ASSESSMENT OF FACTORS AFFECTING SANITATION GOVERNANCE IN NSANJE AND SALIMA DISTRICTS, MALAWI

MSc. SANITATION

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ASSESSMENT OF FACTORS AFFECTING SANITATION GOVERNANCE IN NSANJE AND SALIMA DISTRICTS, MALAWI

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(BSc ENVIRONMENTAL HEALTH)

A THESIS SUBMITTED TO THE FACULTY OF ENVIRONMENTAL SCIENCES, DEPARTMENT OF WATER AND SANITATION IN PARTIAL FULFILMENT OF THE REQUIREMENTS FOR THE AWARD OF A MASTER OF SCIENCE DEGREE IN SANITATION

MZUZU UNIVERSITY

JULY 2024

DECLARATION

I hereby declare that this thesis titled "Assessment of Factors Affecting Sanitation Governance

in Nsanje and Salima districts, Malawi" has been written by me and is a record of my research

work. All citations, references, and borrowed ideas have been duly acknowledged. It is being

submitted in partial fulfillment of the requirements for the award of the degree of Master of

Science (MSc) in Sanitation at Mzuzu University, Malawi. None of the present work has been

submitted previously for any degree or examination to any other University.

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CERTIFICATE OF COMPLETION

The undersigned certify that this thesis is a result of the author's work and that to the best of our knowledge, it has not been submitted for any other academic qualification within Mzuzu University or elsewhere. The thesis is acceptable in form and content, and satisfactory knowledge of the field covered by the thesis was demonstrated by the candidate through an oral examination held on:

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DEDICATION

I dedicate this work to my mum, wife, and children

And

Committed innovators towards sustainable development

ABSTRACT

The study was conducted to determine gaps and provide recommendations for improving the implementation of sanitation governance in the study districts. The study was conducted in Nsanje and Salima districts which are among the districts with poor access to sanitation suggesting poor sanitation governance in these districts. The data was collected from respondents, using questionnaires as interview guide and a checklist. The study participants included community key informants (n=110) who comprised of Health Surveillance Assistants, Area development committees, Natural leaders, the Water Point Committee, and the District Coordinating Committee. The other participants were household heads (n = 393). The study participants were sampled through purposive, convenient and systematic sampling modes. The data was analyzed using descriptive and content analysis. The bivariate analysis (cross-tabulation using Fisher Exact Chi-square test) was used to analyse selected variables to check the association between variables. The study found that there was no harmonised sanitation regulatory framework (p < 0.0001); fewer (< 50 %) sanitation governance documents were observed than those claimed to be available; majority (56 % in Salima and 91 % in Nsanje) claimed to be trained but no records of the training were available and the training referred to was not sanitation governance relate; and stakeholders at micro level, transfers their roles (100 %) to others suggesting low community participation in sanitation governance in Nsanje and Salima districts. The study results suggest gaps in the sanitation regulatory framework, capacity among the stakeholders at both micro and meso levels, and limited availability of sanitation governance documents in the study districts. It is important to develop a robust harmonised sanitation regulatory framework, improve capacity and involvement of the sanitation stakeholders. The study results will help sanitation stakeholders on improving and programming of sanitation projects in the country.

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LIST OF ABBREVIATION AND ACRONYMS

ADC Area Development Committee

CLTS Community Total Led Sanitation

DCT District Coordinating Team

HIV Human Immunodeficiency Virus

HSAs Health Surveillance Assistants

IRC International Rescue Committee

MOU Memorandum of Understanding

MZUNIREC Mzuzu University Research Ethics Committee

NGO Non-Governmental Organizations

OD Open Defecation

ODF Open Defecation Free

SIWI Stockholm International Water Institute

SPSS Statistical Package for Social Science

SWA Sanitation and Water Association

UNDP United Nations Development Programme

UN-Water United Nations Water

VDC Village Development Committee

WASH Water, sanitation, and hygiene

WHO World Health Organization

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CHAPTER 1: INTRODUCTION

1.1 Background

It is argued that sanitation governance is one of the critical determinants of improved sanitation in developing countries (Mjoli, 2015). Even so studies have found disconnect between sanitation stakeholders at Macro (Government and Donor Community), Meso (Local Authority) and Micro (Community for which the service is provided) levels (Ekane, Nykvist, Kjellén, Noel & Weitz, 2014). This is contrary to Water Governance Facility (2015) which defined sanitation governance as the means through which sanitation stakeholders collaborate to achieve and sustain sanitation results. Others defined sanitation governance as concerted effort from stakeholders to develop, implement, and monitor the sanitation project implementation together. Sanitation governance accords project beneficiaries' capacity from the project outset to hold those in authority accountable should something go wrong during the project implementation (Alix (ed). 2016). The project beneficiaries are also part and parcel of decision-making including finance management regarding project implementation (Adams & Zulu 2015). It is suggested that the systematic application of governance elements in sanitation projects in each area helps to sustain sanitation results (Bongartz, Vernon & Fox, 2016).

Nonetheless, globally over 2 billion people do not have access to basic sanitation and 673 million people practice open defaecation (OD) an indication of poor sanitation (WHO, 2019; WSP, 2012). In Africa, poor sanitation is a big challenge as well. Over 220 million people practice open defaecation while in the Sub-Saharan African Region, over 760 million people lack access to basic sanitation (World Health Organization, 2019; Moee & Rheingans, 2014). In Malawi, access to basic drinking water is low (67 %) and to basic sanitation is at 42 % while open defaecation is at 6 %. A good proportion (58 %) of rural households in Malawi lack access to basic sanitation (UNICEF, 2018; Jones, 2020). Access to basic hygienic services is as low as 10 % and about 4 million people lack access to safe drinking water in Malawi

(UNICEF, 2018). The sanitation situation in the country might be worse by now should Open Defaecation Free slippage be considered (Phiri, Kalulu, Kumwenda, Chidziwitsano & Kalumbi, 2014).

Studies have revealed that where there is bad sanitation governance there is often poor sanitation. For instance, a study conducted (Mjoli, 2015), found that poor sanitation governance led to poor sanitation for every affected household in South Africa. Literature suggests that poor sanitation governance is the main attribute of poor sanitation. A study by Maharaj (2012), revealed that the government of South Africa failed to attain and sustain sanitation results in Inanda due to poor sanitation governance. Studies have further shown that poor sanitation governance led to the missed targets of the Millennium Development Goals of increasing access to basic sanitation to 54 % by 2015 and remains the biggest challenge to the achievement of Sustainable Development Goals, especially goal 6.2 (Mjoli, 2015; Patterson, Kochi, & Kathryn., 2015).

Drivers of the implementation of sanitation governance vary across the globe, regions, and countries due to various reasons (Ekane, et al., 2014; Duit, Galaz, Eckerberg & Ebbesson, 2010). The antithesis to the stipulations of sanitation governance, the literature reveals that little attention is accorded to sanitation financing for maintenance and operations and that policies and by-laws are either deficient or not available (Ekane, et al., 2014; WaterAid, 2011). Deficiencies in research, unavailability of institutions or lack of inclusiveness in the institutions, faulty planning process, failure in infrastructure development, and lack of regulations are also listed among the attributes of poor sanitation governance or failure in the implementation of the same (Ekane, et al., 2014). The literature further suggests a failure to recognize the role played by governance to be critical for sanitation governance implementation and needs global attention (Bayu, Kim & Oki, 2019; Duit, et al., 2010).

The current global sanitation status is worrisome considering that attempts to address sanitation challenges date way back to 300 AD (Yannopoulos, Yapjakis & Kiafa-Saropoulou, 2017; Angelakis & Rose, 2014). Sanitation challenges are further being considered as a big puzzle to solve despite having sanitation governance in situ which has the potential to address sanitation challenges (Ekane, et al., 2014). Researchers have recommended to determine challenges on sanitation governance in areas where there is poor sanitation if we are to address sanitation challenges (Bayu, et al., 2019). Nevertheless, studies have shown that having governance instruments in place is not a guarantee for their implementation (Mkwate, Chidya & Wanda, 2017). A study conducted in 74 countries in sanitation governance revealed that despite that 74 % of the countries under study, had some governance elements in place to govern sanitation, it was only 19 % that had implemented the instruments (World Health Organization/United Nations-Water, 2017). Other studies have further revealed that although there might be institutions and regulations under WASH, they have been often biased towards water resource management (Geyer, Foster, Ludwig & Ndasiba, 2011). It is therefore imperative to delve deeper into an understanding and address challenges deterring the implementation of sanitation governance (Wanda, Manda, Mphande & Kushe, 2017).

Implementation of sanitation governance varies from country to country or from region to region despite sharing common sanitation challenges and having commonly prescribed sanitation governance tools (Duit *et al.* 2010). In Burundi, sanitation governance focuses on urban sanitation with the roles and responsibilities of stakeholders not well defined. Tanzania relies on Non-State Actors and uses a demand-driven approach. In Uganda and Rwanda, the central government plays the leading role, but the two countries fare differently in sanitation. It is therefore imperative to further understand sanitation governance by drawing lessons from stakeholder interactions and comparing their performance (Ekane, et al., 2014).

Sanitation governance in Malawi is multi-level. It falls among several government departments and ministries (Ministry of Health and Population, 2018; Ministry of Water Development and Irrigation, 2008; Ministry of Natural Resources and Environmental Affairs, 2004; Ministry of Local Government, 1998). The multi-level sanitation governance in Malawi embraced CLTS to enhance ODF in Malawi in 2008 (MoHP., 2018). Nevertheless, since 2008 only 4 districts in Malawi managed to attain ODF (Ministry of Health and Population, 2020) by the time this study commenced in 2021 and their current sanitation status is not clear (Phiri, et al., 2014). Governance challenges in Malawi are not only being observed in sanitation but also in water resource management (Mkwate, et al., 2017; Wanda, et al., 2017; Kalulu, et al., 2012). The objectives of the National Environmental Policy (2004), Local Government Act (1998), Malawi National Sanitation Policy (2008), and National Sanitation and Hygiene Strategy (2018), are to improve environmental sanitation in Malawi. However, the documents are not clear on the jurisdictions and roles of the stakeholders. The documents discuss sanitation challenges independently of each other than doing so in liaison with all the interested partners and targeted beneficiaries involved (MoHP., 2018; MoWDI., 2008; MoNREA., 2004; MoLG., 1998). The implementation of sanitation governance documents depends on the commitment of the local government, available resources, and interests of donors involved in the sanitation sector and good sanitation governance (Bayu, et al., 2019; Ekane, et al., 2014). Studies therefore urge governments to take necessary steps to promote adequate access to sanitation and have a coherent sanitation governance framework as one of the necessary steps to implement and facilitate universal access to safe sustained water supply and sanitation services and facilities (Water Governance Facility, 2025)

1.2 Problem statement

The developing countries including, Malawi, are still struggling to attain and sustain sanitation results (United Nations International Children's Emergency Fund 2018; WHO/UN-Water.,

2017). Studies implicate weak sanitation governance to poor access to improved sanitation (Bourque, 2016; Hooghe & Marks, 2003). Malawi is among the countries struggling to sustain sanitation results (United Nations International Children's Emergency Fund 2018). The country struggles to curb cholera episodes yearly and lies amongst the countries in Sub Saharan Region of Africa with high prevalence of undernutrition which is also more often than not associated with poor sanitation conditions like diarrhoea and helminths (UNICEF, 2018; MANA., 2013). Amongst the 29 districts of Malawi, it is only 4 districts which were declared ODF suggesting poor sanitation in the majority (86 %) of the Malawi districts and the least performing districts in sanitation had less than 3 traditional Authorities declared ODF by 2020. Nsanje and Salima districts fall among the districts with poor sanitation in Malawi (Kafanikhale, 2020). Sanitation has remained poor in Malawi disregarding the introduction of CLTS in the country since 2008 (NSHS,2028). The poor sanitation in Nsanje and Salima districts suggests weak sanitation governance in these districts and weak sanitation stands out amongst the factors associated with poor sanitation(Masindi & Duncker, 2016). Weak sanitation governance could negatively impact, the attainment of Malawi Vision 2063 as adequate sanitation falls among the key enablers of the Vision. The study conducted by WaterAid (2011) showed a correlation between poor sanitation with weak sanitation governance. WaterAid (2011) then highlighted the need for the availability of a robust sanitation regulatory framework for the successful implementation of sanitation projects (Ekane, et al., 2014). A robust sanitation regulatory framework refers to a framework that clearly defines service delivery, provides management arrangement and regulatory responsibilities, harmonized by legislation at local government with clear laws (Alix (ed). 2016).

