that seeks to ‘enable’ systems and structures that affect CBM.

Can experience stimulate the right learning and action for CBM Effectiveness?

Indeed, many of the disablers of CBM at the local level concern the gap between what Quin, Balfors and Kjellén (2011p. 278) described as ‘idealized roles of actors in the organizational framework and their roles in reality’. Many problems that are disabling CBM have been around for a long time and caused stagnation in levels of access to safe water countrywide; delayed disbursement of funds to local governments from the centre, conflict of interest in contracting out to the private sector, irregular spending e.g. re-allocation of funds for extension work (*software activities*) to supply activities (*hardware activities*), weak sector coordination mechanisms at local government level and weak systems for monitoring among many others. These still remain poorly attended to. The problems indeed relate to sector governance weaknesses present at macro, meso and micro levels of planning and policy implementation, and several theories for this failure could be borrowed from those that explain the weaknesses inherent in NPM and the new governance agenda, particularly regarding the assumptions held that governments ought to allow other players to carry on tasks with ‘less’ government interference. The evidence from this study confirms that government direct involvement is fundamental for the effectiveness of CBM. Most of the roles of actors at the meso and macro

levels of the rural safe water supply programmes have not been adequately played out, thus affecting those of the community at the micro level.

In an environment that hosts continuous learning, both desirable and undesirable results should provide opportunities for learning in order to correct deviations or maintain and/or even scale up good results. The results of this study have indicated that such learning would enable but also be enabled by regular monitoring and research, particularly integrating community dialogue or community engagement at the lowest level of decision making i.e. the water user community, following the subsidiarity principle of organisation and governance. The subsidiarity principle does not denounce state intervention in matters that concern local communities, but it promotes the idea that state intervention in the community should only be undertaken to the least extent possible allowing communities more autonomy to take decisions provided they are within acceptable legal and policy standards (Stohr 2001). An enabling government will thus have a role in ensuring that communities and the institutions they have elected to manage their water facilities perform in its best interests, particularly with regard to policy implementation. This study confirms that while government institutions may be happy to have service delivery models such as CBM work, these institutions may not assertively demonstrate their levels of determination to make such models work. This study has shown that opportunities for making CBM work and succeed in Uganda's rural water supply sub-sector have not been adequately tapped, despite the fact that most of these are well known to the key sector actors at the macro, meso and micro levels.

Lessons that would stimulate learning and enable actions are largely ignored, while others are either unknown or are being taken for granted especially at the micro-level as Chapter Six has shown. Subsequently, the many good intentions of the policy and institutional framework for the delivery and sustainability of rural safe water services have largely remained unrealistic or just ideal rather than useful tools for empowering the poor and eliminating social and political inequalities associated with access to safe drinking water. Paradoxically, the consequences of a poor policy attention are also well known among actors at different levels, just as are, the options for mitigating these consequences. But the actions remain clearly weak or totally missing. In Chapter Five and Six, the results show that government actors and other service providers know

the challenges posed by a poor system of building community capacity in broad and specific terms, but despite such knowledge, there is little evidence to show the existence deliberate effort to do things differently. Good practices in the NGO sector remain inadequately replicated in other communities, despite their wide dissemination. Hence, NPM is not completely different from earlier approaches and concepts in public administration particularly in Sub-Saharan Africa (see for instance, Kakumba and Nsingo 2008). Problems ranging from inequitable distribution of services across and within communities to lack of community interest or motivation to participate in public programmes still prevail. Indeed, as the World Bank (1997) noted, the world's development success stories of today's industrial economies or the postwar growth "miracles" of East Asia show that development requires an effective state; one that plays a catalytic and facilitating role, encouraging and complementing the activities of private businesses and individuals (The World Bank 1997), but there has to be real leadership commitment. In the next section, a discussion of the implications of this study's findings on policy and practice is made.

Implications for Policy and Practice: Towards an enabling Framework for CBM and Functional Sustainability of Rural Point-Water Facilities

Despite a coherent policy and legal framework supported by an elaborate institutional framework, and continued commitment of financial resources, the rural water supply sub-sector and more particularly CBM systems still falls short of the required 'energy' to achieve results. This study establishes a number of issues in the sector that are working to disable opportunities for progress in sustainability of community managed water facilities and which continue to undermine progress. Much of what the good legal and policy framework prescribe has remained purely theoretical when issues of community management and functional sustainability of rural safe water supply infrastructure are considered. The legal and regulatory framework is also predominantly top-down and is less known by communities who hardly make any reference to it as a basis for demanding improved services. Apart from calls for community contributions towards water source construction and post construction O&M, which communities are also struggling to uptake, this study established that very little was known by people in the case study concerning the relationship between safe water supply sustainability, the environment, health and personal hygiene. As one of the key informants interviewed at the meso level indicated, issues of

financing of water facilities, procurement and supplies are also still ‘far away’ from the community. Only few community members are knowledgeable about the purchase of spare parts with the help of HPMS, a phenomenon that could also be regarded as irregular, since HPMS are reportedly capable of distorting basic information without being detected by the community.

This study confirms the fact that despite the call for a demand-responsive policy framework, the Ugandan rural water supply sector is characterised, effectively, by a top-down approach popularly known as supply-driven. As Quin, Balfors and Kjellén (2011) observe, many of the links between actors represented in Uganda’s institutional framework for rural safe water service delivery are very weak. The choice of technology for rural point water facilities is also largely limited to high-cost technologies which require significant technical and financial support to the communities. With the current weak system of devolution to local governments characterised by funding and budgetary processes that are devoid of proper financial predictability and continuous creation of new districts amidst limited human and financial resources, the rural water supply and sanitation sector in Uganda faces significant challenges (Mills 2006).

Hence, ensuring that financial resources intended for the delivery of safe water services in rural communities is one of the most important benefits decentralised service delivery and the new public management approach is expected to bring into the water sector in Uganda. However, the evidence generated by this study shows that this good intention has not yet yielded to its fullest potential for leveraging functional sustainability of rural point-water facilities. In terms of financing, the study confirms earlier conclusions which show that leveraging financial resources is a necessary, although not a sufficient condition for effective public service delivery (Winpenny 2003, Mosca 2006, Widmalm 2008), or sustainable rural water supply (Muhangi 1996, Harvey and Reed 2004, Quin, Balfors and Kjellén 2010, Quin, Balfors and Kjellén 2011). The major bottlenecks range from sector budget ceilings that tend to favour water supply against maintenance of existing infrastructure to delays in procurement and disbursement of funds to decentralised local government units.

The analysis of policy documents and interviews on experiences and perceptions of the main actors in Uganda’s rural water sector indicate that the good and potentially enabling legal, policy

and institutional framework yet to translate into effective CBM and sustainable services. On the whole, study findings indicate that there is a well-known potential for CBM to sustainably enhance functionality rates of installed rural safe water facilities among all the stakeholders in the rural domestic water supply sub-sector in Uganda. This knowledge exists at all levels of policy making and implementation. It is not only reflected in the national policy and legal frameworks, but also in the many implementation guidelines and schedules at local government level, and most importantly in documented success cases in the country. However, despite this knowledge, and the existence of an elaborate policy and institutional framework, there is insufficient evidence to show that service authorities are deliberately concerned and are taking deliberate, conscious and consistent actions to ensure that CBM systems for rural domestic water supply do not continue to fail to produce desirable results. Some of the respondents argued that it is almost universal truth in Uganda that efforts and strategies that have often been taken to have CBM work have seemingly only concentrated on production, revision and circulation or distribution of sector policy documents, with minimal effort for ensuring that such efforts re-emphasise and make-work, CBM of rural point water facilities. Communities are initially highly interested in supporting the projects, but this initial enthusiasm and sense of ownership that is evident at the beginning of the projects within recipient communities is usually poorly managed by actors who are 'rushing' to implement projects. In addition, even where meaningful participatory approaches have been applied, it usually takes a couple of months after commissioning of the rural water projects for the interest of the community to dwindle. The good policy and institutional frameworks meant to leverage effectiveness of community managed rural domestic water supply infrastructure remain loosely connected to communities. Policy guidelines and corresponding institutional arrangements may appear sufficient enough to leverage excellent levels of effective community management, but are largely still on paper and inadequately understood and applied at lower levels. The level of actor knowledge and interpretation of policy guidelines tends to diminish among lower level actors and more so among communities. The success of the community management model of rural safe water supply in Uganda seems to depend more on individual agency, behaviour or motives of actors and less on the wider institutional goals, culture and practice. Community experiences with certain policy contradictions, and the seemingly negative trend in their perceptions of public actors is increasingly affecting the extent to which communities are willing to commit their voluntary

time and financial resources to community development activities, more so those that are linked to government.

It appears that deliberate efforts to enhance effectiveness of community based models of service delivery in Uganda's rural water sub-sector will need a package of strategies that prioritise building long term community trust and confidence in public sector actors. The role of bye-law development and implementation in bringing about long term attitudinal change in the community and among local politicians has not been given sufficient attention. Given a context where communities almost expect that 'all services should be provided for free' as it almost were in Makondo, it takes heavily concerted efforts to change community mindsets. Henceforth, the credibility of any patriotic system of leadership ought to be measured among others by the extent to which they are explicit at law development and enforcement. In sub-Saharan Africa, where 'populist leadership regimes' are easily found, this important regulatory institution tends to suffer a lot of compromise (Allen and Hasnain 2010, Awortwi, Helmsing and Oyuku-Ocen 2010, Green 2010a). Community-level bye laws are not only needed in the water sector programmes but in many other related sectors such as sanitation and health, environment, child development and education etc. In rural domestic water supply and CBM in particular, bye-laws should be seen to be institution building and pro-community cohesiveness rather than 'pernicious' to the rural community of water users.

Effective CBM systems can propagate high levels of sustainability of point water sources in resource poor settings. But this will depend on how a number of governance related constraints at the macro and particularly meso are addressed. Key among such factors is the need for consistent prioritisation of government led community enablement activities that clearly value communities as customers in a more consumerist approach to service delivery. It is perhaps until this has been achieved that CBM systems will translate into the long desired high levels of technical functionality and sustainability of rural domestic water supply facilities. In the context of Uganda, and sub-Saharan Africa in general, it will take more than just increasing financial resources in the rural water sector, but a real change in mindset of service providers immediate to the community over communities and their rights of access to services. However, central government institutions also ought to put their mindsets right in order to undertake people

centered and service efficiency supervisory roles. Effective CBM will also take the change in the current flow of information and quality of trust between communities and their immediate service authorities. Further, it will also take a different set of cultural values among service providers especially the local government authorities. A new understanding of community level bye-law development and implementation is seemingly very critical in the current CBM frameworks in sub-Saharan African states with a political history and dispensation like that of Uganda. Bye-laws in such a context are critical community level resources not only in facilitating effective community participation in water management systems but will also serve to revitalise the seemingly fast-fading African culture of mutual support and collective self-reliance. However, their popularity and support will depend on the extent to which meso-level actors especially at district local government level understand their urgency. Communities working under the CBM framework will always need at least a minimal amount of external support, especially from local and central government institutions as lead agencies working in collaborative effort with NGOs. Thus, community management is primarily a task given to a few (elected) members of beneficiary community. As the findings have demonstrated in Chapter Five and Six, the efficacy of CBM depends *inter-alia* on the quality and effectiveness of the overall project implementation cycle.

Drawing from this study's findings, a discussion of the key issues that emerge as critical for the future effectiveness of CBM is made. This discussion and the suggestions or proposals made are only provided in light of the fact that they emerge as important lessons for future development programmes utilising CBM as a service delivery model. On the whole the most important issue is about re-thinking the place of communities in the overall framework for the sustainability of rural point water facilities in resource poor settings. There are certain realities facing economies of the developing world and those of sub-Saharan Africa in particular. First, cost-sharing/cost recovery is permanent on the economic and public service delivery agenda especially in the water sector. Second, politics of patronage and aid history have for long kept communities stuck at the receiving end, and paradoxically, amidst economic regimes of a reduced state. Third, service delivery is a must and remains a responsibility of the government regardless of whether new players exist or do not exist on the scene, whether the regimes in power are seeking or not seeking new mandates from their citizens. Hence, governments as their democratic

responsibility have to remain to be seen to steer the multitude of the many actors service delivery, within or outside networks so as to reap the best results from this governance arrangement.