There are a lot of studies conducted assessing factors affecting sustainability of attained sanitation results, but only a few of these have highlighted the need to address governance

challenges in sanitation. Nevertheless, one of the two studies that highlighted governance challenges, focused on water governance challenges in Balaka (Mkwate, et al., 2017) while the other looked at governance issues in relation to the flood risks in Karonga District (Wanda, et al., 2017). This study therefore focused on governance challenges in sanitation and regardless of their geographical situation in districts of the country. Thus, knowledge of factors affecting sanitation governance was considered crucial.

1.3 Aims of the study

1.3.1 Main objective

The main objective of this study was to assess factors affecting sanitation governance in Nsanje and Salima districts in Malawi.

1.3.2 Specific objectives

The specific objectives of the study were:

- a) To analyse the elements of the regulatory framework affecting the implementation of sanitation in Nsanje and Salima districts.
- b) To assess the availability of sanitation governance documents at sanitation institutions at both meso and micro levels in Nsanje and Salima districts.
- c) To determine knowledge in sanitation governance among sanitation stakeholders at the meso and micro levels in Nsanje and Salima districts.
- d) To analyse stakeholder participation in sanitation governance at micro level in Nsanje and Salima districts.

1.3.3 Research questions

a) What are the elements of sanitation regulatory framework affecting the implementation of sanitation projects in Nsanje and Salima districts?

- b) Are sanitation governance documents available at both meso and micro levels in Nsanje and Salima districts?
- c) Do stakeholders have knowledge in sanitation governance at both at both meso and micro levels in Nsanje and Salima districts?
- d) Do stakeholders participate in sanitation governance at micro level in Nsanje and Salima districts?

1.4 Justification of the study

The study is critical in the prevention of most communicable diseases including COVID 19 and polio which have a link to poor sanitation which cannot be addressed without identifying and addressing sanitation governance challenges (Bongartz, et al., 2016; Ekane, et al., 2014). The study results will help Water and Sanitation stakeholders to address sanitation governance challenges for improved sanitation. Universal access to basic sanitation subsequently helps to prevent and reduce sanitation related diseases. The study in sanitation governance is critical to the attainment of Malawi Vision 2063. This study is further in line with the attainment of Sustainable Development Goals especially goal 6.2 in the country (WHO/UN-Water., 2017). Sustainable Development Goals' agenda, of universal access to basic sanitation and ending open defaecation, attainment awaits identification and addressing sanitation governance challenges in most developing countries including Malawi. The aim of the Malawi Health Sector Strategic Plan (HSSP II) of promoting access to clean water, and sanitation and that of the National Sanitation and Hygiene Strategy of ending OD. The agenda cannot be realized unless challenges affecting the implementation of sanitation governance are understood further and addressed (MoH 2018), and conditions including polio (Bongartz et al.2016). The study results will inform Water and Sanitation Stakeholders in the country in addressing gaps in sanitation regulatory framework and policy for improved programming and implementation of sanitation projects.

1.5 Ethical considerations

The study ethical clearance was sought from Mzuzu Research Ethics Committee (MZUNIREC). The clearance was sought to ensure the safety and protect the rights of participants and its protocol number is MZUNIREC/DOR/22101(Appendix B). Participants were briefed on the study so that they could understand what the study involved, the reasons, and the benefits of their participation to the beneficiaries and the system. This then allowed participants to decide whether to participate or not but also allowed them to withdraw when they became suspicious of the study (Appendix C). They were further not allowed to participate until they consented to their participation in writing.

1.6 Study limitations

Resources was one of the limiting factors. The study wished to have conducted the study in at least three districts sampling one district from each region. Nevertheless, the results from the sampled two districts have shown the similar gaps which suggest weak sanitation governance in the country. Randomization of the sample of the Traditional Authorities and respondents ensured a representative sample was arrived at. The other limiting factor was COVID 19 which had an impact on the study period. However, the COVID-19 period was addressed by holding research courses and presentations online.

CHAPTER 2: LITERATURE REVIEW

This chapter begins with the presentation of the theoretical framework followed by the conceptual framework. Then the chapter reviews the literature in sanitation governance about the study objectives and sanitation governance elements reviewed in this study. The study also reviewed some comparative studies conducted elsewhere like the multi-level study which was conducted to compare sanitation governance in Rwanda, Tanzania, and Uganda to deepen an understanding of the drivers of sanitation challenges (Ekane et al 2014).

2.1 Sanitation governance theoretical framework

This study is anchored mainly by the democratic theory which promotes the rule of law, and fair and impartial use of legal framework emphasizing the need to protect human rights (Nandy, 2013). The democratic theory further advocates for the total subjection of an individual to the community authority from which originated the concepts of liberty and equality (Fischer, 2012). Sanitation governance is driven by the democratic theory above as it promotes the collaboration of stakeholders and collective rule which is highlighted in sanitation governance (Ekane, et al., 2014).

According to (Bayu, et al., 2019), the main challenge in sanitation governance could be the failure of governments to integrate previous results of monitoring efforts into the development of a robust sanitation regulatory framework. Lack of the sanitation regulatory framework negates universal access to basic sanitation and sustenance of achieved sanitation results. Studies have shown that sanitation governance elements are the major influence on the attainment and sustenance of sanitation service delivery (Geyer, et al., 2011).

2.2 Sanitation governance conceptual framework

The sanitation governance conceptual framework presents interrelated governance factors driving sanitation governance in Nsanje and Salima districts. The conceptual frame presents

the objectives of the study and variables that are governance elements of interest to this study (Fig. 1). The topmost part of the conceptual framework contains objectives under which are variables which are generally the factors being assessed to determine their impact in sanitation governance in the study districts. The conceptual framework suggests that if sanitation governance challenges are addressed, there could be synergy among sanitation players during decision-making, operation, maintenance, and monitoring of service provision. Eventually, there will be improved access to and sustenance of sanitation results (Ekane, et al., 2014).

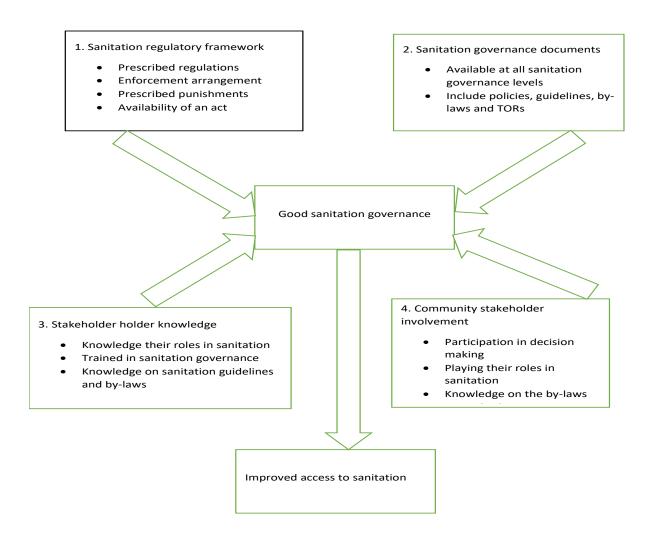


Figure 1: Conceptual framework (Source: Adapted from https://www.mdpi.com)

2.3 The elements of sanitation regulatory framework

Sanitation regulatory framework refers to a framework that clearly defines service delivery, and regulatory responsibilities, harmonized by legislation at local government with clear laws (Alix 2016).

Political theory ensures justice, rights, and law enforcement (Dryzek, et al., 2011). Normative theory sets what should be the standard of doing things (Singer, 2018) and organization theory likens institutions to rules that govern the game (Wegerich 2001). Alix, (ed). (2016), faults sanitation governance when the policy is not clear and further argues that a good policy document should stipulate its goal, and objectives and be framed in such a way that it ringfences the conduct of stakeholders. The organization theory further suggests that an effective policy should clearly state the benefits of its implementation and be understood by beneficiaries (Bayu, et al., 2019; Alix, (ed). 2016). Further than this, studies conducted elsewhere support the argument that the policy should lay a platform for enhancing the sustainability of the achieved results (Hulland, Martin, Dreibelbis, DeBricker & Winch, 2015). The studies further provide for the sanitation guiding framework for service provision, design, implementation, monitoring, and resource allocation. The literature further suggests the availability of a regulatory framework to be critical for policy implementation and enforcement of sanitation functions enshrined in the policy (Damoah et al. 2018). The study conducted in Rwanda showed that the implementation of a policy faced resistance since other key stakeholders were not consulted and the policy contradicted the norms and cultural practices of the area. The resistance the community had against the policy suggests the need to have full consultation from beneficiaries and put in place institutions that could govern the provision of sanitation services at the local level as well (Ekane, et al., 2014; Amable, 2004).

Regulations specify who should provide what service to whom. The regulations also define standards and codes that clarify the quality of service required and sanctions to take should

there be bleach of the drivers of implementation of a given project. Currently, regulation enforcement in developing countries remains a challenge due to a lack of a framework and overlapping mandates which limits ministry initiative to develop and enforce the regulation (Lüthi, et al., (ed.) 2011). A regulatory framework ensures the availability of guiding rules and standards for achieving sustained services. The sanitation regulatory framework should be established at all levels and be fertile to defend the rights to access to safe, improved, and sustained sanitation results by all as stipulated in the global WASH frameworks (Sanitation and Water Association, 2020).

2.4 Availability of sanitation governance documents.

Literature has shown that there are a lot of efforts being made to address sanitation challenges such as the agenda for change that aims at achieving universal access to water, sanitation, and hygiene by 2030 (WHO/UN-Water., 2017; United Nations Development Programme, 2015). There has been investment in effective technologies for sustainable WASH service which promotes technology assessment. Sustainable Development Goals, goal number 6 also recommends universal access to basic sanitation (International Rescue Center, 2012; Lüthi, et al., (ed.) 2011). Malawi has several instruments but with gaps for promoting the provision of sanitation services and facilities, which include the National Water Policy (2005), National Sanitation and Hygiene Strategy (2018), and National Sanitation Policy (2008). The National Sanitation Policy suggested the development of a sanitation regulator frame in 2008 years ago an indication of the unavailability of the framework. It is not clear whether the framework was developed. The policy does not clarify the implementation protocol for sanitation governance. The policy further fails to stipulate sanitation structures from the National through the community levels and focuses much on urban sanitation (NSP 2008). This is contrary to the sanitation governance protocol which recommends the setup of functional sanitation specific institutions at all levels (Uckrow & Stephan 2012). The National Sanitation Policy has least

stipulated the sanitation governance structures at the micro-level an indication of its failure to recognise that the stakeholders at the micro-level have high de facto like that of the National Technical Working Group on realising sanitation results (NSP 20008, NSHS 2018). The presence of sanitation governance protocols is also another important element in sanitation projects and the push for the inclusion of private stakeholders in sanitation is also a plus to sanitation governance. However, literature shows that multiple government ministries in developing countries including Malawi play roles in sanitation but without clarity on their jurisdiction and this negatively impacts coordination and leads to misuse of resources through duplication of effort (MoHP., 2018; MoWDI., 2008). It is also not known whether Malawi has SOPs for good governance in sanitation by looking at the struggle the country is having to attain and sustain achieved sanitation results at micro level (Phiri, et al., 2014). This then casts doubt on the availability of a robust sanitation regulatory framework which is also dependent on the further delineation of the implementation of sanitation governance and factors influencing its implementation.

Failure to do so could raise suspicion and jeopardize project acceptability which could affect the sustainability of achieved results (Damoah, Amoako, Isaac, Akwei & Botchie, 2018). Sanitation governance provides for transparent and accountability frameworks which allows sanitation project beneficiaries hold stakeholders at Macro and meso level accountable for the project funds should communities feel the team did not do their duties as stipulated in the project terms of references regarding resource management (Lüthi *et al.* (ed.) 2011). The beneficiaries have the right to hold the project team accountable should something go wrong (Averill & Gottlieb 2019). A lesson on transparency and accountability can be drawn from Ghana. Ghana at one point suffered project failure following a lack of accountability and transparency which resulted in project cost deviation and abandonment (Averill & Gottlieb, 2019; Damoah, et al., 2018).

2.5 Stakeholder knowledge in sanitation governance at meso and micro level

Literature suggests training as one of the critical elements of sanitation governance. It is emphasized that stakeholders at micro level institution should be provided with training in sanitation governance to ensure that they have access to information regarding sanitation projects taking place in their areas and play their roles (Averill & Gottlieb, 2019). Furthermore, sanitation institutions at both meso and micro level should receive training on finance management which should include accountability and transparency, leadership, project conceptualization, planning, implementation, and evaluation. Further than this, sanitation governance protocols stipulate the importance of the stakeholders' understanding of their roles in sanitation at both meso and micro levels of sanitation governance. Sanitation stakeholders are encouraged to know laws and guidelines guiding sanitation projects in their respective areas (Alix, (ed). 2016). Contrary to the required sanitation governance protocols in training sanitation stakeholders, literature has revealed inadequate and un-updated knowledge in sanitation among the stakeholders which leads to non-functional sanitation institutions especially at micro level (Bayu, et al., 2019; Ekane, et al., 2014)

2.6 Community participation at micro level

Effective community involvement is embedded in democratic theory. Network theory supports community participation as it is the mainstay of the diffusion of cultural ideas and information amongst the stakeholders in question and democratic theory supports collective rule (Fischer, 2012; Donaldson & Preston, 1995). Other studies agree with the democratic theory above that sustained sanitation results are ingrained in stakeholder collaboration which enhances active participation by project beneficiaries and all other relevant stakeholders (central and local governments, community structures, youths, NGOs, and Civil Society Organizations. It is further suggested that beneficiaries should be the centre piece of decision-making regarding the project at all levels of implementation, filtering out assumptions and designing the project

on real issues. The argument above underscores the low probability of project sustainability should the project proposal leave behind community norms, culture, interests, and concerns (Lüthi, et al., (ed.) 2011). Nevertheless, participatory planning does not always guarantee project sustainability since the local government, private sectors, and the central government might have preconceived project design; ignore proposed changes to the project from the beneficiaries, and the appraisal process done in a hurry (Gomez & Graham, 2004). In such scenarios, researchers suggest beneficiaries are not participatory but rather just contribute to the interests which are contrary to the community's own regarding the project to be implemented (Lüthi, et al., (ed.) 2011; Gomez & Graham, 2004). A study conducted in Mexico registered success in sanitation projects through the existence of specific and inclusive local sanitation committees. The committees were also given capacity on project budgeting and management, development, and use of institutions for encouraging community participation in decision-making regarding project implementation, monitoring, and maintenance (SIWI., 2008).

CHAPTER 3: METHODOLOGY

This chapter begins with a description of the districts of study and the criteria for their selection into the study areas. The chapter further presents subsections of methodology which include research methods and data collection tools, methodology matrix, ethical consideration, and study limitation.

3.1 Study area

The study was conducted in the Traditional Authorities (TAs) Kalonga and Tengani in Salima and Nsanje Districts of Malawi, respectively (Fig 2). The study was conducted in Nsanje and Salima to deepen an understanding of factors affecting sanitation governance as these districts fall among the districts with poor sanitation which suggests poor sanitation governance. The presentation of the study area covered demographic, settlement pattern, economic, water and sanitation profiles. The study areas were presented separately for each district to appreciate their efforts, similarities and differences on sanitation performance.

3.1.1 Nsanje District

Demography, settlement patterns, and economic activities

Nsanje district has a population of 299,168 people of which 155, 590 are females and 143,578 are males. There are 46,952 under-five children in Nsanje District (NSO, 2018). Nsanje district has 63, 972 households with 32,172 female-headed households. Settlement patterns in Nsanje are linear along the shire and M-1 road, sparse in hilly areas, and mushroomed in trading centres and the Boma. There are also temporary settlements in marshy areas while a few have permanent structures. The major part of the district is heavily affected by floods every time the country experience floods. In Nsanje people grow maize, rice, sweet potato, cotton, and groundnuts. Cotton is the main cash crop grown in Nsanje. The crops are mainly cultivated through irrigation during the dry season along the Shire and Ru o riverbanks. In Nsanje

common animals reared are cattle and goats. People in Nsanje earn a living from crop and animal farming. Apart from farming, people in the district also run small businesses which include fish mongering (NDC, 2020).

Water and Sanitation

Nsanje District has 75 % coverage of access to safe water. Latrine coverage in Nsanje is pegged at 63 % with 2 TAs declared ODF. Wastes are disposed of through incineration, burning, burying, and refuse pits. Nsanje is one of the districts in the country which are prone to floods and, water and sanitation-related disease outbreaks (NDC, 2020; Kafanikhale, 2020)

3.1.2 Salima District

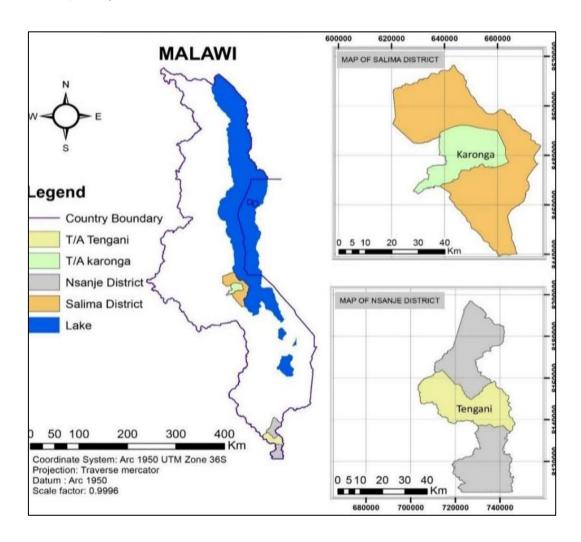
Demography, settlement patterns, and economic activities

Salima District has a population of 478,346 people of which 246, 415 are women and 77, 309 under-five children. The district has 105,558 households with 37,356 female-headed households (NSO, 2018). Salima has a population density of 222 people/km². People in Salima have a nuclear pattern of settlement in towns and trading centres, linear settlements along the roads, and sparse settlements in areas where farming is extensive. In Salima, people earn their living through subsistence farming, doing small business, and fish mongering. Major crops grown in Salima include maize, cotton, sugar cane, and rice. Cotton and tobacco are the main cash crops grown in Salima District (SDC, 2018).

Water and Sanitation

In Salima, access to safe water is 85 % in the rural areas of the district. Salima has latrine coverage at 82 % with 3 TAs declared ODF. Wastes in Salima are disposed of through incineration, burning, pit latrine, burying, and refuse pits. Salima District is amongst districts in Malawi which are prone to floods. Salima registered high cases of under-five diarrhoea. In

2018 the district reported 12,522 diarrhoea cases among the under fives (SDC, 2018; Kafanikhale, 2020).



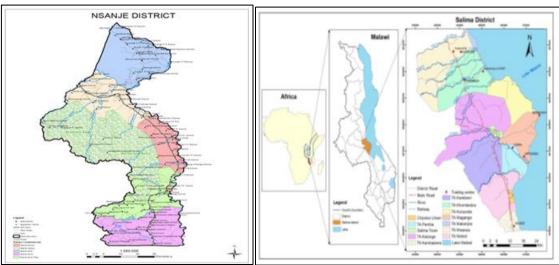


Figure 2: Map of Nsanje and Salima (Source: mec.rg.mw/maps-districts)

.3.2 Research methods and data collection tools

3.2.1 Study design and data collection

The mixed methods study design was used where both qualitative and quantitative methods were employed. The mixed methods were employed because the study thought of collecting both qualitative and quantitative data.

3.2.2 Sampling frame

Table 1 presents demographic data of Nsanje and Salima districts. The table also provides some data from which sample frames for the household samples for two districts were drawn. Table 2 shows demographic data for Traditional Authorities Tengani in Nsanje and Kalonga in Salima from which the study was conducted and sample frames for households and villages were drawn. The respondents to the study were WASH stakeholders from private, government departments, local community leaders, and households. The targeted participants included community key informants which include Area Development Committee (ADC) members, District Coordinating Team (DCT) members, Water Point Committee (WPC) members, Health Surveillance Assistants (HSAs), and Natural Leaders (NLs).

The significant similarities and differences between of the two study areas more especially in sanitation were reviewed (Table 3). The demo data captured could help the researcher to appreciate the efforts put by the stakeholders in sanitation and further highlight the probable situation of the sanitation governance in the districts of study (Nsanje and Salima).

Table 1: Summary of demographic data for study districts

Study districts

Variable	Nsanje	Salima
Population	316, 123	521, 186
Females	171, 285	246, 877
Under five children	50, 580	83, 390
Households	79 031	130, 297
Female-headed households	32, 172	45, 309

Table 2: A summary for demographic data for the Traditional Authorities in Salima and Nsanje districts

	Traditional Authorities	Traditional Authorities		
Variable	TA Tengani	TA Kalonga		
Population	27, 447	62, 496		
Households	5, 678	11, 111		
Villages	79	83		

3.2.3 Differences and similarities of the study areas

Table 3 provides the summary of the study area in sanitation status at the time the study was commenced. The table presents number of traditional authorities in each district of study declared ODF. The table also provides sanitation coverage in these districts in terms of sanitary

facilities with focus on latrines. The other data the table provides is coverage on access to safe water in Nsanje and Salima districts.

Table 3: Sanitation coverage of the study areas

Coverage (%)		
Salima	Nsanje	
85	75	
75	63	
27 (<i>n</i> =3)	22 (<i>n</i> =2)	
	Salima 85 75	

TAs: Traditional Authorities; ODF: Open defaecation free

3.2.4 Sampling methods

A multi-stage sampling mode was employed to select participants. Traditional authorities Kalonga and Tengani in Salima and Nsanje districts were respectively selected through cluster sampling method from which 8 Villages from each TA were systematically and randomly selected using a thumb rule of 10 % of the villages in the targeted areas. Purposive sampling was used to sample HSAs and DCT members while convenience was used to select those at the time of interview. The households were systematically sampled after determining the household sampling interval for each village. Government officials and private stakeholders were also selected purposively and conveniently interviewed. The number of community key informants was determined using the rule of thumb of 30 % since the sample frame was less than 1000. The rule of thumb was used since the sample calculation formula the Investigator used, gives a more accurate sample size when the sample frame is at least larger than 1000.

The sample size for households was therefore calculated using the Yamane formula (Yamane,

1967): Sample size =
$$\frac{P}{(1+P\times e^2)}$$
 Equation 1

where P=sample frame (Salima =11111) + (Nsanje =5678) e (margin of error) (0.05)= $\frac{16789}{(1+16789\times(0.05^2))}$

Sample size = 393

Sample proportions Salima 67 % of 393=263

Nsanje 33 % of 393 =130

Total sample =393

The sample sizes were calculated using a 30 % of the sample frame using rule of thumb (Table 4)

Table 4: Sample sizes for the study participants

Category	Formula used	Sample frame	Sample size
Households	Yamane formula	16	393
H.S.As	Rule of thumb	100	30
DC members	Rule of thumb	69	20
Natural leaders	Rule of thumb	69	20
WPC	Rule of thumb	69	20
DCT	Rule of thumb	70	21

H.S. As: Health Surveillance Assistants; ADC: Area development committee; Water point committee; DCT: District coordinating committee

3.2.5 Data collection methos and tools

The study collected both qualitative and quantitative data. Qualitative data was collected through in-depth interviews to get in-depth insights regarding respondent views, knowledge, and understanding of sanitation governance. Qualitative data was collected to confirm

knowledge gaps in sanitation governance among the proportion that was quantitatively suggested to have knowledge gaps and quantitative data was collected to determine, among others, the proportion of households, Extension Workers, and DCT members who had capacity gaps in sanitation governance. The quantitative data was also collected to determine the proportion of available sanitation governance documents. The other reasons for collecting qualitative data was to learn if the sanitation stakeholders could link sanitation challenges to sanitation governance which is an indicator of their knowledge status in sanitation governance. Both qualitative data were further collected from Sanitation Structures to determine their functionality and capacity for sanitation governance.

The enumerators collected data from participants using in-house questionnaires which were used as interview guide at the respondent office or residence (Appendices D, E & F). The doconfirm checklist was also used to confirm some responses from the respondents (Appendix G). In a situation where the DCT member was extremely engaged, the questionnaire was dropped and picked later, particularly on the government and non-state actors. The enumerators could return to those DCT members who were not available at the first visit.

3.2.6 Data management and statistical analysis

Data was analysed through content and descriptive analysis. Content analysis entailed the generation of frequencies, narrative analysis, transcribing, generation, and coding of themes. Descriptive analysis, besides the generation of frequencies, it included the generation of tables and testing the results using Fisher Exact Chi-Square. Before conducting descriptive statistics, the raw datasets were checked for completion and errors. The data was cleaned. Questionnaires received were entered and checked for incompleteness to make meaningful sense. The bivariate analysis (cross-tabulation using Fisher Exact Chi-square test) was used to analyse selected variables to check the association between variables. For qualitative data analysis, the results generated were used to supplement the findings of the quantitative results. Qualitative data

were analysed using narrative analysis where there was a transcription, generation, and coding of themes based on the narrative responses from the interviewees. Narrative analysis was employed to analyse the qualitative responses from respondents. The enumerators visited and interviewed each household respondent for 15-20 minutes. The questionnaires were in English and uploaded on Android.