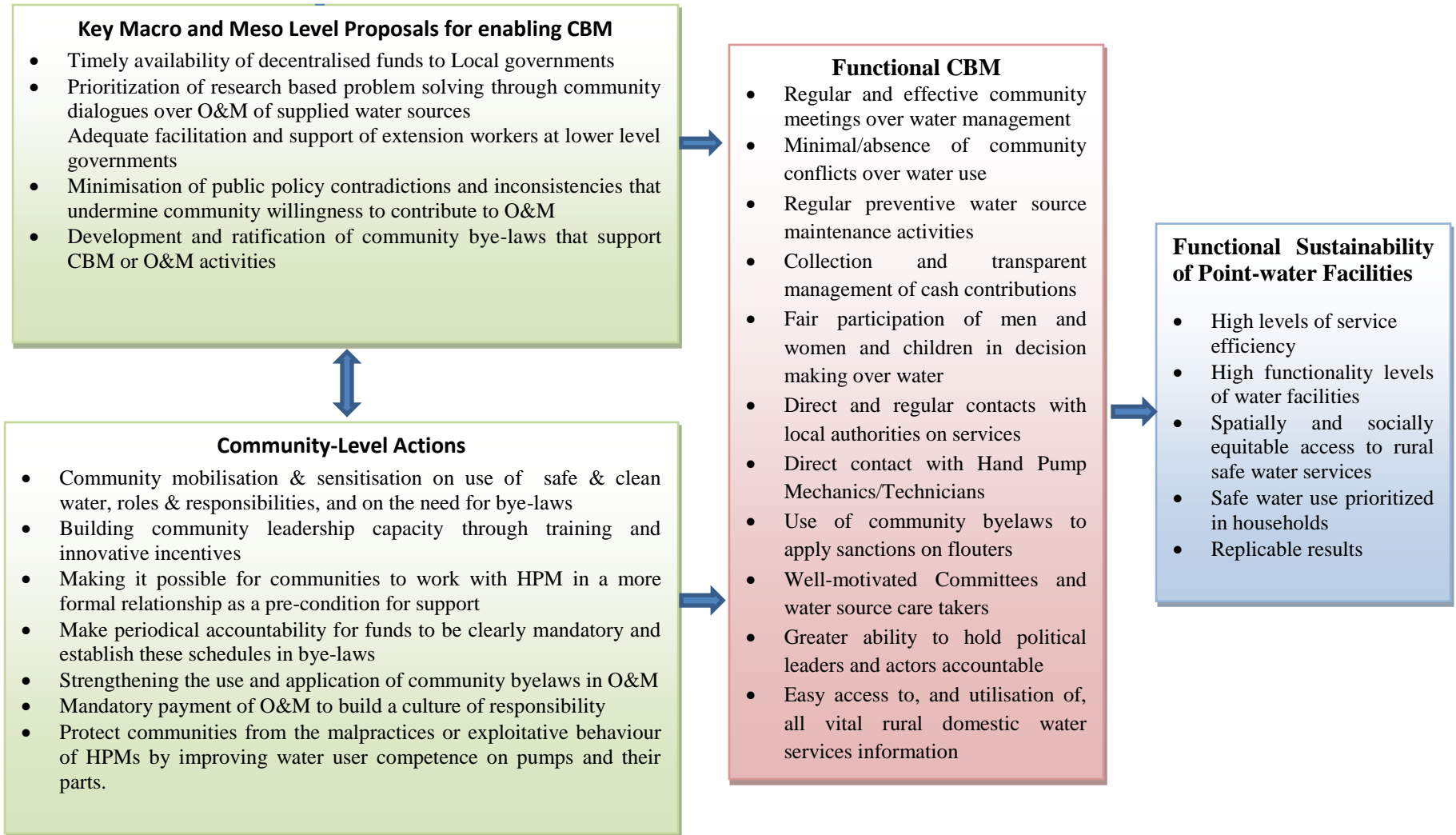
In addition, considering that the majority water users in sub-Saharan Africa (over 85% in Uganda) still live in rural areas means that investing a large amount of time and resources to support the sustainability of rural water projects is one sure way to significantly reduce the number of people using unprotected/unsafe water. In addition, mobilising them effectively can have a great impact on cost recovery. In the rural water sector, and CBM and functional sustainability of rural point-water supply facilities, the most critical issue, based on this study's findings is a renewed focus/attention on building micro level capacity and removing all the disablers there in for CBM to yield more positive results. Once this becomes the arching objective for all actors, as a matter of fact, it automatically means that meso and macro level disablers will be identified and attended to. Thus the main caveat is that the secondary stakeholders must be willing and able to effectively play their roles. There must therefore be sufficient political will and effort to make CBM work to deliver sustainable services to the majority in peripheral rural areas in sub-Saharan Africa. There must also be the necessary determination to make and implement budgets as important caveats for translating political will into action. A detailed discussion of the specific actions targeting to leverage CBM and functional sustainability of rural point water facilities is presented in subsequent discussion on the proposed framework for revitalisation of CBM based on this case study from Uganda.

A Framework for Revitalising CBM: the role of Innovative and Context-Specific Enabling Mechanisms

The currently promoted Community Based Management System (CBMS) for rural safe water service delivery in its design strategically and rightly places water users in the most important positions in the rural safe water governance framework. But the effectiveness of the position of water users in the framework much depends on whether and how policy actors are directly in touch with communities in ensuring that the important place they occupy in the service delivery framework is tapped for the attainment of the goals of CBMS. In chapter one, a conceptual and operational relationship between Effective CBM and Functional sustainability of rural point

water facilities was discussed (figure 1), while in Chapter Three, the relationship between the three major strands of enablement in relation to NPM and governance perspectives were also examined (figure 4). Based on these conceptualizations, Chapter Five and Six examine study findings on governance dynamics and contextual factors that determine the effectiveness of CBM as a model for sustainable rural safe water supply. In the following discussion, a number of policy implications are examined as a guide for strategic actions needed for enhancing the effectiveness of community managed models of service delivery in contexts similar to that of Uganda. I argue that government institutions more than any other actor are vital to the success of the CBM. An effective government (central and local) will positively influence the functions of the market (HPMs and spare parts distribution/availability). These in turn, will positively influence CBM (effective communities) to enhance sustainability of point-water facilities and services. The cycle in the relationship is expected to remain continuous through intra-sector actor interactions, learning, innovation and capacity building. This is illustrated in figure 23 below.

Figure 23 Proposed framework for enhancing the effectiveness of CBM as a model for the sustainability of rural point water facilities in contexts similar to Uganda.



Need to build and consciously sustain meso-level actor partnerships in support of CBM

There is a need for Central and Local government authorities to consciously build capacity in support of CBM. As argued, more than any other actor in the rural safe water supply, government actor institutions need to consciously build capacity at all levels of policy and service delivery in support of CBM effectiveness using context relevant policy adjustments and innovations. The results of this study stress the importance of the fact that the success of CBM requires considerable investment in human resource capacity building strategies, targeting not only the community as primary beneficiaries of services, but also their political and technical leaders at the macro and meso levels. The ability of local politicians and technical authorities to appreciate and play their roles both before and after construction is imperative for CBM and the sustainability of the water infrastructure. Effective cooperation among stakeholders builds a great amount of trust that has a strong bearing onto tangible social mobilisation for CBM. The study findings thus support an increasing recognition that external agencies may need to play wider roles in facilitating equality of access, beyond merely setting criteria (Clever and Toner 2006a).

I argue further that the need to address barriers to real community empowerment is more seriously evident at the community level, but the actors to stimulate this intervention remain more at the meso level and macro level. Communities need to be supported at whatever cost to own and govern point-water supply infrastructure supplied in their communities. The main outcome from ownership should be seen as a product of their ability to contribute to O&M and for the WSCs to be able to collect, utilise and account for O&M fees. The success of CBM and functional sustainability depends on functional WSCs capable of fulfilling their core functions. But this depends on whether macro and meso level actors are effectively playing their own roles to enable the private (for-profit and not for profit) sector and its interface with the community. Based on this study, capacity building actions to enhance the effectiveness of CBM in achieving functional sustainability include all those actions that enhance the effectiveness of all frontline service providers including Sub-county Local Government Extension Workers, HPMs, WSCs and the Water Source Care-takers.

The effectiveness of these actors also makes it easier for the NGO actors to play their part. This study established that initiatives from the major NGO actor to work with local authorities were

frustrated by complaints of poor staffing or high expectations from local authorities on facilitation or allowances from the NGO. Such a scenario questioned the extent to which a local authority exists to deliver services closer to its people or not. Whereas it may be true that the district capacity may have been challenged by the fact that it had just been established, the existence of an active and fairly better funded water and sanitation programme of the Medical Missionaries of Mary (MMMs) ought to have been taken advantage of by the local authority to enhance greater sustainability of the services they were providing. Effective partnership and collaboration remains a key pillar for the success of policies seeking user contributions as part of cost recovery strategies. Initiatives to build strong partnerships between service providers can be frustrating if they are one sided as opposed to when they are collectively embraced by sector actors. Poor collaboration as this study has indicated in Chapter Six may lead to un-necessary conflicts, counter-accusations and poor performance results and institutional mistakes. Again, the bottom line is that government actors have to take the lead in the case of CBM. This is because of their comparative advantage over other actors in terms of relative permanency. Building and sustaining trust among stakeholders is essential for cooperation and cooperation enhances efficiency and effectiveness due to the ‘hybridization’ it brings in form of resources or competencies from different actors (finance, technical skills, community trust as well as proximity to beneficiaries of service). The benefits of effective collaborations and partnerships are still likely to be missed, most particularly if local government authorities are slow or never able to exploit such opportunities.

The findings of this study also show that in order to be able to attract community support for programmes, services must consistently be seen and perceived by the community to be provided following the principles of equity and social justice. Unfortunately, some service providers especially from government may still hold the attitude that provision of public goods and services to the community is a favour rather than a right. For that reason, they remain quite comfortable with supply driven models which seemingly offer them a lot of convenience in implementation and accountability. Consequently technical and socio-economic information needs of actors have not benefitted from the experiences of users of services on the quality of services through regular monitoring and evaluation studies. Frontline service providers

especially from the sub-county local government need to form and maintain strategic partnerships with community based organisations in order to maintain a good level of contact with the community or service users.

Instituting innovative ways of institutionalizing community responsibility for O&M of water supply infrastructure could also include mechanisms that allow more formal agreements between the community or their representatives and the service providers. Such formal agreements should stipulate in clear language the terms and conditions for service delivery including the roles and responsibilities of the beneficiaries as a condition for support, and local authorities should be careful not to fault on their side of responsibility. The agreements should also stipulate that stakeholders would periodically meet to review progress, collectively address discrepancies and allow continuous learning. Such actions will help to improve on the quality of communication between providers and recipients of services. They will also help to constantly clarify on perceived contradictions in policies by the community members as well as demystify constraints to extension work that are known to undermine CBM and functional sustainability of rural point water facilities. But the need for local authorities to emphasise motivation and facilitation of technical staff in the extension service sector should not be totally ignored.

Need to innovatively and consciously scale-up extension visits to communities in support of CBM

It was indicated in Chapter Five that local government extension staff in charge of community mobilisation and sensitisation (software) are sometimes sidestepped by district water officers who may prefer to re-allocate some of the software funding to construction of new water sources rather than support software activities for O&M of existing water supply infrastructure. It was also found out that there were tendencies by DWOs to deliberately disregard community development staff in spearheading *software* activities for rural point water facilities, sometimes in preference for hand-pump mechanics, because these could easily be manipulated. Measures to re-emphasise and ensure that software activities are undertaken may therefore not only be seen in terms of increased funding, or making adjustments in budget allocation and management, but also ensure that extension work yields more substantial results for CBM systems. In contexts

similar to Uganda, the number and capacity building activities undertaken in a given period of time could be added to the list of indicators for measuring rural water sector performance, and funding for local governments tied to such performance and also used in the update of the *rural water supply atlas* of the MWE. This is on the basis of the fact that such visits as this study has indicated have the potential to enhance functional sustainability of rural point water facilities, but have seemingly been undermined by local government sector actors. The number of times extension workers actually visit and sensitise or support CBMs for point-water facilities would be considered against a minimum threshold for reporting. This would be done in such a way that data is recorded by the WSCs and quarterly reports made to the district and sub-county leadership. This also means that such local government reports would feed into the national level-annual sector performance reporting of the sector ministry to guide planning and budgeting for CBM activities in the rural water supply. By including such indicators in the performance monitoring portfolio, the effectiveness of CBM would be among the priorities in the sector, constituting an enabling strategy.