3.2.7 Methodology matrix

The methodology matrix provides a summary of objectives, variables, methods of data collection and analysis (Appendix A).

CHAPTER 4: RESULTS

This chapter presents the research results based on the objectives of the study. The data was collected from 20th December 2022 to 11th January 2023. Section 4.1 gives the response rate of the respondents and subsequent sections give actual results based on the factors being assessed and per objectives of the study. The study was conducted to analyse the elements of the regulatory framework guiding the implementation of sanitation; and to assess the availability of sanitation governance at both the meso and micro levels of sanitation governance. The other objectives were to determine knowledge in sanitation governance among sanitation stakeholders at both meso and micro levels of sanitation governance and to analyse stakeholder participation in sanitation governance level at micro level of sanitation governance in Salima and Nsanje districts of Malawi. Furthermore, this chapter presents the study results concurrently from Salima and Nsanje under each objective. A summary of results is presented comparing sanitation governance in Salima and Nsanje districts. The chapter begins by presenting the results of the response rate of the interviews which were conducted in Salima and Nsanje (Table 5). The results have been provided in tables, figures, and narrative format.

Table 5: A response rate of study participants

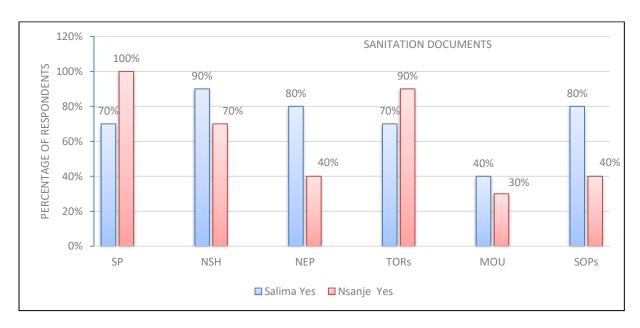
Variable	Salima District (n)	Nsanje District (n)
DCT members	10	10
Community key informants	55	55
Households	263	130
Total	328	195

DCT: District coordinating team

4.1 Elements of sanitation governance regulatory framework guiding the implementation of sanitation

The study analyzed the elements of sanitation regulatory framework which included availability, management arrangement and regulation of the sanitation regulatory framework mainly at the meso level of sanitation governance in the study districts.

District WASH stakeholders, members from DCT, were interviewed using a questionnaire on whether they have a sanitation regulatory framework (Figure 3). There was no harmonized sanitation regulatory framework reported. Those cited have conflicting management arrangement and with only clear regulations at urban setting. Salima, National Sanitation and hygiene strategy was the highest (90 %) sanitation regulatory framework reported while in Nsanje the most reported (100 %) document was National sanitation policy.



MOU: Memorandum of understanding; SP: Sanitation policy; NSP: National sanitation and hygiene strategy; NEP: National Environmental Policy; TORs: Terms of references; Standard operation procedures

Figure 3: Documents used as regulatory framework in Salima and Nsanje districts

4.2 Availability of sanitation governance documents at meso and micro levels

4.2.1 Availability of sanitation governance documents at meso level

The DCT members were further asked whether the they had sanitation documents at both meso and micro levels in the districts (Tables 6). The results showed that highest (100 %) amongst the DCT members in Salima while in Nsanje the dissemination was highest (80 %) among the Area development committee.

Table 6: Stakeholders with sanitation documents availability in Nsanje and Salima districts

	Salima Distric	et	Nsanje l	District	
	Reported (n)		Observe	Observed (n)	
Variables	Yes	No	Yes	No	
DCT members	10	0	7	3	
Natural leaders	0	10	0	10	
Area Development Committee	5	5	8	2	
Village Development					
Committee	8	2	6	4	

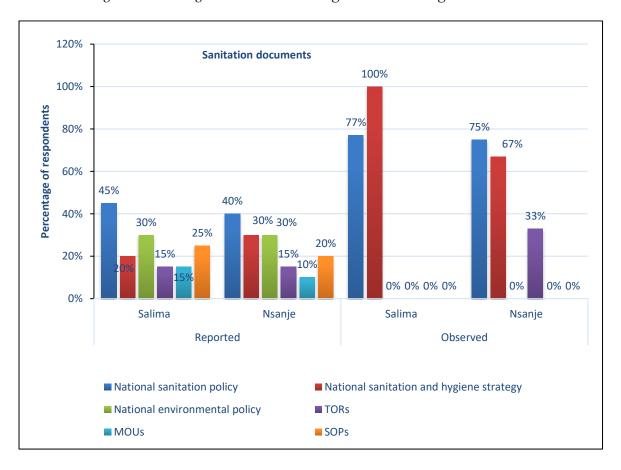
DCT: District coordinating team

4.2.2 Sanitation governance documents at micro level

The study further assessed the availability of sanitation governance documents micro level level by looking at the available sanitation documents, such terms of references (TORs), memorandum of understanding (MOUs), guidelines, and SOPs (Figure 4). The results showed that National Sanitation policy was the most cited sanitation regulatory framework in both Salima (45 %) and Nsanje (40 %) districts. National sanitation and hygiene strategy was the most (100 %) observed sanitation regulatory framework in Salima District while National Sanitation Policy was more (75 %) observed in Nsanje District.

The respondents were further asked to explain the reasons for the status quo regarding sanitation governance documents at their disposal.

Use of MOU was reported at the community level where one of the respondents in Tradition Authority Kalonga in Salima said "We do not have specific sanitation documents used for implementation of the sanitation projects. Most of the times we use a memorandum of understanding between the government and non-governmental organizations."



MOU: Memorandum of understanding; TORs: Terms of references; SOPs: Standard operation procedure

Figure 4: Documents reported and observed with community key informants in Nsanje

Fig 5 presents a summary of the results on finance transparent and accountability framework. The interviewees were further asked if they had finance transparent and accountability frameworks (Figure 6). The results showed that the transparent and accountability framework was not observed in both districts of the study despite being cited as available. On the

availability of a finance transparent and accountability framework, another respondent from

Salima said that their committees have a finance transparent and accountability framework but there was no evidence of the availability of the same. In support of the above assertion one of the community key informants in Salima, through an in-depth interview, explained: "We cannot say we have a written or approved document that we are using as transparent and accountability framework. When we are asked to take part in monitoring sanitation projects in our communities, we usually follow what we have on as a district. But to tell the truth, our committees do not have such a framework. "Similarly, one of the community key informants from Nsanje, explained: "We do not have the framework that could guide us. However, we use some guidelines that would help our communities to follow up on the projects including sanitation projects. Although that does not mean that we have in our custody the guidelines through kulondoloza it's when we use the guidelines."

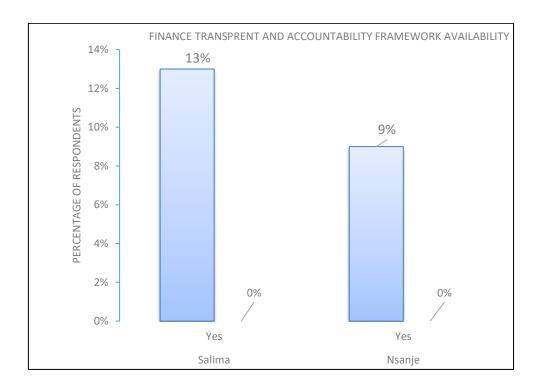


Figure 5: Availability of sanitation finance transparent and accountability framework and stakeholder knowledge in sanitation finance

4.3 Knowledge of stakeholders in sanitation governance at meso and micro levels

4.3.1 Training of sanitation institution members

Community key informants were asked whether they were trained and the last time they were trained (Table 7). The results showed that the stakeholders were trained (P-value <0.05). The observations showed no records of the training (p-value <0.001). The recent time of training cited was more than two years ago and was beyond the recommended training period.

Table 7: Training of community informants in sanitation governance in Salima and Nsanje districts

	Salima Nsanje			sanje		
Variable	Respons	se (n)		R	esponse (n)	P-value
Variable	Yes	No	Total	Yes	No	
Trained people	31	24	55	50	5	0.0001
Available reports	0	31	31	0	50	

4.3.2 Household knowledge on sanitation governance documents.

The study went further to determine if the households knew sanitation governance documents they can refer to when implementing sanitation projects in both Salima and Nsanje districts. Respondents were further asked if they knew their and other stakeholders' roles in sanitation in their areas (Table 8). The results showed that community members knew the available sanitation by-laws (*p*-value <0.05). The results further showed that the DCT members visits the communities for sanitation activities in both Salima and Nsanje districts (*P*-value <0.05). Nevertheless, there were no minutes confirming the visits (*p*-value 0.0001). The qualitative data from the households in Nsanje also agree with the findings from the quantitative results. On sanitation by-laws one respondents narrated "We do not know any by-laws regarding

sanitation. All we know is that we should have toilets in our households as we were taught by our community health promoters." Another household head provided examples of sanitation by-laws and said, "Our village head man encourages that everyone should have a toilet and if found that there is a household without toilet that particular household is fined with a goat or chicken." Similarly, in sanitation guidelines, one of the women from an in-depth interview explained "Some of sanitation and hygiene guidelines recommend owning and using the latrines which have a functional hand washing facility that is used when visiting the toilets, rubbish pits, and cloth lines. A household without toilets does not have respect."

Additionally, participants at micro level, narratively responded on how the community implements sanitation by-laws, as one of the men in Salima, said "Previously in our area, the village head could call for community gathering in sanitation issues such as owning and using the toilets. Households could be warned that those without pit latrines and hygiene facilities were to pay chicken or money as a fine". On following sanitation guidelines and strategies, one of the participants narrated as follows: "We are taught by our health surveillance assistants that we should cover our food, always use the toilets, use the rubbish pit for waste collection and sweeping our surrounds."

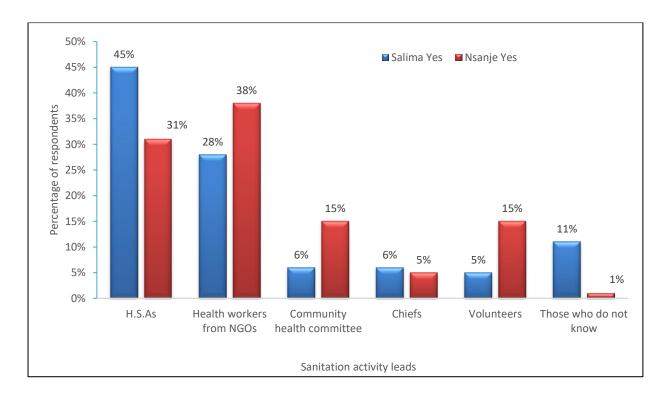
Table 8: Knowledge of households in sanitation governance in Salima and Nsanje

		Salima (n)			Nsanje (n)		P-
Variables		Yes	No	<i>P</i> -value	Yes	No	value
Regulations	Know Sanitation by-laws	158	105	0.003	71	59	0.005
Regulations	Know sanitation guidelines	8	255	0.034	9	121	0.069
DCT visits	Visit status	150	113	0.002	71	59	0.003
DCT visit	Once in three months (quarterly)	29	234	0.87	12	118	0.091
frequency	Once in 6 months (bi-annually).	234	29	0.007	118	12	0.089
Availability of	f minutes	0	263	0.001	0	97	0.063

DCT: District coordinating team

4.3.3 Knowledge of households on their roles in sanitation

Respondents at households were asked to mention the leads in sanitation activities in their communities to understand if they knew that they were the ones to lead sanitation projects in their areas and that other players should only contribute to their efforts (Figure 7). The results showed that more respondents (45 %) cited H.S.A in Salima and in Nsanje majority (38 %) mentioned health personnel from NGOs as the leads in sanitation projects in their areas.



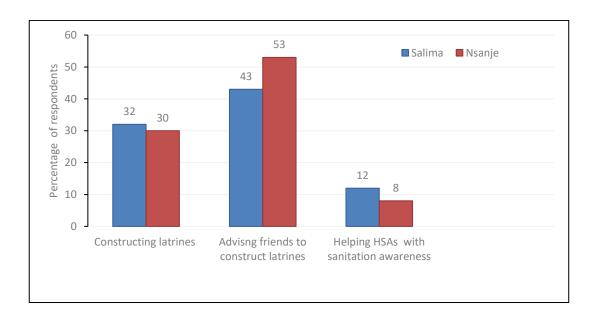
H.S.A: Health Surveillance Assistant; NGOs: Non-Governmental Organizations

Figure 6: Leads of sanitation in the communities

The results have shown that people know their roles as they are able to encourage each other on latrine construction both in Salima (53 %) and Nsanje (52 %) districts (Figure 7). Qualitative results also agreed with quantitative results as was explained by one of the participants during an in-depth interview in Salima who said, "Most of the times HSAs are the ones visiting our houses and we do what they tell us so that next time they come, they should see that we have done what they told us to do". Furthermore, on who has the responsibility for toilet

construction, one of the participants interviewed said "We have the responsibility to construct toilets in our households to prevent diarrheal. We also share our latrines with those who practice open defecation." However, one of the women narrated that "the government should strengthen health committees to punish those who do not want to construct toilets so that people will construct toilets because they fear the government."

The qualitative results in Nsanje also agree with the quantitative results. The study found that through in-depth interviews, the respondents indicated that the government has the power to influence sanitation behaviour adoption as one of the women explained "I said that the role of the government is to encourage people to have toilet because the government has the capacity and laws which most people fear once they come to effect. So, the government can use laws to punish those who do not have toilets". The study found that that more people (44 %) in Salima indicated that the government is supposed to encourage the communities on latrine construction while in Nsanje 25 % of the respondent's cited construction of latrines for the elderly as one of the government responsibilities in sanitation (Figure 8).



HSAs: Health Surveillance Assistants

Figure 7: Households roles in sanitation at community level

4.4. Stakeholder participation in sanitation governance at micro level

Community committee members were interviewed to determine if the district councils involved them in decision-making in sanitation projects in their areas. Respondents were also asked if they had selection criterion for the members of the sanitation institution which specified on the members (Figure 5). More (84 %) community committee members in Nsanje were involved than in Salima (44 %) in facilitating sanitation activities which were planned by the DCT and taking place in their areas. The study has revealed that none of the committees had a reference (110, 100%) framework for clarifying the exact proportion for each category of membership into the committee.

The other participant from Nsanje District also said, "We are not directly involved in sanitation projects, and we may not know the amount of money allocated to sanitation projects as we are not part of the committees at the meso level."

One of the participants from Salima had to say "We know budget for the sanitation through meetings at the district council. But sometimes we hear from the radio, but we have not been shared copies of the reports."

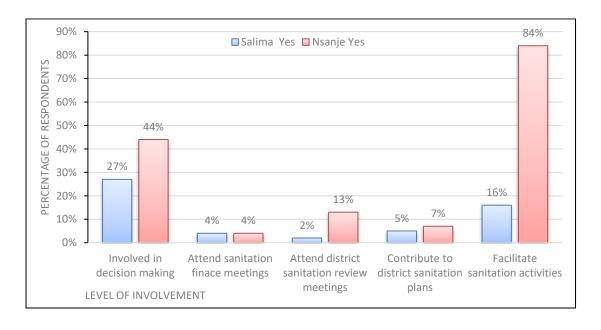


Figure 8: Community key informants' involvement by the District Coordinating Team

4.5 Comparative analysis of sanitation governance in Salima and Nsanje

The bivariate analysis, (cross-tabulation using the Fisher Exact Test), was used to analyse selected variables.

Table 9: Comparative Analysis of the results in Salima and Nsanje districts

	Salima (%)	Nsanje (%)	P-value
Documents Observed at DCT Key informants			
Confirmed	47	89	0.236
Not confirmed	53	21	
Total	100 (<i>n</i> =55)	100 (<i>n</i> =34)	
Document disseminated			
Yes	100	90	
No	-	10	
Total	100 (<i>n</i> =10)	100 (<i>n</i> =10)	
Documents Observed at Community key informant	s		
Confirmed	97	92	0.0765
Not confirmed	3	8	
Community key informants Trained in sanitation g	overnance		
Trained	56	91	0.0345
Not Trained	44	9	
Total	100 (<i>n</i> =55)	100 (<i>n</i> =55)	
Involved in decision making by district council			
Yes	27	44	0.0451
No	73	56	
Total	100 (<i>n</i> =55)	100 (<i>n</i> =55)	
District Council conduct sanitation visits at commu	unity level		
Yes	56	71	0.234
No	44	59	
Total	100 (<i>n</i> =263)	100 (<i>n</i> =130)	
Households' knowledge of sanitation guidelines			
Yes	3	9	0.634
No	97	93	
Total	100 (<i>n</i> =263)	100 (<i>n</i> =130)	

DCT: District coordinating team

Table 10: Comparative analysis

HH knowledge of sanitation by-laws	Salima (%)	Nsanje (%)	P-value
Able to mention sanitation by-laws	55	51	0.453
Correctly mentioned by-laws	45	49	
Total	100 (<i>n</i> =263)	100(n=130)	
OD is still practiced			
Yes	30	16	0.002
No	70	84	
Total	100 (<i>n</i> =263)	100(n=130)	
Households know their roles in ending open defecation			
Yes	62	81	0.053
No	38	19	
Total	100 (<i>n</i> =263)	100(n=130)	

HH: Households; OD: Open defaecation

The Fisher Exact Test was used taking into consideration of the cells with less than 5 count values. The results were compared between these two districts in terms of the availability of sanitation regulatory framework documents, dissemination of the documents to key stakeholders, and confirmation of the documents community key informants reported to have. The comparison is also based on the community key informants trained capacity in sanitation governance and their involvement in decision-making at the district level. The study also compared the results of household heads' involvement in sanitation governance and their knowledge of sanitation issues (Tables 9 & 10).

4.6 Chapter summary

This chapter has presented the results of Salima and Nsanje districts based on research objectives. This chapter also compared the results of these two districts. The next chapter focuses on the discussion of the results.

CHAPTER 5: DISCUSSION

This chapter gives a detailed discussion of the findings. Results obtained from interviews and observations are triangulated and compared to other studies or reports done elsewhere in the same field. The discussion has also compared the study results between Salima and Nsanje districts.

5.1 Sanitation regulatory framework

Dinala et al. (2020), provided the policies, acts, and strategies that guide the sanitation sector in Malawi which among others include the National Sanitation policy, Water Resources Act (2013), and ODF strategy. These documents are not harmonized. The study has revealed that sanitation stakeholders refer to and use different documents for sanitation governance in the study districts as sanitation regulatory frameworks. The documents referred to and used include the Local Government Act 1998 which decentralized some WASH sector functions to the District Councils; the Water Resources Act 2013 and the Environmental Management Act 1998. Sanitation documents referred as regulatory framework does not provide clear regulation and sanctions at micro level other than they do for urban sanitation. The results suggest lack of a harmonised sanitation regulatory framework in the districts of study. The results further support the findings of UNICEF (2019) which observed that the key available legislation indirectly underpin sanitation. National Sanitation Policy in Malawi also noted the gaps in sanitation regulatory framework and recommended the development of the framework in 2008. The results furthermore more echo the challenges reported by the MoWDI (2015) that there are gaps in sanitation legal instruments for the regulation of the WASH Sub-sector in Malawi. The study's results further support the assertion by the WaterAid (2016-2021) assessment report which indicated that institutional, legal, and policy frameworks in the WASH sector present a picture of disintegration and fragmentation. The disintegration and fragmentation affect decision-making and coordination on critical issues that affect sanitation activity implementation. The lack of the harmonized sanitation regulatory framework may lead to not having common guiding standards, regulations at all governance levels and tools for the implementation of sanitation projects leading to the district's failure to sustain sanitation results. As Alix (2016) indicated that delivery the regulatory framework ensures the availability of guiding rules and standards for achieving sustained services and that the stakeholders have common tools for evaluation and action to take to enforce sanitation service delivery and implementation. The results further suggest the need for the development of a harmonised robust sanitation regulatory framework for guiding the implementation of sanitation projects.

5.2 Availability of sanitation governance documents at meso and micro levels

The cited sanitation regulatory frameworks were fewer than expected. The highest cited document was National Sanitation Policy (Salima 45 %, n=20; Nsanje 40 %, n=20). This suggests limited availability of sanitation regulatory frameworks both in Salima and Nsanje districts. The few observed sanitation regulatory frameworks in Salima and Nsanje were only available in English. This is contrary to sanitation governance protocol which stipulates that sanitation governance documents targeting community stakeholders should be in the local language to keep all stakeholders at all levels well informed and enabling them full participation in decision making (Mjoli, 2015). The study has further revealed that there are no TORs for community committee members and no evidence was observed for the availability of inclusion criteria framework for the selection of members into sanitation institution casting doubt on availability of inclusive committees in the study areas. These findings differ from Jiménez et al. (2020) who found that mutual inclusiveness of all stakeholders in water and sanitation projects was a major attribute of good sanitation governance. However, women's inclusion criteria, were clearly stated only in Water Point Committees' guidelines. The results further highlight the need for the development of TORs, and selection criteria for inclusive committees.

The language could increase limitation to understanding sanitation governance especially at the micro level. The findings further concur with Wanda et al (2017) who noted that lack of knowledge of water and sanitation instruments is one of the factors contributing to the challenges of governance of water and sanitation at the district level.

Gabriel (2017), provided that transparency and accountability frames are a proven critical element for improved access to and the quality of public service delivery. Similarly, (Bayu, et al., 2019), asserts that transparency and accountability are key elements in sanitation governance. Contrary to the above assertions, the results vindicated the lack of transparent and accountability frameworks at community institutions in the study districts. This is important because the lack of transparency and accountability frameworks to guide the expenditure of sanitation project funds demean the trust the community members have in stakeholders at the micro level and reduces the probability of project results sustainability (Ormazábal, 2018; Young, 2009). Nevertheless, regarding the assertions that the sanitation finance reports, and budget allocation are shared with them, there was no observable evidence for the availability of such reports. Lack of evidence on the availability of the same casts doubt on the assertion that sanitation finance reports are shared with institution members in the study districts. The challenges associated with sharing the reports in sanitation finances with community key informants could be due to a lack of sanitation finance transparency and accountability frameworks. This may have a negative implication on the success of the project implementation as Damoah et al. (2018) pointed out that if the beneficiaries of the project are dissatisfied and believe the project team is not transparent may not rule out corruption and not support the project effort for successful implementation. The results therefore provide for not availability of the sanitation governance documents but also in appropriate language at each level

5.3 Stakeholder knowledge in sanitation governance at meso and micro levels

The study results have provided the status of community stakeholder knowledge in sanitation; inclusiveness of the sanitation institutions; TORs and finance accountability and transparency frameworks in Salima and Nsanje districts.

5.3.1 Stakeholder knowledge in sanitation governance at meso and micro levels

The study results have shown that the community key informants were trained. The *p-value* 0.0001 shows the significance of the training in sanitation governance. The study also established that the communities have knowledge in sanitation bylaws (Salima -value 0.003; and Nsanje-p-value <0.005). Nevertheless, the training did not positively influence sanitation governance in the districts of the study. This could be so considering that the study did not find any training records supporting the assertion that the community key informants were trained, while others could not remember whether they were trained or the last time they were trained. The study further learned that the trainings cited were not necessarily sanitation governance related and the institutions to which members belonged were not sanitation specific. This implies knowledge gaps in sanitation governance as participants do not know the protocols of sanitation governance and refer to other training for sanitation governance. The study agrees with Wanda et al., (2017) who also observed that one of the factors affecting the implementation of sanitation governance is a lack of training and awareness among stakeholders. As Lüthi, et al., (2011) indicated that the training of the project beneficiaries should include transparent and accountability which could help them to lead stakeholders in developing a finance strategic plan and guide project expenditure and monitoring. Contrary to this, the study found that none was trained in sanitation finance transparency and accountability. This defeats the purpose of having sanitation governance in situ for sustained sanitation results and risking the perpetual sanitation challenges if sanitation governance challenges are not addressed. The results call for the capacity building of sanitation stakeholders in sanitation finance and the development of a sanitation transparent and accountability framework to enhance community participation in managing and averting sanitation project fund embezzlement.