Extension work in support of CBM could also constitute a forum for community engagement and action research activities on O&M and overall social transformation of communities. Some cases have been reported where WSCs have for instance utilised O&M funds to provide credit to members of the community, impacting on livelihoods (Nabunya et al 2012). But such innovations indeed require more support and capacity building for communities. One of the underlying causes for poor sustainability levels in community managed rural safe water supplies is limited community engagement forums that bring service providers and consumers (communities) together at the level where services like water are consumed. Such forums serve both technical and political goals for community development. Community level participatory engagement or action research would not only inform planning but also serve to build community capacity for O&M of water sources and subsequently enable more prospective community development innovations, enhance downward accountability and minimize or at best eliminate public resource mismanagement. It would also serve to revitalise and maintain high levels of community cohesion and trust towards public service providers. The results of this study as discussed in chapter seven indicate that community trust towards government can indeed influence the extent to which communities are willing to support government programmes even

if they are visibly intended to benefit them. The policy framework in support of CBM in the rural water sector ought to enhance community knowledge of aspects in service delivery that are critical for building community trust of the systems of government. Such aspects for instance would include procurement and contract management processes, project implementation schedules or timelines etc. However, owing to the bureaucratic character of public officials and managers rooted in legacies of their colonial administrations, community dialogue activities have not been given meaningful attention. Consequently, rural communities in much of sub-Saharan Africa including Uganda have tended to maintain rather pathological beliefs that public service delivery processes are too technical and therefore ‘unworthy’ for them to invest time understanding. Others also feel that governments always do ‘their things according to their wish’, bothering less on what results accrue to them from government interventions. This is the disconnect that will need to be tackled in the context of CBM for rural safe water supply and sustainability, with government institutions taking a substantial lead.

Inter-governmental decentralisation can still work in favour of CBM

The findings of this study point to weaknesses in fiscal decentralisation to local governments in support of service delivery. Intermittent and unpredictable local government funding characteristic of Uganda’s decentralized financing of rural water services, and local government dependency on central government grants to finance services compound problems of CBM. As indicated in chapter five, at the meso level sector coordination mechanisms (DWSSCs and IDMs) and the presence of technical support units (TSUs) are important steps towards enhancing opportunities and prospects for influencing decisions on CBM. However, the regularity and quality of these meetings has tended to depend among others on the availability of funds, which are not always readily available. While NGOs are commended for improving the socio-economic conditions of communities and households, particularly by increasing access to safe water, there is a risk of losing this hard earned achievement if the local leadership and stakeholders do not make their contribution towards sustainability of these investments. Local authorities interviewed at the district and sub-county strongly appreciated the contribution of the MMMs, although they did not seem adequately ready to propel such achievements.

The future of CBM and rural safe water supply is about improved levels of efficiency in financing local governments. For the water sector and CBM in particular, I already indicated earlier that investment in software is an inevitable intervention. As noted earlier, community capacity building activities (software) should be seen as strategies for long term financing of the rural water and sanitation programmes. By building this capacity, the seemingly ever-growing dependency on external support by communities will be curtailed. In order to maximise opportunities that enhance long term access to safe domestic water supply, increased contact and trust between technical people and the community as earlier proposed, would also enhance uptake of alternative technologies such as rain water harvesting (for those that could afford) as well as existing cheaper options for enhancing the quality of drinking water. Communities could be trained to form groups and pool money to contribute towards a rain-water harvesting projects, initially to one most deserving member or on their own preferred criteria and continue on a rotational basis until every member is supplied. This intervention would serve to complement other technologies, reduce pressure on pumps especially in the dry seasons and at peak hours, allowing less time for queing as well as less frequency on hand pump break-down.

A history of dependency on external support not only from NGOs but also from government programmes or individual politicians seeking to be elected in what Goodfellow and Titeca (2012) referred to as vote banks for positions have potentially served as an impediment to cost recovery, self-support potentialities and capacities. This has been exacerbated by low levels of sensitisation and community education on the need for collective action amidst declining levels of public financing. It is important for CBM to diversify its purpose beyond pumps to other far cheaper options for delivering sustainable services using the same principles applied in CBM. Again, this will take the intervention of government in ensuring that the potentially existing spirit of mutual support and collective action does not fade completely but is nurtured and consciously supported as an African resource. Indeed, it should be noted that CBM builds on much longer traditions of self-managed assets (Lammerink, et al. 2001, Mitlin 2004). This study has indicated that in developing contexts marred by high levels of poverty and inequality, households that live far away from safe water sources and cannot afford to pay vendors chose obtain unprotected water sources, yet others that could afford would pay a water vendor to deliver water to their homes on a regular basis. In addition, some members of the community were willing to pay more

than they were expected to pay as contribution for repair of water sources, while others were willing to individually finance repair of pumps and accept to be paid as the other members of the community brought in their contributions. Such resources could be tapped for even greater projects if levels of community organisation and cohesiveness are sustainably kept high. The answer for this is in viewing community capacity building as an alternative to financing rural safe water programmes.

Need to make the Market aspects of CBM work to stimulate high levels of functionality of point water sources

The privatisation of the services of Hand Pump Mechanics (HPMs), and the liberalisation of hand pump spare parts distribution may have been premised on the fact that it generates high efficiency levels in terms of quick response to breakdowns of point water sources but the findings show that these private sector actors also need an effective regulation to ensure that they do not exploit the community. This study found out that the relationship between the community and the Sub-county HPM was quite informal contrary to sector policy guidelines. Actions that would enhance formalization of water users and HPMs are being attempted in recent initiatives to roll out associations of HPMs with a hope that these institutions would be more self-regulating entities. I argue that even if HPMAAs are promoted, their effectiveness will remain compromised if the capacity of communities is not build to effectively deal with the HPMs. Hence, even if there may be institutional weaknesses in policy implementation at higher levels, building the capacity of communities to understand market mechanisms surrounding spare-parts dealership such as pricing and quality or branding would go a long way in impacting positively on their relations with HPMs. Ensuring that community capacity to undertake regular preventive maintenance is also an important strategy that could be enhanced by through training and support by the HPMs. This will require investment in toolkits to make sure that they are kept with WSCs in the community rather than having them kept at the sub-county or district local government head-quarters.

The need to combine community sensitisation with bye-laws on CBM

While regulation of the HPMs is important, it may also not effectively impact on CBM if the community and their WSCs are not effective in the collection of funds for O&M within the community. Effective community management as currently promoted in most development programmes depends entirely on an effective system of ensuring long term community collective action. In contexts daunted by a remarkable reduction in interest by communities to voluntarily participate in public programmes and activities, innovative ways of sustainably revitalising community interest to appreciate the roles they can play in achieving desired levels of service delivery for community development change and transformation become very critical. Mechanisms to ensure community compliance with O&M in terms of fulfilling their roles ought to be instituted. Critical as this study has shown in Chapter Six is the need to revitalise the role and community bye-laws on O&M including those that are concerned with attendance of community meetings. This study indicates that local government support for the development and implementation of community bye-laws is weak and sometimes politicised. Combining education and sensitisation of the community on CBM with bye-law development and implementation would help communities to appreciate bye-laws as an important social and economic investment for the sustainability of their services rather than take them as government 'coercion'. This is based on the backdrop of the fact that sensitisation alone may not effectively work to instill behaviour modification within communities on a long term basis. The rural water sector could exploit opportunities presented by the legal framework to support communities not only to develop but also enforce bye-laws as a mechanism for augmenting the effectiveness of CBM of point water facilities.

Bye-laws related on CBM are not only important for enhancing compliance to O&M, but are also crucial to the 'health and wealth' of communities. Some of the good practices in the rural water and sanitation sector have in their education and sensitisation programmes linked used the link between water, health and wealth as a mechanism for motivating them to support their programmes for long term sustainability. Integrating the importance of bye-laws in such campaigns would be another important addition to strengthening opportunities for service sustainability. To avoid associating laws with government as is the challenge identified in this

study, the NGOs in the sector would take lead using strategies that would ensure that the communities would eventually own the bye-laws.

While it may require a considerable amount of time, effort and innovation, revitalising the perception and effectiveness of bye-laws in Uganda's rural communities could also serve to not only reverse the persistently glaring trend towards total dependency by communities on external support in the operation and maintenance of waterfacilities, but could also broadly serve to revitalise the hitherto reliable and now seemingly fast-fading African culture of mutual support and collective self-reliance. Community bye-laws are also crucial in for revitalising community interest to attend meetings especially by the men who have tended to relegate community meetings to women. It seems that bye-laws and sanctions for none-compliance can only be made legitimate if local authorities are seen to be consistent and uncompromising towards their enforcement.

Community education and sensitisation on the importance of bye-laws will not only mitigate the influence local politics on their implementation but may also help to mitigate the impact misconceptions about other policies can have on O&M. In this study, policies such as mass immunisation, universal primary education and the scrapping of graduated tax were found to be impacting negatively on community willingness to pay for O&M of their water sources. In bye-laws and sanctions on attendance of general community meetings including those on water supply would complement other mechanisms that revitalise community trust and respect for their leaders including the WSCs.

The need to innovatively incentivize membership to WSCs and Water-Source Care-taking

There is need for introducing social incentives for the WSCs and (especial) point-water source caretakers in very innovative ways that would keep individual members or the entire groups motivated to volunteer their time. Such initiatives and strategies need not be financial incentives rather they would include things like; consistent official recognition in public meetings or gatherings by local political leaders or religious leaders on worship days, in schools where their children go to school etc. This is in recognition of the fact that human resources at the

community level are pertinent to the success of community managed projects. In addition, human attitudes play a big role in sustaining the supply of voluntary labour/time, and these could easily be compromised by simple conflicts and disagreements characteristic of rural community contexts such as the case between a water source caretaker in Misaana and the abusive girl (described in Chapter Six). Regular group support and guidance by local authorities and other service providers could also further enhance members' understanding of community development dividends or benefits that accrue from working in groups as opposed to abandoning responsibility to individuals (caretakers). Periodical election of WSCs should be encouraged in order to reduce the monotony of voluntary work that some members may suffer, affecting their levels of motivation. These strategies would serve to contribute towards addressing interests of individual without necessarily compromising group goals.

Implications for Future Research

Broadly, the findings of this study emphasise the current importance of effective collaborations and partnership between users and providers of public/basic human services as embedded in the NPM and governance frameworks. The results bring out interesting issues that could be pursued in much more detail in future research on community based managed public/basic service delivery, especially in sub-Saharan Africa; How do public service delivery actors understand their role of working to serve the basic interests and rights of citizens in the NPM framework for basic service delivery mechanisms that emphasise CBM? How do users of services delivered under the CBM model perceive such approaches and those promoting them? Do communities appreciate the current changes in policy frameworks? Do they view them as intended to genuinely serve their interests? Do they see these as exploitative? How can a positive understanding of the shift in service delivery and associated challenges in roles and responsibilities be propelled, and what circumstances can sustain positive learning between and among the different stakeholders?

Methodologically, this study was only limited to the study of CBM of point water facilities for domestic water supply in Uganda which included protected springs, shallow wells and deep bore holes. The study did not cover other community managed technologies such as rain-harvested water technologies or gravity flow schemes common for rural growth centres. The study did not

also include any community managed schemes for water for production. Given that these water technologies are also provided using the same institutional framework, it would be important for future studies to include consider them in their sample, as there may be enabling and disabling issues unique to such schemes the present study could have missed out especially at the micro/community level.

Longitudinal studies pre-dominantly using action research techniques would offer the best option for understanding the impact direct and regular community sensitisation would have on community willingness to support CBM. It would also help explore more deeply the other dynamics of such as the time it would take, the tools and methods needed in order to stimulate full community interest that generates good results on CBM. Further it would explore more dynamics around bye-law development and implementation by allowing researchers more time to participate in their development and implementation. The Action research approach would also allow more time to examine the extent to which local politics could be utilised to support rather than undermine community contributions to O&M through dialogue and community engagement. Given that children were observed to be the major water collectors, the action research study would also explore opportunities that would come from using children to sensitise parents over the need for safe water by linking it to their right to health and education. This is because safe water ceases to be safe when children are exposed to risks of physical attacks, and/or when the processes of accessing it undermine children's enjoyment of other basic rights. Other messages would cover comparisons of expenditure between treatment of water related ailments and monthly contributions to O&M in order to demonstrate the amount of savings households could make by contributing to O&M of safe water facilities as a preventive strategy against water related illnesses.