The study further found that the communities in Salima and Nsanje transferred their roles to others (*p-value*<0.05). This further revealed a sanitation governance knowledge deficit amongst the communities in Salima and Nsanje as they shifted their roles of ending open defecation within their communities to government, NGOs, and HSAs other than themselves. Household members did not know that according to sanitation governance protocols (Duit *et al.* 2010) they are the ones to lead sanitation projects from the outset through monitoring. The study results suggest sanitation knowledge gaps at both meso and micro levels in both Salima and Nsanje. The results concur with Madon et al (2018) findings which indicated that the main cause for the change in attitudes towards improved sanitation is not that they fear the law but that once people saw the cholera outbreak occurring, they started constructing their toilets. Capacity building at both meso and micro levels is imperative to address sanitation governance challenges in the study areas.

5.4 Participation of sanitation stakeholders in sanitation projects at the micro level

Contrary to the requirement of sanitation governance, the study revealed that the community sanitation institution members do not take part in decision-making in sanitation projects at the council level. They are only involved at the later stage of the project like the facilitation (84 % in Nsanje & 44 % in Salima) of community sanitation activities in which decisions have already been made by DCT which comprises council stakeholders at the district level alone. It was also revealed that the DCT make the visits to the communities (Salima-*p-value* =0.002; and Nsanje -*p-value*=0.003). Nonetheless, the visits of DCT members to the communities did not positively influence implementation of sanitation governance both in Salima and Nsanje as there was disconnect between the DCT member visits reported and the evidence of the visits.

The DCT visits to the communities had no minutes to reflect their visits and the topics of discussion during the visits. The visits were not significant (p>0.05 for both Salima and Nsanje). The limited visits to the communities by DCT members could have contributed to limited participation in sanitation activities taking place in the study areas. The study has vindicated limited participation in sanitation governance by stakeholders more especially at the micro level from where the project beneficiaries come from.

5.5 Comparing sanitation governance in Salima and Nsanje district

This section discusses the similarities and differences in sanitation governance in Salima and Nsanje based on the objectives of the study. The results of the comparative analysis have shown no significant difference in the situation of sanitation governance in the two study districts. There is no harmonised sanitation regulatory framework in sanitation governance. The availability of the reported documents at DCT was neither significant (p-value 0.236). The level of the availability of the reported documents at community key informants was also not significant (0.0765). There was no difference regarding the training the key community informants received (p-value 0.0345) and that the trainings referred to in both districts were not sanitation governance related. The study found no training reports for the claimed trainings both in Salima and Nsanje districts. The findings suggest knowledge gaps in sanitation governance amongst stakeholders in Salima and Nsanje districts. Limited access to sanitation documents was also prominent in both districts of Salima and Nsanje. The results showed weak sanitation governance in both districts.

CHAPTER 6: CONCLUSION.

This chapter provides a summary of the findings, conclusion, and recommendations. The summary has been presented on the findings on the elements of sanitation regulatory framework, the availability of sanitation governance at both meso and micro levels of sanitation governance, capacity of stakeholders and community participation in sanitation projects.

6.1 Summary

This section presents a summary of the study. The study has revealed gaps in sanitation regulatory; lack sanitation governance documents at both meso and micro level of sanitation governance; knowledge gaps among stakeholders in sanitation governance at both meso and micro levels in the study areas; and limited participation in project conceptualization planning, implementation, and monitoring. The revelations suggest weak sanitation governance and its negative implication in sanitation.

6.2 Conclusion

The study results suggest gaps in sanitation regulatory framework, capacity amongst sanitation stakeholders, limited availability of the sanitation governance documents, and limited involvement of community sanitation stakeholders at both meso and micro levels in the study districts. The findings on objective (a), have revealed gaps on sanitation regulatory framework as there was no harmonized regulatory framework for guiding, regulating, and enforcing sanitation standards at all levels of sanitation governance including at the micro level. There was no consistency on the documents which sanitation stakeholders referred as sanitation regulatory framework and the management arrangements in the documents. The study has also confirmed unavailability of sanitation act in both Nsanje and Salima districts. Availability of a harmonised sanitation regulatory framework with clear management arrangement and supporting documents is critical for improved sanitation programming and implementation in the districts.

On objective (b), the results found limited access to sanitation governance documents. The evidence of the document's availability was fewer or not available at all despite the claim the responded made of having them. Apart from physical unavailability, the fewer documents seen were in the language which was not appropriate for the stakeholders especially for at micro level. This limited the use of the document by the stakeholders at that particular level. Sanitation governance documents should not only be available but also be in the appropriate language for each level to enhance their implementation.

The objective (c) ascertained knowledge gaps at both meso and micro levels. The knowledge gap was noted as the participants claim of being trained was not backed by records. There were no records of the trained stakeholders. Further than this, was that the training referred to by the stakeholders were not sanitation governance related. The participants did not know what sanitation governance training entails. At community level, sanitation stakeholders could not recognise their roles in sanitation such that they could transfer their core roles to other stakeholders. Capacity on sanitation governance among sanitation stakeholders should not be overlooked. The stakeholders need to know their roles and the capacity they are supposed to receive to enhance sustainability of achieved results.

Through objective (d), the study has concluded lack of community involvement in sanitation governance. There results showed limited participation in sanitation governance by stakeholders from micro levels. The study has shown that stakeholders from micro level are only involved from implementation and to the less extent. Sanitation decisions are made at the DCT demeaning the sanitation governance recommendations which put the sanitation beneficiaries at the helm of planning, implementation and evaluating their own projects to enhance project sustainability.

The lack of harmonised sanitation regulatory framework; limited availability of sanitation governance documents; lack of capacity amongst sanitation stakeholders; and limited involvement of sanitation stakeholders; suggest weak sanitation governance both in Salima and Nsanje districts. The study findings call for the address on sanitation governance challenges enroute to the address of sanitation challenges in these districts.

6.3 Recommendations

Based on the findings of the study on the objectives of the study, the following have been recommended to enhance good sanitation governance in the districts which is critical for attaining and sustaining sanitation results.

Objective (a) recommendations on sanitation regulatory framework:

- Developing a harmonized sanitation regulatory framework for guiding, regulating and enforcing sanitation stands at all levels including at micro level.
- The regulatory framework should have supporting documents such as Sanitation Act with clear regulations, management and enforcement arrangement.

Objective (b) recommendations on sanitation documents availability:

- There is need to make sanitation governance documents available at all levels including the micro level of sanitation governance.
- o The documents should be in the appropriate language at each level.

Objective (c) recommendations on stakeholder capacity:

 Water and sanitation sector should build capacity of stakeholders in sanitation governance at all levels, including at micro level, to ensure they know and play their roles in sanitation

Objective (d) recommendations with regards to community involvement:

 WASH sector should encourage improved community participation especially from stakeholders at micro level so that the sanitation beneficiaries should lead in planning, implementation and evaluation their own sanitation projects.

6.4 Areas for further studies

This study only focused factors affecting sanitation governance at meso and micro level in only 2 districts, further studies can be conducted to assess factors affecting sanitation governance at macro level and factors delaying the development of the harmonized sanitation regulatory framework in the country. The study can also be conducted in more districts to determine sanitation governance status in the country.

References

Adams, E. A. & Zulu, L. C., 2015. 'Participants or customers in water governance? Community partnership for peri-urban water supply, *Geoforum*, 25(2015), pp. 112-115.

Alix, L., (ed). 2016. Governance of water and sanitation: As it is applied to humanitarian and development projects. Paris. France: Action Against Hunger.

Amable, B., 2004. *The diversity of modern capitalism*. 2004-02-12 ed. London: Oxford University Press.

Angelakis, N. A. & Rose, B., 2014. Evolution of sanitation and wastewater technologies through the centuries, London: IWA.

Averill, W. E. & Gottlieb, J., 2019. Two theories of transparency. Springer, Berlin, German.

Bayu, T., Kim, H. & Oki, T., 2019. Water governance contribution to water and sanitation access equitability in developing countries, Advanced Earth and Space Science, Tokyo: Japan.

Bongartz, P., Vernon, N. & Fox, J., 2016. Sustainable sanitation for all: Experiences, challenges, and innovations, 2016 ed. London: Practical Action Publishing. Ltd, UK.

Bourque, E., 2016. WATER, SANITATION, AND HYGIENE (WASH)GOVERNANCE: NOTES ON THEORY AND PRACTICE, s.l.: UNESCO-IHE.

Centre for Disease Control, 2021. *Global Water, Sanitation & Hygiene (WASH): Sanitation & Hygiene,*Washington D.C: Centers for Disease Control and Prevention.

Damoah, I. S., Amoako, I. O., Akwei, C. & Botchie, D., 2018. Corruption as a source of government project failure in developing countries, Evidence from Ghana. *SAGE*, 49(3), pp. 17-33.

Dinala, H., Sambo, J., Nyambe, S. & Yamauchi, T., 2020. *A Comparative report on health and water, sanitation,* Tokyo: Research Institute for Humanity and Nature, Japan.

Donaldson, T. & Preston, E. L., 1995. The stakeholder theory of corporation: Concepts, evidence, and implications. *Academy of Management Review*, 20(1), pp. 65-95.

Dryzek, S. J., Honig, B. & Phillips, A., 2011. *Oxford handbook of political science:* London: Oxford University Press, UK.

Duit, A., Galaz, V., Eckerberg, K. & Ebbesson, J., 2010. Governance, complexity, and resilience. *Global Environmental Change*, 20(3), pp. 363-368.

Ekane, N., Nykvist, B., Kjellén, M., Noel, S. & Weitz, N., 2014. *Multi-level sanitation governance:* Understanding and overcoming the challenges in the sanitation sector in Sub-saharan Africa, Stockholm Environment Institute, Stockholm, Sweden.

Fischer, F., 2012. Participatory governance: From theory to practice. Oxford: University Press.

Geyer, N., Foster, M., Ludwig, A. & Ndasiyaba, A., 2011. *East African practitioners workshop on pro*poor urban sanitation and hygiene, Kigali, Rwanda Government.

Gomez, J. & Graham, J. P., 2004. Community Participation in Dry Sanitation Projects. *Water Policy*, 6(2), pp. 249-262.

Harris, A., 2011. Distributed leadership: Implications for the role of the. *Journal of Management Development*, 31(1), pp. 7-17.

Hooghe, M. & Marks, G., 2003. Unraveling Central State, but how? 'Types of multi-level governance',. *American Political Science Review*, 97(2), pp. 233-243.

Hulland, K., Martin, N., Dreibelbis, R., DeBruicker, V.J., & Winch, P., 2015. What factors affect the sustained adoption of safe water, hygiene, and sanitation technologies? A systematic review of the literature., London: EPPI-Centre, Social Science Research Unit, UCL Institute of Education, University College London.

IRC, 2012. Financing water and sanitation for the urban Poor: Six key solutions, IRC Water and Sanitation Centre and Water & Sanitation for the Urban Poor, Marseille: IRC Water and Sanitation Centre and Water & Sanitation for the Urban Poor, France.

Jones, L., 2020. 10 facts about sanitation in Malawi, Tachoma, Washington: Borgen Project.

Kafanikhale, H. M., 2020. Water and sanitation. Lilongwe, Ministry of Health.

Kalulu, K., Hoko, Z., Kumwenda, S. & Mayo, A., 2012. Sustainability of Community-Based Water Management in Mulanje District, Malawi. *Journal of Basic and Applied Scientific Research*, 2(3), pp. 2481-2488.

Lüthi, C., Morel, A., Tilley, E. & Ulrich, L., (ed.) 2011. Community-led urban environmental sanitation planning: CLUES complete guidelines for decision-makers with 30 tools. Zurich: Eawag-Sandec, Switzerland.

Maharaj, N., 2012. *Governance and service delivery a case study of sanitation in Inanda, Durban,* Durban.: University of KwaZulu-Natal, Howard College Campus, KwaZulu-Natal, South Africa.

MANA, 2013. 40 percent of Nsanje Households do not have toilets, Lilongwe: Malawi News Agency.

Madon, S., Guyll, M., Willard, J., Jussim, L., Heather N., Salib E.R., Scherr Kyle. C., 2018. The accumulation of Stereotype-Based Self-Fulfilling Prophecies. *Journal of Personality and Social Psychology*, 115 (5), pp.825-844.

Masindi, V. & Duncker, L., 2016. *State of Water and Sanitation in South Africa*, s.l.: University of South Africa.

Mjoli, N., 2015. A Framework for sanitation governance in South Africa municipalities, Pretoria: Water Research Commission.

Mkwate, L. R., Chidya, C. G. R. & Wanda, M. M. E., 2017. Assessment of drinking water quality and rural household water treatment in Balaka, Malawi. *Physics and Chemistry of the Earth*, 100(2017), pp. 353-362.

Moee, C. L. & Rheingans, R. D., 2014. *The global challenge in water, sanitation, and health,* Atlanta: Emory University.