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ANNEXES

Annex I: Research Tools

Qualitative Interview Guides

Guide A:

FGDs with Water Users (not on any water committee i.e. ordinary water users)

A1 Identification

- i. Village/LC 1
- ii. List of participants and their designation (Ordinary Member/Leader)
- iii. Types of safe water sources in the community, when they were constructed, the institution that constructed them and present functionality level
- iv. Number and alternative sources of water existing in the community

A2 Knowledge of safe water as a key health and economic resource

- i. What do you regard to be the importance of water to human life?
- ii. How does safe water rank in terms of other needs of your community? (Probe the other needs and ask the community to indicate whether/how availability of safe water contributes to their attainment)
- iii. Please tell me how water contributes to household social and economic well being
- iv. Which people/persons are most affected when there is safe water scarcity in your area?
- v. What would you consider to be a good water source and a bad water source?

A3 Community knowledge of the roles of different actors and modalities for establishing safe water sources

- i. What do you know with regard to government policies, guidelines or conditions governing the provision of safe water to rural communities?
- ii. What do you know with regard to specific roles and responsibilities of the central government, your district and sub-county in provision and maintenance of rural safe water sources?
- iii. Who else apart from Central and Local governments do you find important in the provision and maintenance of safe water sources in your community?
- iv. What do you know to be the roles and responsibilities of the community when it comes to rural safe water service delivery?
(Probe whether water users know their roles as stipulated in National Policy Framework i.e. Participation in: Planning and decision making; Election of WSC; Site selection; improving sanitation; cleaning water source surroundings; Determination of how much to contribute and actual contribution to capital and O & M costs; enactment of bye laws)
- v. What difference would it make if government or any other actor came and put in place a water source for you to use without in anyway asking you to participate?
- vi. How helpful have been the private sector actors such as HPMs and Spare Parts Dealers to this community in ensuring that your water sources continue to be in good operating conditions? Which private institutions or individuals have been helpful in the past five years or so in your community
- vii. How helpful have been NGOs in your community with regard to safe water provision and maintenance of constructed water sources? Please name the NGOs that have been key players in safe water service delivery in your community.

A4. Community Capacity for Water Source Operation and Maintenance

- i. What institutions or community structures are traditionally responsible/recognised for managing water sources in your community?
- ii. What have you done to ensure that existing water sources remain in good operating conditions? (e.g. have they ensured that they have a fairly skilled/trained pump mechanic, any contacts and agreement with spare parts distributors, ensure that the community members contribute, building trust between WUCs/WSCs and the community etc)
- iii. Do you have any bye laws that govern usage/operation and maintenance of your water sources (**Ask about what they are and the antecedents/motivational factors**)
- iv. What are the key challenges faced by the community in ensuring that the water sources are well maintained (**probe: community cooperation and conflict, community organisation and ingenuity or lack of it etc; determination, collection and accountability for funds collected for O & M etc**)
- v. Knowledge of other sources of help in case the water source fails beyond the capacity of the community to repair. **Has this knowledge been utilised in the past or can it potentially be utilised in future?**
- vi. Factors that determine community ability and willingness to contribute to construction/capital cost and the cost of minor and major repairs at a constructed water source. **What forms of contributions are preferred by the community: Cash or in-kind? Probe for other mechanisms of contribution preferred by the community and why etc.)**
- vii. What do you do when higher levels of government (Sub-county and district) fail to adhere to your calls for safe water supply in your locality?
- viii. With regard to safe water services in your community, how have you been involved in the contractual processes? Which contractor(s) constructed your main water source and which contractor(s) repairs in case the community is not able to undertake specific mechanical works?
- ix. How were you involved in determining the cost and payment modalities for construction of your main water source(s)?
- x. What was the total cost of construction and what contribution did the community make?

A5. Community capacity to engage government and hold them accountable for services.

- i. Do you think you can help a 'reluctant' government (central and Local) to effectively deliver safe water services in your communities? (Please explain why you think this way? (**Knowledge of rights as citizens**)
- ii. In which ways do you think you can best help government to deliver safe water services to your community? (**Knowledge of responsibilities of citizens: e.g. probe whether and how they seek accountability from local councils with examples of how they have done this in the past**)
- iii. How do you normally get to know sub-county and district plans and budgets with regard to rural safe water? (**Probe: Sensitisations, announcements on radio, Council representatives or media reports**)
- iv. What do you would you consider to be your roles and responsibilities as citizens in ensuring that service providers especially local governments make known to you the status of services (especially safe water) they ought to deliver in your localities?
- v. Please give a full account of the processes and circumstances you go through to repair your main water source whenever it breaks down.

Guide B:

Interview Guide for Community Leaders (LC1 Executive)

B1 Identification

- i. Village/LC 1
- ii. List of participants and their designation (Ordinary Member/Leader)

- iii. Types of safe water sources in the community, when they were constructed, the institution that constructed them and present functionality level
- iv. Number and alternative sources of water existing in the community

B2 Knowledge of safe water as a key health and economic resource in the community

- i. What do you regard to be the importance of water to human life? **Probe for social and economic well being of communities, households and possible sources of such knowledge.**
- ii. How does safe water rank in terms of other needs of your community? (Probe the other needs and ask the leaders to indicate whether/how availability of safe water contributes to their attainment)
- iii. Which groups of people/persons are most affected when there is safe water scarcity in this community and why?
- iv. What in your community do you consider to be a good water source and a bad one?

B3 Community knowledge of the roles of different actors and modalities for establishing safe water sources

- i. What do you know with regard to government policies, guidelines or conditions governing the provision of safe water to rural communities?
- ii. What do you know with regard to specific roles and responsibilities of the central government, your district and sub-county in provision and maintenance of rural safe water sources?
- iii. Who else apart from Central and Local governments do you find important in the provision and maintenance of safe water sources in your community and why?
- iv. What do you know to be the roles and responsibilities of the community when it comes to rural safe water service delivery?
(Probe for knowledge of roles as stipulated in National Policy Framework i.e. participation in: Planning and decision making; Election of WSC; Site selection; improving sanitation; cleaning water source surroundings; Determination of how much to contribute and actual contribution to capital and O&M costs; enactment of bye laws)
- v. What difference would it make if government or any other actor came and put in place a water source for you to use without in anyway asking you to participate?
- vi. How helpful have been the private sector actors such as HPMs and Spare Parts Dealers to this community in ensuring that your water sources continue to be in good operating conditions? Which private institutions or individuals have been helpful in the past five years or so in your community
- vii. How helpful have been NGOs in your community with regard to safe water provision and maintenance of constructed water sources? Please name the NGOs that have been key players in safe water service delivery in your community.

B4 Village Leadership Capacity to Demand for Safe Water Services

- i. Has your community ever placed demands to the sub-county for safe water services?
- ii. Please give an account of the processes under which current water sources came to be in the community *(ever requested for a water source? Defined type of source? When was this request made? And who made the request? To whom was the request made and what processes followed...)*
- iii. Under what circumstances may a request for safe water services be rejected by government or any other actor? Has a request for a safe water facility in your community ever rejected?
- iv. What plans/arrangements are in place to improve sustainable access to safe water in your community?
- v. In which ways do you think you can best help government to deliver safe water services to your community? **(Knowledge of responsibilities of citizens: e.g. probe whether and how they seek accountability from local councils with examples of how they have done this in the past)**
- vi. How do you normally get to know sub-county and district plans and budgets with regard to rural safe water? **(Probe: Sensitisations, announcements on radio, Council Representatives or media reports)**
- vii. What do you consider to be your roles and responsibilities as village leaders in ensuring that the sub-county and district make known to the community members the status of services (especially safe water) they ought to deliver in your localities?

B5. Community Capacity for Water Source Operation and Maintenance

- i. Please give a full account of the processes and circumstances you go through to operate and maintain your main water source(s) whenever there is breakdown.

- ii. What have you done to ensure that existing water sources remain in good operating conditions? (e.g. have they ensured that they have a fairly skilled/trained pump mechanic, any contacts and agreement with spare parts distributors, ensure that the community members contribute, building trust between WUCs/WSCs and the community etc)
- iii. Do you have any bye laws that govern usage/operation and maintenance of your water sources (**Ask about what they are, antecedents/motivational factors and processes of their institution**)
- iv. What are the key challenges faced by the community in ensuring that the water sources are well maintained (**probe: community cooperation and conflict, community organisation and ingenuity or lack of it etc; determination, collection and accountability for funds collected for O & M etc**)
- v. Knowledge of other sources of help in case the water source fails beyond the capacity of the community to repair. **Has this knowledge been utilised in the past or can it potentially be utilised in future?**
- vi. Factors that determine community ability and willingness to contribute to construction/capital cost and the cost of minor and major repairs at a constructed water source. **What forms of contributions are preferred by the community: Cash or in-kind? Probe for other mechanisms of contribution preferred by the community and why etc.)**
- vii. What do you do when higher levels of government (Sub-county and district) fail to adhere to community calls for safe water supply in your locality?
- viii. With regard to safe water services in your community, how have you been involved in the contractual processes? Which contractor(s) constructed your main water source and which contractor(s) repairs in case the community is not able to undertake specific mechanical works?
- ix. How were you involved in determining the cost and payment modalities for construction of your main water source(s)? What was the total cost of construction and what contribution did the community make?

Guide C:

Key Informant Interview Guide for Sub-county/LC III Officials

C1. Safe Water Accessibility

- i. What is the current estimated sub-county safe water coverage?
 - a. Are there tools for collecting water data in this sub-county?
 - b. What methods do you use to collect the data?
- ii. If you were to rank the major problems faced in this sub-county, where would safe clean water fall?
- iii. Which Parishes and Villages are well covered with safe water and which ones have the poorest coverage and why?
- iv. What is the average distance to the nearest safe water source in the sub-county?
- v. What types of safe water sources mainly exist in the sub-county and why?
- vi. What type of water sources have the lowest functionality levels and which ones have the highest functionality levels and why?
- vii. What major changes in terms of access to safe water have occurred in the sub-county in the last 5-10 years?

C2. Knowledge, understanding and utilization of policies and guidelines for CBMS for water service delivery

- i. How does a community get to be served with a safe water point in this sub-county?
- ii. What guidelines and policies exist for the provision of water in the sub-county?
- iii. How can you tell that the guidelines and policies for water provision are well known or not known to the community and what is the status quo at present?
- iv. Are the guidelines and policies strictly followed in the allocation of water sources in the sub-county no matter who the actor/service promoter is? Explain.

- v. Did the sub-county participate in the formulation of these guidelines and policies? In what ways did the sub-county participate?
- vi. What can you comment on the existing guidelines
What are the strengths of these guidelines and policies in the provision of water services in this sub-county? What are the constraints of these guidelines and policies in the provision of water services in this sub-county?
- vii. To what extent do the problems and constraints of the guidelines and policies explain the challenges of sustainable service delivery in the sub-county?
- viii. What other factors that you think affect people's accessibility to safe water in this sub-county?

C3. Gaps in enabling water Users to participate in safe water Provisioning

- i. Community Based Maintenance System for constructed safe water sources is widely endorsed and regarded one of the best options for operation and Maintenance of communal water supply facilities. To what extent has this approach been applied in provision of safe water in this sub-county?
- ii. To what extent do you think communities in this sub-county appreciate/understand this new approach?
- iii. What methods/approached do you use to collect water related information/data in this sub-county?
- iv. How do you tell that water source based maintenance systems are functional or not?
- v. Looking back to the period before the community based management system (Before mid 1990s) was introduced and after, how do you compare safe water supply sustainability levels in the past and the present in this sub-county?
- vi. To what extent are the following adhered to in ensuring CBMS for safe water in this sub-county?
 - Respect for community's decision to participate in service provision or not
 - The choice and type of technology and service level options based on community willingness to pay;
 - Community decisions on when and how their services will be delivered;
 - Community decision on how source maintenance funds are managed and accounted for;
 - Community decision on how the services are operated and maintained.
 - Downward accountability and information sharing with regard to funds, services etc.