Ministry of Health & Population, 2018. *National sanitation and hygiene strategy*. Lilongwe: Ministry of Health and Population, Malawi.

Ministry of Health & Population, 2020. *Water and Sanitation report*. Lilongwe, Ministry of Health and Population, Malawi.

Ministry of Local Government, 1998. Local Government Act. Lilongwe: Malawi Government.

Ministry of Natural Resources and Environmental Affairs, 2004. *National Environmental Policy*. Lilongwe: Ministry of Natural Resources and Environmental Affairs, Malawi.

Ministry of Water Development & Irrigation, 2008. *National Sanitation Policy*. Lilongwe: Ministry of Water Development and Irrigation, Malawi.

Nandy, S., 2013. Bad Governance and Poor Children: A Comparative Analysis of Government Efficiency and Severe Child Deprivation in 68 Low- and Middle-income Countries. *Elsevier*, Volume 48, pp. 19-31.

Nsanje District Council, 2020. *Nsanje District socio-economic profile*, Lilongwe: Malalwi Government.

Nilsen, P., (ed). 2015. Making sense of implementation theories, models, and frameworks. *Implementation Science*, 53(2015).

National Statistics Office, 2018. *National population and housing census*, Zomba. Malawi: National Statistics Office.

Ormazábal, G., 2018. The Roles of Stakeholders in Corporate Governance: A View from Accounting Research. *Foundations and Trends in Accounting*, 11(4 (2016)), pp. 193-290.

Patterson, J., Kochi, F. & Bowen, K., 2015. How can we prevent the UN's sustainable development goals from failing? Paris: UN, France.

Phiri, G. C., Kalulu, K., Kumwenda, S., Chidziwisano, K. & Kalumbi, L., 2014. Attainment of open defecation free status among Villages of Nthondo Area in Ntchisi District, Malawi. *Standard Scientific Research and Essays*, 2(13), pp. 743-748.

Sánchez, E., Mejía, T. & Smits, S., 2008. *Capacity for the local governance of sanitation services* provision among poor urban communities in Honduru. Delft, Netherland, IRC.

Salima District Council, 2018. Salima District socio-economic profile, Lilongwe: Malawi Government.

Shah, K. S. & Corley, G. K., 2006. Building better theory by bridging the quantitative -qualitative divide. *Journal of Management Studies*, 43(8), pp. 1821-1835.

Singer, A. A., 2018. Normative political theory. New York: Oxford University Press, USA.

Stockholm International Water Institute, 2008. *Status of implementation of CSD-13 policy actions on water and sanitation*, New York: United Nations Department of Economic Affairs, USA.

Sanitation and Water Association, 2020. Sanitation and water for all: Mutual accountability mechanism. [Online] Available at: htth://www.sanitationandwaterfoall.org [Accessed 10 September 2020].

United Nations Development Programme, 2015. *Sustainable development goals*, New York: United Nations Development Programme, USA.

United Nations International Children Emergency Fund, 2018. *The Water, Sanitation and Hygiene* (WASH) Programme in Malawi, Lilongwe, Malawi: UNICEF.

UNICEF, 2018. Water, Sanitation and HygieneStatistics in Malawi, Lilongwe: UNICEF.

United Nations Water & World Health Organization, 2017. *UN-water global annual assessment and drinking water (GLAAS)*, Geneva: World Health Organisation, Switzerland.

Vargas, M., (ed).2015. *Building better beings: A theory of moral responsibility*, Califonia: Califonia University, USA.

Wanda, M. M. E., Manda, A. M., Mphande, C. & Kushe, J., 2017. Governing WASH for disaster risk reduction in Karonga Town, Malawi. *International Journal of Disaster Risk Reduction*, 26(2017), pp. 69-77.

WaterAid, 2011. The sanitation problem: What can and should the health sector do?, Lilongwe: WaterAid, Malawi.

WaterAid, 2020. Facts and statistics: Malawi, Lilongwe: Malawi.

Wegerich, K., 2001. *Institutional Change: A Theoretical Approach*. London: University of London, UK.

Water Governance Facility, 2015. Water governance facility, Stockholm, Sweden: UNDP, Sweden.

WHO, 2019. Sanitation fact sheet, Geneva: World Health Organization, Switzerland.

Yamane, T., 1967. *A simplified formula to calculate the sample size*. Prentice-Hall: National Library of Australia.

Yannopoulos, S., Yapijakis, C. & Kaiafa-Saropoulou, A., 2017. History of Sanitation and Hygiene Technologies in the Hellenic World. *Journal of Water, sanitation, and Hygiene for development,* Volume 4, pp. 163-180.

Young, D., 2009. How to build trust with stakeholders for better outcomes, s.l.: Mural.

APPENDICES

Appendix A: A methodology matrix

Table 11: Methodology matrix

Objective	Variables	Data collection tools	The type of analysis used
a) To analyse the elements of the regulatory framework affecting the implementation of sanitation	 Policy and strategy coordination Management arrangement Regulation Enforcement 	Do-confirm checklist In-house survey questionnaires	Content analysis entailed the generation of frequencies, narrative analysis, transcribing, generation of themes, coding of themes, Descriptive analysis entailed: Frequencies, graphs, and bivariate analysis using Fisher Exact Chi-Square
b) To assess the availability of sanitation governance documents at sanitation institutions at both meso and micro levels.	 Polices By-laws TORs Guidelines 	Do-confirm checklist In-house survey questionnaires	Content analysis: Generation of frequencies, narrative analysis, transcribing, generation of themes, coding of themes Descriptive analysis entailed: Frequencies, graphs, and bivariate analysis using Fisher Exact Chi-Square
c) To determine knowledge in sanitation governance among sanitation stakeholders at the meso and micro levels.	 Training Knowledge of their roles Knowledge of the roles of other stakeholders 	Do-confirm checklist In-house survey questionnaires	Content analysis: Generation of frequencies, Narrative analysis, transcribing, Generation of themes, coding of themes, Descriptive analysis: Frequencies, graphs, and testing the results with Fisher Exact Chi-Square
d) To analyse stakeholder participation in sanitation governance at micro level	 Planning budgeting Implementation Monitoring 	Do-confirm checklist In-house survey questionnaires	Content analysis: Generation of frequencies, Narrative analysis, Transcribing, Generation of themes, Coding of themes, Descriptive analysis entailed: Frequencies, graphs, and bivariate analysis using Fisher Exact Chi-Square



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MZUZU UNIVERSITY RESEARCH ETHICS COMMITTEE (MZUNIREC)

Ref No: MZUNIREC/DOR/22/101

07/12/2022.

Fred Mwandida, Mzuzu University, P/Bag 201, Luwinga, Mzuzu 2.

fredmwandida@gmail.com

Dear Fred.

RESEARCH ETHICS AND REGULATORY APPROVAL AND PERMIT FOR PROTOCOL REF NO: MZUNIREC/DOR/22/101: COMPARATIVE ANALYSIS OF SANITATION GOVERNANCE IN NSANJE AND SALIMA DISTRICTS, MALAWI

Having satisfied all the relevant ethical and regulatory requirements, I am pleased to inform you that the above referred research protocol has officially been approved. You are now permitted to proceed with its implementation. Should there be any amendments to the approved protocol in the course of implementing it, you shall be required to seek approval of such amendments before implementation of the same.

This approval is valid for one year from the date of issuance of this approval. If the study goes beyond one year, an annual approval for continuation shall be required to be sought from the Mzuzu University Research Ethics Committee (MZUNIREC) in a format that is available at the Secretariat. Once the study is finalised, you are required to furnish the Committee with a final report of the study. The Committee reserves the right to carry out compliance inspection of this approved protocol at any time as may be deemed by it. As such, you are expected to properly maintain all study documents including consent forms.

Wishing you a successful implementation of your study.

Committee Address:

Secretariat, Mzuzu University Research Ethics Committee, P/Bag 201, Luwinga, Mzuzu 2; E-mail address: mzunirec@mzuni.ac.mw

Yours Sincerely,

the ce

Gift Mbwele

SENIOR RESEARCH ETHICS ADMINISTRATOR

For: CHAIRMAN OF MZUNIREC

MZUZU UNIVERSIT RESEARCH ETHICS COM. : EE

0 7 DEC 2022

PRIVATE BAG 201. LUWINGA MZUZU 2

Committee Address:

Secretariat, Mzuzu University Research Ethics Committee, P/Bag 201, Luwinga, Mzuzu 2; E-mail address: mzunirec@mzuni.ac.mw

Appendix C: Informed consent

Introduction

I am Fred Chikuta Mwandida from the Department of Water and Sanitation in the Faculty of

Environmental Science at Mzuzu University. We are researching Sanitation Governance:

Assessment of factors affecting sanitation governance in Nsanje and Salima districts in Malawi.

This consent form may contain words that you do not understand. Please ask me to stop as we go

through the information, and I will take time to explain. If you have questions, you can ask me or

another researcher participating in this study.

Purpose of the research

This study aims to assess factors affecting sanitation governance in Nsanje and Salima in order to

understand the challenges affecting sanitation and propose better solutions for addressing the

challenges.

Type of Research Intervention

The study will involve your participation through an individual interview and observation.

Participant Selection

You are being invited to take part in this research because your responses will help to provide

information that helps researchers understand sanitation governance in your district and

community.

Voluntary Participation

Your participation in this study is entirely voluntary. It is your choice whether to participate or not.

If you choose not to participate you will be replaced by another one who can volunteer to participate.

I may skip any question and move on to the next question if you feel you have no ready answer to

the question.

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Duration

The research will take place for a period of 18 months. The interview will not last more than 30 minutes.

Risks

You do not have to answer any questions or take part in the interview if you feel the question(s) are too personal or if talking about them makes you uncomfortable.

Reimbursements

You will not be provided any incentive to take part in this study.

Sharing the Results

The knowledge that we get from this study will be shared with you and your community before it is made widely available to the public. We will publish the results so other interested partners may learn from the research or provide a platform for further studies regarding sanitation governance.

Who to Contact?

If you have any questions, you can ask them now or later. If you wish to ask questions later, you may contact: **Fred Chikuta Mwandida on 0999589429**, Mzuzu University, Private Bag 201, Luwinga, Mzuzu 2, Malawi; **Dr. Russel Chidya on** 0999317176, Mzuzu University, Private Bag 201, Luwinga, Mzuzu 2, Malawi. or **Associate Professor Mtafu Manda on** 0991457272, Mzuzu University, Private Bag 201, Luwinga, Mzuzu 2, Malawi.

This proposal has been reviewed and approved by the Mzuzu University Research Ethics Committee (MZUNIREC) which is a committee whose task it is to make sure that research participants are protected from harm and embarrassment. If you wish to find out more about the Committee, contact Administrator, **Mr. Gift Mbwele on** 0999404008/0888641486, Mzuzu

University Research Ethics (MZUNIREC), Mzuzu University, P/Bag 201, Luwinga, Mzuzu 2,
Malawi.
Do you have any questions?
Part II: Certificate of Consent
I have been invited to participate in the study assessment of factors affecting sanitation governance
in your district.
I have read the foregoing information, or it has been read to me. I have had the opportunity to ask
questions about it and any questions I asked were answered to my satisfaction. I consent voluntarily
to be a participant in this study.
Print Name of Participant
Signature of Participant
Date
Day/month/year
I have witnessed the accurate reading of the consent form to the potential participant, and the
individual has had the opportunity to ask questions. I confirm that the individual has given consent
freely.
Print name of witness Thumbprint of participant
Signature of witness
Date
Day/month/year

Appendix D: Questionnaire for District Coordinating Committee

Your office was purposively selected to participate in this interview. The interview is being conducted to obtain information regarding sanitation governance in your district. Despite that your office has been purposively selected, the information provided shall be treated with confidentiality and the analysis shall not indicate the names of participants. The information you shall provide shall be used to generate a report in sanitation governance in your district. Although the survey is not compulsory, your participation is imperative for the success of this study.

you shall provide shall be used to generate a report in sanitation governance in your district.
Although the survey is not compulsory, your participation is imperative for the success of this
study.
Are you ready to participate in the survey?
Consent given? Yes No
Signature of participant
A. Identification of respondent
1. Questionnaire ID no
2. Date of interview
3. Name of interviewer
4. The entity of the respondent
5. Category of the respondent
B. Sanitation policies, institutions, regulations, and regulatory framework
6. Do you have sanitation guidelines for the implementation of sanitation in your district?
Yes No
7. Which sanitation guidelines are in use to guide the implementation of sanitation in your
district? Tick those available and confirm their availability using the checklist.