C4 Actor-level initiatives for Enhancing Effectiveness of CBMS for rural Safe Water

- i. How does poor participation of the community affect actors in safe water service delivery? How does it affect central and local governments, the private sector and NGO actors to deliver safe water services?
- ii. What activities is the sub-county often engaged in to build the capacity of water users/communities in the provision of safe water through Community Based Management Systems?
- iii. How often are these activities undertaken? How are they prioritized over other activities?
- iv. How has private sector involvement in rural safe water promoted or hindered effective CBMS for safe water provision in this sub-county?
- v. In what ways has NGO involved in water provision in this sub-county promoted or constrained CBMS?
- vi. What role is played by the sub-county in creating an enabling environment for the PS and NGOs to promote safe water provision in the sub-county? Please describe the nature of relationships that exist between the sub-county and the private sector and NGOs
- vii. How does the sub-county ensure that the activities of the private sector and NGOs do not compromise goals of CBMS?
- viii. If anything was to change in the current approaches to rural safe water provision, what would you suggest should change and what is your basis for your position?

GUIDE D

Interview Guide for District Political and Technical/Civic Leadership

D1 Identification

- i. Designation of the informant
- ii. Time served in current designation and length of time spent working with MWE/DWD

D2. Safe Water Accessibility

- i. What is the current estimated district safe water coverage?
 - a. Are there tools for collecting water data in this district?
 - b. What methods do you use to collect such data?
 - c. How is data utilised to enhance service delivery?
- ii. If you were to rank the major problems faced in this district, where would safe clean water fall?
- iii. Which sub-counties and Parishes are well covered with safe water and which ones have the poorest coverage and why?
- iv. What is the average distance to the nearest safe water source in the district?
- v. What types of safe water sources mainly exist in the district and why?
- vi. What type of water sources have the lowest functionality levels and which ones have the highest functionality levels and why?
- vii. What major changes in terms of access to safe water have occurred in the district in the last 5-10 years?

D3. Knowledge, understanding and utilization of policies and guidelines for CBMS for water service delivery

- i. How does a community get to be served with a safe water point in this district?
- ii. What guidelines and policies exist for the provision of water in the district?
- iii. How can you tell that the guidelines and policies for water provision are well known or not known to the community and what is the status quo at present?
- iv. Are the guidelines and policies strictly followed in the allocation of water sources in the district no matter who the actor/service promoter is? Please explain.
- v. Did the district participate in the formulation of these guidelines and policies? In what ways did the district participate and if not what would you comment on this?
- vi. How does the district utilize these guidelines and policies? Are there any ingenious modifications to the national guidelines and policies that suit local contexts?
- vii. What can you comment on the existing national guidelines for safe water service delivery to rural communities
 - What are the strengths of these guidelines and policies in the provision of water services in this district?
 - What are the constraints of these guidelines and policies in the provision of water services in this district?
- viii. To what extent are the problems and constraints of the guidelines and policies explain the challenges of sustainable service delivery in the district?
- ix. What other factors that you think affect people's accessibility to safe water in this district?

D4. Gaps in enabling water Users to participate in safe water Provisioning through CBMS

- i. Community Based Maintenance System for constructed safe water sources is widely endorsed and regarded one of the best options for operation and Maintenance of communal water supply facilities. To what extent has this approach been applied in provision of rural safe water in this district?
- ii. To what extent do you think communities in this district appreciate/understand this new approach?
- iii. How do you tell that Community Based Maintenance systems are functional or not?
- iv. What methods/approached do you use to collect water related information/data in this district?

- v. Looking back to the period before the community based management system (Before mid 1990s) was introduced and after, how do you compare safe water supply sustainability levels in the past and the present in this sub-county?
- vi. To what extent are the following adhered to in ensuring CBMS for safe water in this district?
 - Respect for community's decision to participate in service provision or not
 - The choice and type of technology and service level options based on community willingness to pay;
 - Community decisions on when and how their services will be delivered;
 - Community decision on how source maintenance funds are managed and accounted for;
 - Community decision on how the services are operated and maintained.
 - Downward accountability and information sharing with regard to funds, services etc.

D5. Actor-level initiatives for Enhancing Effectiveness of CBMS for rural Safe Water

- i. How does poor participation of the community affect actors in safe water service delivery? How does it affect central and local governments, the private sector and NGO actors to deliver safe water services?
- ii. What activities is the district often engaged in to build the capacity of water users/communities to participate in the provision of safe water through community Based Maintenance Systems?
- iii. How often are these activities undertaken? How are they prioritized over other district/sector activities?
- iv. How has private sector involvement in rural safe water promoted or hindered effective CBMS for safe water provision in this district?
- v. In what ways has NGO involved in water provision in this sub-county promoted or constrained CBMS?
- vi. What role is played by the district in creating an enabling environment for the PS and NGOs to promote safe water provision in the district?
- vii. Please describe the nature of relationships that exist between the district and the private sector and NGOs
- viii. How does the district ensure that the activities of the private sector and NGOs do not compromise goals of CBMS?
- ix. If anything was to change in the current approaches to rural safe water provision, what would you suggest should change and what is your basis for your position?

GUIDE E

Interview Guide for National level Technical and Policy Actors (Ministry of Water and Environment & Directorate of Water Development)

E1. Identification

- iii. Designation of the informant
- iv. Time served in current designation and length of time spent working with MWE/DWD

E2. Implementation of Community Based Maintenance Systems for rural Safe Water

- i. Community Based Maintenance System for constructed safe water sources is widely endorsed and regarded one of the best options for Operation and Maintenance of communal water supply facilities. What processes did government go through to change from a Centralised Management to CBMS?
- ii. Under Community Based Management System for rural water services, all major actors have specific mandates for ensuring that this service delivery approach is effectively followed as a precursor for sustainable rural safe water service delivery. How have the following actors played their policy mandates towards effective and functional CBMS?
 - a. Central Government
 - b. Local Governments (Districts and Sub-Counties)
 - c. NGOs and CBOs
 - d. Private Sector

- e. Development Partners
 - f. Communities
- iii. How does government ensure that the activities non government actors (private sector and NGOs and development partners) do not compromise goals of CBMS?

E3. Outcomes of Promoting CBMS as a policy prescription

- i. How does poor participation of the community affect actors in safe water service delivery? How does it affect central and local governments, the private sector and NGO actors to deliver safe water services?
- ii. To what extent is equitable distribution of safe water services promoted or compromised by using CBMS in providing water to poor rural communities?
- iii. There has been increased funding for rural safe water services in the recent years. How does the increase in funding relate with effectiveness or lack of it with regard to CBMS approaches to rural safe water services?
- iv. The CBMS seems to raise some contradictions with regard to access to safe water being a fundamental human right. How is this seemingly contradicting arrangement being mitigated ingeniously by government and other water actors?
- v. What visible indicators can you point to and show that provision of safe and clean water is contributing to poverty reduction as a national objective linked to access to safe water?
- vi. How in your view does CBMS cater for disadvantaged groups such as the disabled, women, the very poor and other indigent categories in society whose effective participation is often compromised by their predicament?

E4. Enhancing CBMS through ingenious enablement approaches (beyond the present guidelines)

- i. How has CBMS so far influenced rural safe water sources sustainability levels
- ii. What has specifically gone wrong in areas where CBMS have failed to deliver the much needed rural safe water service sustainability levels?
- iii. What has gone well in areas where CBMS have delivered significant sustainability level?
- iv. What in your view needs to change in order to maximize benefits of CBMS and at what level in policy implementation should such change (s) be effected?
- v. How empowering or disempowering is CBMS to rural water users?
- vi. What aspects/principles of CBMS do you feel need to be revisited in order to enhance sustainable access to safe water in rural areas?
- vii. Who is best placed to enhance CBMS effectiveness?

GUIDE F

Interview Guide for Development Partners and NGOs

F1. Identification

- i. Development partner/NGO
- ii. In what aspects of safe water provision are you involved or supporting the GoU?

F2. Involvement and experiences in Promoting CBMS for rural safe water provisioning

- i. How does poor participation of the community affect actors in safe water service delivery? How does it affect central and local governments, the private sector and NGO actors to deliver safe water services?
- ii. How do the activities and processes of government in the water sector affect your own activities in safe water service delivery?
- iii. To what extent and in what ways have you been involved in promoting CBMS for safe water provisioning in the rural water sub-sector?
- iv. Have you always followed national guidelines as stipulated in the National framework or so but with modifications?

- v. What is your view about CBMS in terms of sustainable accessibility to safe water in relation to Centralised Management by either government or NGO?
- vi. Would you consider the approach as promoting or hindering equitable distribution of safe water services in Uganda? Explain.
- vii. Why do you think CBMS is being promoted despite its potential shortcomings in developing country contexts? Any external influence you think compelled government to adopt such an approach?
- viii. How has been the experience in terms of promoting accessibility and equity? What in your view needs to change in order to maximize benefits of CBMS and at what level in policy implementation should such change (s) be effected?
- ix. How empowering or disempowering is CBMS to rural water users
- x. What aspects/principles of CBMS do you feel need to be revisited in order to enhance sustainable access to safe water in rural areas?
- xi. Who is best placed to enhance CBMS effectiveness?

F3. Outcomes of Promoting CBMS as a policy prescription

- i. The CBMS seems to raise some contradictions with regard to access to safe water being a fundamental human right. How is this seemingly contradicting arrangement being mitigated ingeniously by government and other water actors?
- ii. What visible indicators can you point to and show that provision of safe and clean water is contributing to poverty reduction as a national objective linked to access to safe water?
- iii. How in your view does CBMS cater for disadvantaged groups such as the disabled, women, the very poor and other indigent categories in society whose effective participation is often compromised by their predicament?

3. What level of education (formal) have you attained?

- | | |
|------------|------------------|
| 1. None | 4. A level |
| 2. Primary | 5. Dip Holder |
| 3. O level | 6. Degree Holder |

4. What is your main occupation?

- | | |
|---------------------------|---------------------|
| 1. Crop farmer/Peasant | 6. Self –employed |
| 2. House wife | 7. Livestock Farmer |
| 3. Student | 8. Mixed Farmer |
| 4. Salaried Worker | |
| 5. Casual Labourer | |
| 9. Other (please specify) | |

5. How many are you in this household?

6. How Old are you? (age in complete years)

7. Relationship to you of other members of the Household

	Husband	Wife	Son	Daughter	Aunt	Uncle	Brother	Sister	Grand Mother	Grand Father	Grand Child	In-law	Worker	Other (Specify)
Member One														
Member Two														
Member Three														
Member Four														
Member Five														
Member Six														
Member Seven														
Member Eight														
Member Nine														
Member Ten														

8. What is your tribe /ethnic background?

- | | |
|---------------------------|------------|
| 1. Muganda | 4. Munyoro |
| 2. Munyarwanda | 5. Murundi |
| 3. Munyankole | 6. Mukiga |
| 7. Other (please specify) | |

9. Which religious denomination do you belong to?

- | | |
|---------------------------|-------------------------|
| 1. Roman Catholic | 4. Pentecostal |
| 2. Protestant | 5. Traditional believer |
| 3. Islam | |
| 6. Other (please specify) | |

10. What is your current marital status?

1. Married
2. Cohabiting
3. Widow

4. Widower
5. Divorced/separated
6. Single/ not yet married/ never married

C: HOUSEHOLD LIVELIHOODS & WELL BEING

1. What is your household's major source of income?

- | | |
|---------------------------|----------------------|
| 1. Remittances | 5. Mixed Farming |
| 2. Sale of labour | 6. Crop Farming |
| 3. Business | 7. Livestock Farming |
| 4. Salary | |
| 8. Other (please specify) | |

2. What is your estimated monthly household income?

- | | |
|-------------------------|------------------------|
| 1. Less than 10,000 UGX | 4. 100,000-200,000 UGX |
| 2. 10,000-50,000 UGX | 5. 200,000-300,000 UGX |
| 3. 50,000-100,000 UGX | 6. Above 300,000 UGX |

3. What forms of expenditure related to your household water needs has your household incurred in the last one year? (MULTIPLE RESPONSES ALLOWED IF ANSWER IS NOT NONE)

- | | |
|--|--|
| 1. None | 4. Purchase of water transport equipment
e.g. bikes, wheel barrows etc |
| 2. Monthly contribution to operation and maintenance | 5. Purchase of water storage equipment
e.g. buckets, pots, jerry cans etc |
| 3. Contribution towards repair of pumps when they breakdowns | 6. Water treatment |
| 8. Others (please specify) | 7. Buying water |

4. Please estimate how much money your household spends on water in a month?

- | | |
|--|-------------------------|
| 1. No expenditure at all | 4. Between 500-5,000UGX |
| 2. Doesn't know/ cannot tell how much is spent | 5. 5,000-10,000 UGX |
| 3. 500 UGX or less | 6. Above 10,000 UGX |

5. Type of dwelling unit?

1. Permanent (plastered /unplastered brick wall, cemented floor & iron roof)
2. Semi-permanent (plastered /unplastered mud & wattle with cemented /uncemented floor & iron roof)
3. Temporary (mud and wattle with grass thatch & no cemented floor)
4. Built in permanent materials but no cemented floor

6. How many meals did you have yesterday as a household?

- | | |
|----------|---------------------------|
| 1. One | 4. Four |
| 2. Two | 5. Other (please specify) |
| 3. Three | |

7. If less than 3 meals were eaten, why?(MULTIPLE ANSWERS ALLOWED)

- | | |
|--------------------------------|---------------------------|
| 1. Lack of enough food | 4. Lack of enough money |
| 2. Lack of charcoal / firewood | 5. Lack of enough water |
| 3. Very busy /lack of time | 6. Other (please specify) |

8. Have you ever made a contribution towards any community development initiative in your area?

- 1. Yes
- 2. No
- 3. Doesn't know /can't remember

9. If yes, what contribution did you make?

- 1. Financial
- 2. Labour
- 3. Ideas /meetings
- 4. Land
- 5. Local Materials
- 6. Other (please specify)

10. Towards what development project /initiative/ activity was your contribution (MULTIPLE ANSWERS ALLOWED)

- 1. Water and sanitation
- 2. School development project
- 3. Health promotion (Malaria, HIV/ AIDS etc)
- 4. Security and safety of life and property
- 5. Community road/ bridges /culvert
- 6. Construction of place of worship
- 7. Other (please specify)

D: KNOWLEDGE OF THE IMPORTANCE SAFE WATER TO A HOUSEHOLD'S HEALTH

1. Please tell me how you ensure that water is safe for drinking in your h/hold (MULTIPLE ANSWERS ALLOWED)

- 1. Boiling
- 2. Use of water guard / similar chemical
- 3. Keep it in well cleaned containers
- 4. Wash hands before handling water
- 5. Regularly clean water containers
- 6. Solar disinfection
- 7. Do nothing
- 8. Other (please specify)

2. What diseases do you know that are caused by water which is not safe? (MULTIPLE ANSWERS ALLOWED)

- 1. Don't know
- 2. Diarrhoea
- 3. Stomachaches
- 4. Worms
- 5. Cough/Flu
- 6. Eye infections
- 7. Skin rash
- 8. Malaria
- 9. Others (please specify)

3. Have you or any member of your household ever suffered from water-related diseases such as diarrhoea, stomachaches, worms or malaria? 1. Yes 2. No (go to no. 9)

4. Who in your household has suffered from the following diseases in the last one year? (MULTIPLE RESPONSES ALLOWED)

	Adult Males	Adult Females	Male Youths	Female Youths	Female Children	Male Children
Diarrhea						
Stomachaches						
Cough						
Worms						
Eye infections						
Skin rash						
Malaria						
None (go to no. 8)						

5. What has been the trend in prevalence of the above diseases? Would you say (READ OUT)

- 1. Increasing
- 2. Decreasing

3. Same

4. Don't know / can't tell

6. How have the above water-related diseases affected your h/hold? (MULTIPLE ANSWERS ALLOWED)

1. Increased household expenditure

3. Reduced / interrupted school attendance

2. Reduced family labour

4. Increased burden on healthy family members

5. Other (please specify)

7. How much has your household spent on treating the disease(s) mentioned above in the last one year?

1. Nothing

6. 200,000-300,000 UGX

2. Less than 10,000 UGX

7. Above 300,000 UGX

3. 10,000- 50,000 UGX

4. 50,000-100,000 UGX

8. Use traditional/indigenous medicines that are free/not paid for

5. 100,000-200,000 UGX

8. What household items have you forfeited expenditure in order to treat any or all of the above water-related diseases? (MULTIPLE RESPONSES ALLOWED)

1. None

4. Housing

2. Food

5. Education (of children or any other household member)

3. Clothing

6. Other (please specify)

9. What benefits does your household gain as a result of using clean and safe water? (MULTIPLE RESPONSES ALLOWED)

1. Improved health/Reduction in diseases

4. Saving h/hold income

2. Increased water usage/consumption

5. Reduction of household poverty

3. Saving time

6. Don't know

7. Other (please specify)

E: ACCESS TO SAFE WATER

1. What is the main source of drinking water for your household?

1. Borehole /deep well

5. Bottled water

2. Shallow well

6. Unprotected source (open well, stream, river, pond, wetland etc)

3. Protected spring

4. Rain water (in tank/drum/jerry can/other container)

7. Other (please specify)

2. Why is the above mentioned the most common source for your drinking water? (MULTIPLE RESPONSES ALLOWED. PLEASE TICK UP TO THREE ONLY)

1. Close/ near to the h/hold

4. Meets/provides all the water needs at home

2. Permanent and reliable source of water

5. No treatment required before drinking

3. Has good quality of water

6. No need to pay money in order to use it

7. Other (please specify)

3. Who funded the construction of this water source?

- | | |
|--------------------------------------|---------------------------|
| 1. Government /District /Sub –county | 4. Individual (Name |
| 2. NGO (name | 5. Don't know |
| 3. Community efforts | |
| 6. Other (please specify) | |

4. What major problems do you find in using/collecting water from your main source? (MULTIPLE RESPONSES ALLOWED. PLEASE TICK UP TO THREE ONLY)

- | | |
|----------------------------------|---|
| 1. None | 7. Drying up/not permanent |
| 2. Too far from the household | 8. Contamination (e.g. by livestock etc) |
| 3. Road/path is bad | 9. Maintenance charges |
| 4. Risky for children esp. girls | 10. Lack of money to buy water/pay maintenance fees |
| 5. Congestion of users /queues | 11. Hard/salty water |
| 6. Irregular flow | |
| 12. Other(please specify) | |

5. What alternative sources of water do you use in your household and how often are these used? (RECORD ALL MENTIONED)

	Always	Once /twice a week	Once/twice in two –three weeks	Once /twice a month	Three or more times a month	Once /twice or more in a year
1. Only one source of water is used						
2. Borehole						
3. Shallow well						
4. Protected spring						
5. Rain water (in tank/drum/jerry can/other container)						
6. Unprotected source						
7. Others (specify)						

6. What is the purpose of using the alternative water source? (MULTIPLE RESPONSES ALLOWED)

- | | |
|-------------------------------------|---|
| 1. Very near home | 5. Unlimited access (no restrictions) |
| 2. Permanent source of water | 6. Minimal/no congestion at source |
| 3. Can meet all water needs at home | 7. Has soft water/water that easily makes froth |
| 4. Has good quality water | |
| 8. Other (please specify) | |

7. How far in kilometers is your main water source from your home?

- | | |
|-------------------------------|-----------------------------|
| 1. Less than half a kilometer | 4. More than two kilometers |
| 2. Almost a kilometer | 5. Not sure |
| 3. Nearly two kilometers | |
| 6. Other (please specify) | |

8. How much time does it take the following categories of people in your household to fetch water from your nearest water source? (PLEASE TICK)

	Less than 10 mins	10-30 mins	30 mins -1hr	1-2 hrs	2-3 hrs	Above 3 hrs
Adult females						
Adult males						
Female children						
Male children						
Female youths						
Male youths						
Household helps/domestic workers						

9. What else would your household do if you took a very short time to collect water from your main water source? (MULTIPLE REPONSES ALLOWED. PLEASE TICK UP TO THREE ONLY)

- | | |
|--|---------------------------|
| 1. Income generating activities | 5. Resting |
| 2. Spend it on leisure activities | 6. Nothing |
| 3. Spend it on other household activities | 7. Don't know /can't tell |
| 4. Children would attend school/education better | |
| 8. Other (please specify) | |

10. Does your household get water from water vendors?

- | | | |
|---|--------------------------------|--|
| 1. Never at all | 3. Yes, only in the dry season | 5. Yes, when children are at school/away from home |
| 2. Yes, sometimes, in wet and dry seasons | 4. Yes, always | |

11. What type of containers do you/your household members use to fetch water? (MULTIPLE REPONSES ALLOWED. PLEASE TICK UP TO TWO ONLY)

- | | |
|---------------------------|--------------------------------|
| 1. Plastic jerry cans | 3. Buckets (plastic /metallic) |
| 2. Clay Pots | |
| 4. Other (please specify) | |

12. On average, how many times a day do the following categories of people collect water from your main water source? (READ OUT AND INDICATE NUMBER)

	Never/ None	1-2	2-3	3-4	4-5	More than 5
Adult females						
Adult males						
Female children						
Male children						
Female youths						
Male youths						
Household helps/domestic workers						

13. How many litres of water do the following categories of people collect from the water source per visit? (READ OUT & TICK LITRETS PER CATEGORY)

	Never/ None	1-5	5-10	10-15	15-20	More (specify)
Adult females						
Adult males						
Female children						
Male children						
Female youths						
Male youths						
Household helps/domestic workers/labourers/ vendors						

14. What type of transport is mainly used by the following people in your household to collect water? (PLEASE TICK)

	Bicycle	Hand/head lifting	Wheel Barrow	Motor cycle/'boda boda'	Motor vehicle
Adult females					
Adult males					
Female children					
Male children					
Female youths					
Male youths					
Domestic workers /Household helpers					

15. What problems do you face with your method of transporting water to your household? (MULTIPLE ANSWERS ALLOWED, PLEASE TICK UP TO THREE ONLY)

1. No problem at all
2. Tiresome, needs a lot of physical energy
3. It is costly
4. Bad road/terrain to and from source
5. Limited amount of water transported at a time
6. Takes a lot of time when transporting water
7. Other (please specify)

16. What ailments/ health problems have the following members of your household suffered as result of fetching water? (READ OUT AND TICK)

	None	Chest pain	Headache/pains in the head	Nasal bleeding	Chronic fatigue	Back pain	Spinal problems/deformities	Pelvic pain/deformities	Others (specify)
Adult females									
Adult male									
Female children									
Male children									
Female youths									
Male youths									
Domestic workers /Household helps									

17. What qualities would you like to see in a water source in your village/community? (RECORD ALL MENTIONED)

1. Clean water safe for drinking
2. Does not breakdown so often
3. Cheap to maintain
4. No long queues
5. Uses short time to fill container
6. Not far from home
7. Permanent source
8. Not strenuous to operate
9. Not sure
10. Improved water source e.g. shallow well/bore hole
11. Other (please specify)

F: KNOWLEDGE OF HAND PUMP FUNCTIONALITY IN THE COMMUNITY

1. How often do hand pumps fail?

1. They have never failed
2. Nearly every month
3. About twice or more in a year
4. Once a year
5. Once in two years
6. Have no hand pump (*go to section G*)
7. Doesn't know/not sure

2. Which reasons best explain your answer in (1) above?

1. Over-use of the pumps
2. Misuse of the pumps
3. Laziness/lack of responsibility of caretakers&users

4. Poor repair works
5. Proper maintenance
7. Others (specify)

6. Few users

3. In which particular periods of the year are the hand pumps not working and why do you think this is so?

- | | |
|--|--|
| <ol style="list-style-type: none"> 1. June, July & August because of dry season 2. All the times pumps fail due to over use 5. Other (please specify) | <ol style="list-style-type: none"> 3. Months/ periods with heavy rains e.g. April, September-October 4. When children return from school due to long queues at the pumps |
|--|--|

4. Can you name /identify any parts of a hand pump?

1. Yes (name the part (s).....)
2. No /cant name any part

5. Who usually repairs your hand pumps when they break down?(MULTIPLE RESPONSES ALLOWED)

- | | |
|---|--|
| <ol style="list-style-type: none"> 1. Hand pump mechanic (from where.....) 2. Hand pump caretaker 6. Water User Committee 7. Other (please specify) | <ol style="list-style-type: none"> 3. Anyone in the community/from outside 4. Local council 1 authority 5. District or Sub County authority |
|---|--|

6. Have you ever observed the hand pump being repaired while it was still working?

1. Yes
2. No

7. What are the particular aspects/problems that water users dislike the most about hand pumps in your community? (READ OUT AND TICK)

	Serious aspect/problem	Moderate aspect/ problem	Low aspect/ problem	Not a problem
1. We were not consulted before the pumps were installed				
2. The pumps are difficult to operate				
3. The pumps do not pump enough water				
4. There are often long queues at the pump				
5. The pumped water tastes bad				
6. The pumped water makes us sick				
7. The pumped water has bad colour				
8. The pumps are always breaking down, they are unreliable				
9. When the pumps breakdown they don't get fixed for a long time				
10. We wish we knew how to fix the pumps				
11. The pump fees are too high				

8. If a hand pump breaks down, is it reported to someone in the community?

1. Yes (to whom is it reported
2. No
3. Don't know/Not sure

9. Does anybody from the outside community come to check on how the pumps are working/do maintenance before they break down?(MULTIPLE RESPONSES ALLOWED)

1. Yes (who comes.....)

- 2. No
- 3. Don't know/Not sure

10. To whom would you immediately report if you were the first to find out that your hand pump has broken down?

- 1. The water committee members
- 2. Pump mechanic in the village
- 3. Village council /LCI
- 4. Care taker of the hand pump
- 9. Other (please specify)
- 5. Sub-county authorities
- 6. District Authorities
- 7. Don't know /can't tell
- 8. No body

G: HOUSEHOLD- LEVEL WATER USE & MANAGEMENT

1. On average, how many jerricans of 20 liters do you use per day in your h/hold?

- 1. Less than 1
- 2. 1-3
- 3. 4-6
- 4. 7 and above

2. On average, how many litres of water do you use every day for each of the following activities?

	0-1	2-5	6-10	11-15	16-20	21-30	Above 30
Drinking/Cooking							
Washing clothes							
Bathing							
Washing utensils							
Cleaning house/ latrine /toilets							
Gardening/Crop farming							
Watering animals							
Construction e.g. brick making etc							
Food processing e.g. brewing, fermentation, making pancakes etc							
Washing bicycles/motorcycles/cars							

3. Please tell me which household water uses you regard most important in the dry and wet seasons (MULTIPLE RESPONSES ALLOWED, PLEASE TICK UP TO FOUR ONLY PER SEASON)

	Dry season	Wet season
1. Drinking	<input type="checkbox"/>	<input type="checkbox"/>
2. Washing clothes	<input type="checkbox"/>	<input type="checkbox"/>
3. Bathing	<input type="checkbox"/>	<input type="checkbox"/>
4. Washing utensils	<input type="checkbox"/>	<input type="checkbox"/>
5. Cleaning house/ latrine /toilets	<input type="checkbox"/>	<input type="checkbox"/>

- 6. Gardening
- 7. Watering animals
- 8. Construction
- 9. Food processing e.g. brewing, fermentation
- 10. Washing bicycles/motorcycles
Cars

4. Who in your household usually decides how water is allocated to the different uses? (MULTIPLE ANSWERS ALLOWED, PLEASE TICK UP TO TWO ONLY)

- 1. All household members (any reason.....)
- 2. Adult females (any reason.....)
- 3. Adult males (any reason.....)
- 4. Adult males & females (any reason.....)
- 5. Female children (any reason.....)
- 6. Male children (any reason.....)
- 7. Male & female children (any reason.....)
- 8. Household helps/ domestic workers (any reason.....)

5. How satisfied are you with the way water is used in your household?

- 1. Never satisfied 3. Some how satisfied
- 2. Always satisfied (*go to question 7*) 4. Not sure

6. If never or some how satisfied, why are you not satisfied with the way water is used in your household? (MULTIPLE ANSWERS ALLOWED)

- 1. There is a lot of water wastage 4. Burdens h/hold members who do water collection
- 2. Members who don't collect use most water
- 3. Male members are priority users 5. No deliberate water use plan
- 6. Other (please specify)

7. Who performs the following water related tasks in your household (PLEASE READ OUT AND RECORD RESPONSE)

	Adult females	Adult males	Female children	Male children	Female youths	Male youths	Laborers/ workers/H ousehold helps
Water collection/fetching							
Water storage(in tanks, drums, pots etc)							
Water treatment (e.g. boiling drinking water)							
Cleaning house/ toilet /bathrooms							
Washing utensils							
Washing clothes							
Watering crops/plants							
Watering/spraying animals							
Cooking food							

Washing bicycles/motorcycle/cars							
Bathing children							

8. If you or a member of your household has ever been denied access to a water source due to failure to contribute towards operation and maintenance, what did you do to get water?

1. We have never been denied access
2. Bought water from vendors
3. Used unprotected water sources
6. Other (please specify)
4. Collected from source in next village
5. Started harvesting rain water

9. Who in your h/hold is responsible for providing water when there is such a crisis?

1. Adult female
2. Adult males
3. Adult males & females
4. Female children
5. Male children
6. Female & male children
7. Household workers
8. All household members
9. None/nobody is responsible

10. How often do you get disagreements/conflicts over water collection and water use in your household?

1. Never (*go to section H*)
2. Some times
3. Often
4. Always
5. Not sure/Don't Know

11. Which members of your household usually disagree/conflict over water collection and use?

1. Adult females & adult males
2. Adult females & male /female children
3. Adult males & male /female children
6. Other(please specify)
4. Adult females & domestic workers/household helps
5. Adult males & domestic workers/household helps

12. What are the consequences of the disagreements /conflicts over water collection and use in your household?

1. Reduced willingness to collect water
2. Disproportionate rationing of water
3. Household distress
4. Delayed payment of monthly operation and maintenance fees
8. Other (please specify)
5. Disruption of work/ daily activities
6. Missing school
7. Reduced cohesiveness of family members

H: WATER USER PERCEPTIONS OF SAFE WATER SERVICES AND SYSTEMS

1. If you were asked to rank your major household needs, where would you put clean and safe water?

1. Top priority
2. Second priority
3. Medium priority
4. Very low priority
5. No priority

2. If water is second, medium or very low among the priorities, what is the first priority?

.....

3. What other priority community need(s) other than water would you prefer to have in your village/community? (MULTIPLE ANSWERS ALLOWED. PLEASE RECORD UP TO THREE ANSWERS)

- | | |
|---------------------------|------------------------|
| 1. None | 4. School |
| 2. Clinic/Hospital | 5. Food |
| 3. Road | 6. Agriculture related |
| 7. Other (please specify) | |

4. Who do you consider the most important safe water service provider in your parish/community?

- | | |
|--|--------------------------|
| 1. Government | 3. The general community |
| 2. Medical Missionaries of Mary(MMMs) | 4. Private contractors |
| 5. Can't tell/Not Sure/Don't Know | |
| 6. Other NGOs (please name) | |
| 7. None | |
| 8. Other (please specify) | |

5. How would you rate safe water service delivery in your community? (READ OUT)

- | | |
|----------------|---------------|
| 1. Good | 4. Very bad |
| 2. Fairly good | 5. Can't tell |
| 3. Bad | |

6. Which reasons best explain your rating of safe water service delivery in your community? (MULTIPLE ANSWERS ALLOWED. PLEASE TICK ONLY THREE)

- | | |
|--|--|
| 1. Breakdowns take long to be repaired | 6. Reduction in waterborne diseases |
| 2. Water user committees are inactive/inexistent | 7. Participation of water users in service delivery |
| 3. Mandatory monthly financial contributions | 8. Conflicts over water use are common |
| 4. Conflicts in management of the water source (s) | 9. Takes a short time to collect water |
| 5. Breakdowns are always repaired in time | 10. There are alternative safe water sources |
| 12. Other(please specify) | 11. Water User Committee not transparent in use of water user fees collected |

7. How would you rate the way safe water service delivery programmes in your community involve you in deciding what water service to provide and where they are to be provided?

- | | |
|----------------|------------------|
| 1. Very Good | 4. Very very bad |
| 2. Fairly good | 5. Can't tell |
| 3. Bad | |

8. Which reasons best explain your rating of how safe water delivery programmes involve you in deciding water service to provide and where?(MULTIPLE ANSWERS ALLOWED PLEASE TICK ONLY TWO)

- | | |
|--|--|
| 1. Not involved at all | 4. Our views are considered in all decision making |
| 2. Only involve few members of community | 5. Water user meetings not held/not there |
| 3. Involved throughout all planning meetings | |
| 6. Other (please specify) | |

9. What in your view can be done to improve the way safe water services are delivered in your community? (Probe by asking 'any other'; MULTIPLE ANSWERS ALLOWED. PLEASE TICK ONLY THREE)

1. Involve community members in service delivery

- | | |
|---|---|
| 2. Sensitize water users to make contributions | 5. Build capacity of water user committees |
| 3. Put up more alternative water sources | 6. Eliminate conflicts over water collection/access/use |
| 4. Undertake repairs of all broken down sources | 7. Train and equip local pump mechanics |
| 9. Other(please specify) | 8. External support |

10. What safe water services does the government provide in your community? (MULTIPLE ANSWERS ALLOWED. PLEASE TICK ONLY THREE)

- | | |
|---------------------------------------|---|
| 1. None | 4. Training and sensitizing water users |
| 2. Establishing various water sources | 5. Monitoring to ensure quality of services |
| 3. Regular maintenance and repairs | 6. Hiring and paying contractors |
| 8. Others (please specify) | 7. Don't know |

11. What is your rating of the contribution of government to your community's access to safe water services? (READ OUT)

- | | | |
|-------------|---------------|---------------|
| 1. Adequate | 2. Inadequate | 3. Can't tell |
|-------------|---------------|---------------|

12. What would you like to tell government officials at your district regarding safe water services delivery in your community/areas? (MULTIPLE ANSWERS ALLOWED. PLEASE TICK ONLY THREE)

- | | |
|--|---|
| 1- Services are good | 4. Need more community involvement |
| 2- Services need improvement | 5. Support training of water users on their roles |
| 3- Services are poor | |
| 6- More government involvement in water service delivery | |
| 7- Construct more pumps(boreholes/shallow wells) | |
| 8- Others (specify) | |

13. What other safe water services should government provide? (MULTIPLE ANSWERS ALLOWED. PLEASE TICK ONLY THREE)

- | | |
|--|--|
| 1- Training and equipping pump mechanics | 5-Undertake regular maintenance |
| 2- Construction of more safe water sources | 6-Regulation of spare parts distributors |
| 3- Community sensitization on roles | 7- Supervision of hand pump mechanics |
| 4- Ensure availability of spare parts | |
| 8-Don't know | |
| 9-Other (please specify) | |

14. What do you think community members make as a contribution to safe water service delivery in your community? (MULTIPLE ANSWERS ALLOWED. PLEASE TICK ONLY THREE)

- | | |
|--|--|
| 1. Contribute to capital cost (e.g. cash, materials or labour) | 3. Attend meetings and contribute ideas |
| 2. Contribute cash to regular operations and maintenance | 4. Provide meals for contractors/workers during construction |
| 5. Other (please specify) | |

15. What is your rating of the contributions of your community to safe water service delivery? (READ OUT)

- | | | |
|---|--|---------------------------|
| 1. Adequate | 2.Inadequate | 3.Doesnot know/can't tell |
| 4. Completely inadequate/they don't care at all | 5. Do not have/have never got a safe water source (<i>go to question 17</i>) | |

16. Which reasons best explain your rating of the contributions of your community to safe water service? (MULTIPLE ANSWERS ALLOWED. PLEASE TICK ONLY TWO)

- | | |
|--|--|
| 1. People don't want to pay maintenance fees | 3. People pay operations & maintenance fees well |
| 2. People uncooperative/do not attend meetings | 4. People attend meeting |
| 5. People work together | |
| 6. People do not have enough money | |
| 7. Other (Please specify) | |

17. In your opinion, what else should they do? (MULTIPLE ANSWERS ALLOWED. PLEASE TICK ONLY THREE)

- | | |
|--|--|
| 1- Provision of labour and materials e.g. stones, sand etc committee members | 4- Support training of water user |
| 2- Selection of water user committee members | 5- Maintenance of water sources |
| 3- Ensure proper hygiene at water source | 6- Compensation of water source caretakers |
| 7- Cooking for the workers/providing their food | |
| 8- Others (specify) | |

18. As an individual, what contribution (s) have you made towards safe water service delivery in your community in the past one year? (MULTIPLE RESPONSES ALLOWED. PLEASE TICK ONLY THREE)

- | | |
|--|--|
| 1- None (<i>go to question 20</i>) | 5- Member of a water user committee |
| 2- Labour and materials during construction | 6- Cash contribution towards capital cost |
| 3- Community mobilization and sensitization on roles | 7- Cash contribution towards operation & maintenance |
| 4- Participate in community meetings | |
| 8- Accommodating the workers | |
| 9- Other (please specify) | |

19. If money was contributed, how much was it in Uganda Shillings?

- | | | |
|--------------------------|--------------------------|-------------------|
| 1. 100 UGX or less | 3- Between 3000-5000 UGX | 5. Can't remember |
| 2. Between 1000-3000 UGX | 4. Above 5000 UGX | 6. Doesn't know |

20. What are you willing to contribute in future? (MULTIPLE RESPONSES ALLOWED. PLEASE TICK NOT MORE THAN THREE)

- | | |
|---|--|
| 1. Nothing | 4. Attending planning & sensitization meetings |
| 2. Labour/materials towards capital cost | 5. Cash contribution to operation and maintenance |
| 3. Cash contribution towards capital cost | 6. Leadership role e.g. member of water user committee |
| 7. Cooking for the workers/providing their food | |
| 8. Accommodating the workers | |
| 9. Other (please specify) | |

21. If unwilling to contribute, why are you unwilling?

- | | |
|---------------------------------|-------------------------------------|
| 1- I have no job | 4- It is the role of NGOs/CBOs |
| 2- I have no money | 5- I have too many responsibilities |
| 3- It is the role of Government | 6- I don't have enough time |
| 7- Other (please specify) | |

22. When was the last time your household made a financial contribution towards the operation, maintenance or repair of your water source?

- | | |
|---|----------------------------|
| 1- Have never made a financial contribution | 5- More than two years ago |
| 2- One month ago | 6- Can't tell |
| 3- Months ago | |
| 4- Nearly a year ago | |
| 7- Others (please specify) | |

23. Who usually mobilizes you to make a financial contribution to operation, maintenance or repair of your water main source? (MULTIPLE ANSWERS ALLOWED. PLEASE TICK UP TO THREE ONLY)

- 1- Have never been mobilized
- 2- Own initiative/voluntary
- 3- Water user committee
- 4. Local officials
- 5. Extension staff
- 6. NGO/Project staff
- 7-Local Council 1 committee
- 8-Other (please specify)

24. Who pays this money in your household? (MULTIPLE ANSWERS ALLOWED. PLEASE TICK UP TO TWO ONLY)

- 1-Adult females
- 2-Adult males
- 3-Adult males & females
- 4-Female children
- 10-Male youths
- 12- Don't Know (*go to question 25*)
- 5- Male Children
- 6-Female & male children
- 7-Household helps/domestic workers
- 8- All household members
- 9-Female youths
- 11-Nobody (*go to question 25*)

25. Why is it that this/these person(s) are the ones who pay? (MULTIPLE ANSWERS ALLOWED. PLEASE TICK TWO ONLY)

- 1- Household head
- 2- Is more available
- 3- Has the money
- 6- Other (specify)
- 4- Is the one responsible for paying
- 5- Don't know /not sure

26. How much say do the following categories of people /institutions have in getting government to address issues of interest to them in this community? (READ OUT)

	A lot	Some	Little	None	Don't know
1. Children					
2. Youth					
3. The elderly					
4. Men					
5. Women					
6. The educated					
7. The uneducated					
8. Traditionalists					
9. Politicians					
10. Civil servants					
11. Students					
12. The unemployed					
13. NGOs					
14. CBOs					
15. Religious groups					
16. Community leaders					

27. How often do you trust the government to do what is right?

- 1. Always
- 2. Sometimes/hardly
- 3. Never
- 4. Don't know/not sure

28. As a person, how much rights do you have in getting the government to address safe water issues of interest you?(READ OUT)

- 1. Unlimited
- 2. Some say
- 3. Very limited/No say at all
- 4. Don't know/not sure

29. How free do you think you are to express yourself on safe water issues concerning your community without fear of government reprisal?

- 1. completely free
- 2. moderately free
- 3. not free at all
- 4. can't tell/ not sure

I: KNOWLEDGE OF EXISTENCE& FUNCTIONALITY OF COMMUNITY BASED WATER MANAGEMENT

1. Does your improved water source have a water user committee (WUC)?

- 1. Yes
- 2. No (*go to section J*)
- 3. Don't know
- 4. Have no borehole/shallow well/protected spring(*go to section J*)

2. If your water source has a user committee, what are the roles and responsibilities of the committee in your community? (MULTIPLE ANSWERS ALLOWED. PLEASE TICK UP TO THREE ONLY)

- 1. Collecting money for Operation&Maintenance
- 2. Cleaning the source
- 3. Routine maintenance
- 4. Water source operation
- 5. Carry out repairs
- 6. Reporting breakages
- 7. Calling/Holding meetings
- 8. Other (please specify)

3. Please mention any one position in the composition of your water user committee

- 1. Doesn't know/ can't tell (*go to qn 5*)
- 2. Chairperson
- 3. Vice chairperson
- 4. Secretary
- 5. Treasurer
- 6. Care taker
- 7. Ex-official
- 8. Other (please specify)

4. What is the current composition of the water user committee for your protected water source by gender? (PLEASE TICK AS APPROPRIATE/MENTIONED)

	1. Male	2. Female	3. Can't tell/Doesn't know
1. Chair person			
2. Vice chair person			
3. Secretary			
4. Treasurer			
5. Care taker			
6. Ex-official			
7. Advisor			
8. Information/Public Relations Officer			
9. Other (specify)			

5. What is the percentage of women that ought to constitute your WUC?

- 1. Don't know /not sure
- 2. One third (33%)
- 3. Half (50%)
- 4. Other (please specify)

6. Looking at your water user committee, who are the majority that compose it?(READ OUT)

- 1. Women
- 2. Men
- 3. Don't Know/Not sure

7. How do you rate the performance of your water user committee?

- 1. Very good
- 2. Good
- 3. Fair
- 4. Poor
- 5. Can't tell

8. Please give reasons for your rating above (MULTIPLE RESPONSES ALLOWED. PLEASE TICK UP TO TWO ONLY)

- 1. Regular meetings
- 2. Transparent
- 3. Give feed back to community on their deliberations
- 4. Financially accountable
- 5. Takes good care of the water source
- 6. Do not hold meetings
- 7. Not transparent
- 8. Do not perform their stipulated roles
- 9. Do not harass/mistreat/deny fees defaulters access

10. Other (please specify)

9. When did your water user committee last meet?

- | | |
|--------------------------------|------------------------|
| 1. The committee has never met | 5. About a year ago |
| 2. Within this month | 6. About 2 years ago |
| 3. Last month | 7. Can't remember |
| 4. Months ago | 8. Don't know/Not sure |

10. How often does the entire community of water users meet to deliberate on water issues?

- | | |
|--------------------------|--------------------------|
| 1. Never met | 4. Once a year |
| 2. Once a month | 5. Twice or more a year |
| 3. Several times a month | 6. Can't tell/don't know |

11. From your observation in these meetings or what you know, who mainly attends these meetings?

- | | |
|-------------------------------|---------------|
| 1. Both men and women equally | 4. Can't tell |
| 2. Mainly women attend | 5. Don't know |
| 3. Mainly men attend | |

12. Why do you think it is the above persons who attend these meetings more?

- | | |
|--|--|
| 1. They care most about water in the household | 6. Spend money on repair and maintenance of water pump/source |
| 2. They are affected most when water is not available | 7. Men send women/their children to represent them in the meetings |
| 3. They spend/incure expenses when water-related diseases attack household members | 8. Are responsible for attending the meetings |
| 4. Are more educated than women | |
| 5. Don't care about water or its availability in the household | |
| 9. Others (specify) | |

13. What are the major issues discussed whenever these meetings take place? (MULTIPLE ANSWERS ALLOWED)

- | | |
|-----------------------------|---|
| 1. Accountability for funds | 5. Safeguarding the water source |
| 2. Payment of contributions | 6. Conflicts over the use of the water source |
| 3. Operation&Maintenance | |
| 4. Cleanliness and hygiene | |
| 7. Other (please specify) | |

J: HOUSEHOLD CAPACITY BUILDING FOR SUSTAINABLE UTILIZATION OF SAFE WATER IN THE COMMUNITY

1. What kind of sensitization or training on safe water service delivery have you or a member of your household received in the past?(MULTIPLE ANSWERS ALLOWED)

- | | |
|---------------------------------------|--|
| 1. None received (<i>stop here</i>) | 6. Operation of the water source |
| 2. Don't know | 7. Management of community contributions |
| 3. Forming water user committee | 8. Setting and enforcement of bye laws |
| 4. Cleaning the water source | 9. Can't remember |
| 5. Undertaking minor repairs | |
| 10. Other (please specify) | |

2. If training was received, who trained or sensitized you in the following areas (READ OUT)

	Government official (specify.....)	Local politicians (specify.....)	NGO/project staff (specify.....)	Don't know /don't remember
1. Forming water user committee				
2. Cleaning the water				

source				
3. Undertaking minor repairs				
4. Operation of the water source				
5. Management of cash contributions				
6. Forming & enforcing bye laws				
7. Others (please specify)				

3. When was the last time you were sensitized?

- | | |
|------------------------|--|
| 1. Within this month | 5. Don't know / can't remember |
| 2. Months ago | 6. Never/has never attended any sensitization/training |
| 3. About a year ago | |
| 4. About two years ago | |
| 7. Others (specify) | |

4. Who was mainly represented in the last training you attended on safe water service delivery in the community?

1. Both men and women were well represented
2. Men were more represented
3. Women were more represented
4. Can't tell/don't know

Annex II: Broad and specific principles of good governance

Principles	Specific principles of Good Governance under each of the broader principle
Legitimacy and Voice	<p>Participation: All people should have a voice in decision-making, either directly or through legitimate intermediate institutions that represent their intention. Such broad participation is built on freedom of association and speech, as well as capacities to participate constructively. Freedom of expression, freedom of association, and free media are important for ensuring that people can participate. Provision of decision making autonomy through to lower levels of government through ‘real’ devolution rather than lower level governments merely executing the tasks and instructions given them by the central government is fundamental.</p> <p>Consensus orientation: Good governance mediates differing interests to reach a broad consensus on what is in the best interest of the group and, where possible, on policies and procedures of governance. It calls for patience, good leadership and information sharing to allow a shared consensus among stakeholders.</p>
Direction	<p>Strategic vision: Leaders and the public have a broad and long-term perspective on good governance and human development, along with a sense of what is needed for such development to be achieved. There should also be an understanding of the historical, cultural and social complexities in which that perspective is grounded. Strategic visions should be both clear and permanent.</p> <p>Coherency: Taking into account the increasing complexity of the socio-economic and political environment. Decisions and policies made are conscious and respond to this complexity. Policies and actions are coherent, consistent and easily understood by stakeholders to avoid confusion.</p>
Performance	<p>Responsiveness: Institutions and methods must endeavor to serve all citizens. This principle means that all citizens know that they are taken into consideration by the people or institutions in charge. Sensitive ‘governors’ should have a characteristic which is ready to answer, sympathetic and sensitive to problems, can understand and implement the needs and wishes of the public.</p> <p>Effectiveness and efficiency: Processes and institutions produce results that meet needs while making the best use of resources. The extent to which previously stated goals and objectives of an activity have been met, the extent to which the civil service is independent from political pressure, the quality of public services i.e. policy formulation and implementation, and whether the government is credibly committed to policy effectiveness.</p>
Accountability	<p>Accountability: Decision-makers in government, the private sector and civil society organizations are accountable to the public, as well as to institutional stakeholders. This accountability differs depending on the organizations and whether the decision is internal or external and is mainly social but can also be physical and financial resources accountability. The absence of petty and grand corruption and the presence of an incorruptible police force are key ingredients of good governance.</p> <p>Transparency and openness: This calls for the free flow and sharing of information among development actors and the communities they serve. Processes, institutions and information are directly accessible to those concerned with them, and enough information is provided to understand and monitor them. To communicating to the public (in an accessible language) the decisions of national governments or institutions that serve the public. Providing access to information when requested by the public.</p>
Fairness	<p>Equity and inclusiveness: All people irrespective of their gender, physical or socio-economic status have opportunities to improve or maintain their well-being. When all citizens are able to elect representatives or to participate directly in the political decision making process, a society is inclusive and equitable.</p> <p>Rule of Law: Legal frameworks should be fair and enforced impartially, particularly the laws on human rights. The extent to which agents have confidence in and abide by the rules of society, and in particular the quality of contract enforcement constitutes a good measure of good governance. Individual loyalty to laws becomes a function of the public confidence in law enforcement agents such as the police and the judiciary and once this is achieved, the sustainability of government becomes possible.</p>

Adapted from: Graham, Amos and Plumptre (2003); van Doeveren (2011); Akif Ozer and Yayman (2011a)