Guidelines	Available	Observed	Not	N/A
			observed	
Sanitation policy				
National Sanitation and Hygiene Strategy				
National Environmental Policy				
District-based policy(name it)				
Regulations for the implementation of sanitation				
in your district				
MOU with Non-State Actors WASH stakeholders				
TORs for WASH stakeholders in the district				
SOPs for implementation of sanitation in the				
district				
Other. Specify			<u> </u>	
8. Were the documents mentioned above disseminat in the district? Confirm dissemination by checking				
Yes No				
If yes confirm if disseminated to:				
Disseminated to	Yes	No	Don't kn	iow
District Sanitation Coordinating Committee				
Area sanitation committee				

Village development sanitation co	mmittee				
Village sanitation committee					
Other. Specify			L		
9. Do you have a regulatory frame	work suppor	rting the in	nplementation	n of sanitation	n in you
district?					
i. Yes No					
ii. If yes, the respondent should	name the re	gulatory fra	nmework		
iii. Observe the availability of the	he regulatory	y framewor	k		
Available Not a	available [
10. Which sanitation committees of	loes your di	strict have?	? Confirm av	ailability by	checkin
minutes and reports					
Sanitation specific committees	Available	Not	Confirmed	Confirmed	N/A
		available	available	Not	
				available	
District Sanitation Coordinating					
Committee					
Area Sanitation Coordinating					
Committee					
Village Development Sanitation					
Coordinating Committee					

Village Sanitation Coordinating			
Committee			
Other. Specify			

12.a. What is the composition of the membership?

Committee membership	Yes	No	Do	not
Committee membership	168	110	טע	not
			know	
			KIIOW	
Include women				
include women				
More than 50 % are				
women				
T 1 50 0/				
Less than 50 % are women				
Include PLWH				
Include youths				
Include physically				
challenged				
Other Specify				
Other. Specify				

12. b. Why did you use this composition?

To promote inclusiveness	
I don't know	

12. c. Is the membership stipulated in the terms of reference?

Membership	Yes	No
Stipulated in the TORs		

13. Is the composition stipulated in the district TORs? Confirm using the checklist

Yes No No							
15. Were the committees	s trained? Con	firm usi	ng the ch	necklist			
Yes No							
16. When were the comm	nittees last trai	ined? Co	onfirm us	sing the ch	necklist		
Last time the committee	es were	This	Two	Three	Other.	Not	N/A
trained		year	years	Years		trained	
			ago,	ago,		before	
District Sanitation Coor	rdinating						
Committee							
Area Sanitation Coordi	nating						
Committee							
Village Development S	anitation						
Coordinating Committee	ee						
Village Sanitation Coor	dinating						
Committee							
Water point committee							
Village Health Commit	tee						
17. Are you satisfied wit	h your sanitati	ion servi	ce delive	ery?			
Satisfaction	Yes	No					
Satisfied							

If not, why are you not satisfied?

i. Lack of project continuation fun	d		
ii. Lack of TROs			
iii. There is no sanitation regulator	y frameworl	ζ.	
iv. Lack of funding for sanitation i	nonitoring in	n the commun	nities
C. Functionality and participat	ion in decisi	on-making o	f sanitation structures (at al
levels)			
18. Do the committees listed above moved Yes No No No 19. Is the committee active? Confirm to No			ng the checklist
Committee functionality	Yes	No	Don't know
All members are active			
75 % of members are active			
50 % of the members are active			
Less than 50 % are active			
Members meet every month			
Members meet every two months			
Members meet every three months			

11. When were the committees last trained?

Another period. Specify

Last time the committees were trained	Yes	No	Don't
			know
Within the last 2 years			
Within the last 5 years			
Within the last 10 years			
Not trained before			
Other. Specify		1	- 1

19. How does the council involve the community structures in decision-making? (Check for attendance and minutes)

Community participation in WASH projects	Yes	No	Don't
			know
Invited to sanitation finance meetings			
Invited to district sanitation budgeting meetings			
Contribute to the development of district sanitation plans			
Participate in facilitating the implementation of sanitation			
activities in the communities			
Other. Specify		I	

20. How do you ensure there is continuity of sanitation service delivery after the donor has pulled out? Confirm responses using the checklist

Donor exit strategy	Yes	No	Don't
			know

There is an MOU with partners and the council Sanitation plans are done by communities There are community-based by-laws There are village sanitation committees There are area sanitation committees Other. Specify 1. How do you share your responsibility with the district coordinating committee? Coordination Yes No Don' know There is a sanitation coordinating committee that meets regularly There is a consolidated sanitation reporting template Develop consolidated sanitation plans We are all part of the WASH cluster Develop consolidated sanitation budgets Other. Specify 2. How do you manage the sanitation fund?	There are TORs There is an MOU with partners and the council Sanitation plans are done by communities			
Sanitation plans are done by communities There are community-based by-laws There are village sanitation committees There are area sanitation committees Other. Specify 1. How do you share your responsibility with the district coordinating committee? Coordination Yes No Don' know There is a sanitation coordinating committee that meets regularly Develop consolidated sanitation reporting template Develop consolidated sanitation plans We are all part of the WASH cluster Develop consolidated sanitation budgets Other. Specify 2. How do you manage the sanitation fund? Finance management Yes No Don't				
Sanitation plans are done by communities There are community-based by-laws There are village sanitation committees There are area sanitation committees Other. Specify 1. How do you share your responsibility with the district coordinating committee? Coordination Yes No Don' know There is a sanitation coordinating committee that meets regularly Develop consolidated sanitation reporting template Develop consolidated sanitation plans We are all part of the WASH cluster Develop consolidated sanitation budgets Other. Specify 2. How do you manage the sanitation fund? Finance management Yes No Don't				
There are community-based by-laws There are village sanitation committees There are area sanitation committees Other. Specify 1. How do you share your responsibility with the district coordinating committee? Coordination Yes No Don's know There is a sanitation coordinating committee that meets regularly There is a consolidated sanitation reporting template Develop consolidated sanitation plans We are all part of the WASH cluster Develop consolidated sanitation budgets Other. Specify 2. How do you manage the sanitation fund? Yes No Don't	Sanitation plans are done by communities			
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We are all part of the WASH cluster Develop consolidated sanitation budgets Other. Specify 2. How do you manage the sanitation fund? Finance management Yes No Don't	There is a sanitation coordinating committee that meets regularly There is a consolidated sanitation reporting template			
Develop consolidated sanitation budgets Other. Specify 2. How do you manage the sanitation fund? Finance management Yes No Don't	There is a consolidated sanitation reporting template			
Develop consolidated sanitation budgets Other. Specify 2. How do you manage the sanitation fund? Finance management Yes No Don't	There is a consolidated sanitation reporting template			
Other. Specify 2. How do you manage the sanitation fund? Finance management Yes No Don't	There is a consolidated sanitation reporting template Develop consolidated sanitation plans			
Other. Specify 2. How do you manage the sanitation fund? Finance management Yes No Don't	There is a consolidated sanitation reporting template			
2. How do you manage the sanitation fund? Finance management Yes No Don't	There is a consolidated sanitation reporting template Develop consolidated sanitation plans We are all part of the WASH cluster			
2. How do you manage the sanitation fund? Finance management Yes No Don't	There is a consolidated sanitation reporting template Develop consolidated sanitation plans We are all part of the WASH cluster			
Finance management Yes No Don't	There is a consolidated sanitation reporting template Develop consolidated sanitation plans We are all part of the WASH cluster Develop consolidated sanitation budgets			
Finance management Yes No Don't	There is a consolidated sanitation reporting template Develop consolidated sanitation plans We are all part of the WASH cluster Develop consolidated sanitation budgets			
Finance management Yes No Don't	There is a consolidated sanitation reporting template Develop consolidated sanitation plans We are all part of the WASH cluster			
	Develop consolidated sanitation plans We are all part of the WASH cluster Develop consolidated sanitation budgets			
	There is a consolidated sanitation reporting template Develop consolidated sanitation plans We are all part of the WASH cluster Develop consolidated sanitation budgets			
	There is a consolidated sanitation reporting template Develop consolidated sanitation plans We are all part of the WASH cluster Develop consolidated sanitation budgets Other. Specify			
	There is a consolidated sanitation reporting template Develop consolidated sanitation plans We are all part of the WASH cluster Develop consolidated sanitation budgets Other. Specify			
know	There is a consolidated sanitation reporting template Develop consolidated sanitation plans We are all part of the WASH cluster Develop consolidated sanitation budgets Other. Specify 22. How do you manage the sanitation fund?			
know	There is a consolidated sanitation reporting template Develop consolidated sanitation plans We are all part of the WASH cluster Develop consolidated sanitation budgets Other. Specify	Yes	No	Don't
	There is a consolidated sanitation reporting template Develop consolidated sanitation plans We are all part of the WASH cluster Develop consolidated sanitation budgets Other. Specify 2. How do you manage the sanitation fund?	Yes	No	

There are sanitation fund TORs				
There is an MOU with partners and the council in sanitation fund				
There is a sanitation finance committee at all levels in the district				
Sanitation committees are trained				
Sanitation finance members include community members				
There are finance expenditure accountability forms				
Communities lead in sanitation budgeting and planning				
There is community appraisal before sanitation projects start in the	ne			
communities				
The sanitation fund released for sanitation project is equal to the	ne			
amount allocated in the national budget				
Other. Specify		•		
26. What mechanism of financial transparency and accountability	does th	ne d	istric	t have?
	Yes	No)	Don't
				know
Use sanitation financing strategic framework				
Trained sanitation financing committee members				
Sanitation financing committee				
Use sanitation financing monitoring framework				
Producing and sharing sanitation finance expenditure reports to				
all stakeholders at all levels				

Others. Specify				
26. Do they have the criteria for the selection of members	for the co	ommit	tee?	
Include women				
Include members from the community structures				
Include PLWH				
Include youths				
Include physically challenged				
Literate				
Other. Specify				
Appendix E: Questionnaire for local community key in	nformant	S		<u> </u>
You have been selected to participate in this interview.	Γhe interv	iew is	being c	onducted
obtain information regarding sanitation governance in you	r district.	The in	formatic	on regardi
participation shall be treated with confidentiality and ana	lysis shall	l not i	ndicate tl	he names
participants. The information you shall provide shall be u	sed to ge	nerate	reports i	n sanitati
governance in the district. Although the survey is not	compuls	ory, y	our part	ticipation
imperative for the success of this study Should you feel u	ncomfort	able at	any time	e during t
survey you are at liberty to discontinue your participation				
Are you ready to participate in the survey?				
Consent given? Yes		No		
Signature of participant				

A. Identification of respondent			
1. Questionnaire ID no			
2. Date of interview			
3. Name of interviewer			
4. The entity of the respondent			
5. Position of respondent			
B. Sanitation institutions and regulations			
6. Do you have sanitation guidelines for the implementation	of sanitatio	n in your d	istrict?
Yes No			
7. Which sanitation guidelines are in use guiding the imp	olementation	of sanitati	on in your
district? Confirm those available using the checklist.			
	Available	Not	Don't
		available	know
National sanitation policy			
National Sanitation and Hygiene Strategy			
National Environmental Policy			
Tradional Environmental Folloy			
National Sanitation Regulatory Framework			
District regulatory framework			
District TORs for WASH stakeholders in the district			
MOU with partners			
SOPs for sanitation in the district			
Other. Specify			

8. To which sanitation committee do you belong?

			Yes	No	Don't
					know
District Sanitation Coordinating	g Committee				
Area Sanitation Coordinating C	Committee				
Village sanitation committee					
Other. Specify					
9. For the committees, you below	ng to, what is the i	nembers	ship compo	sition?	
			Yes	No	Don't
					know
More than 50 % are women					
50 % are women					
Less than 50 % are women					
Includes physically challenged					
Includes the youths					
Includes PLWH					
				<u> </u>	1
10. Does your committee have T	ORs stipulating the	he meml	pership?		
Yes No					
If yes, observe the documents					
	Yes	No			
TORs observed					

TORs specify membership			
criteria			
Other documents. Specify			
D. Functionality and participati	on in decision-m	aking of sanit	tation structures (at all
levels)			
11. Is the committee active?			
	Yes	No	Don't know
All members are active			
75 % of members are active			
50 % of the members are active			
Less than 50 % are active			
Members meet every month			
Members meet every two months			
Members meet every three months			
Another period. Specify			
12. When were the committees last train	ined?		
	Yes	No	Don't know
Within the last 2 years			
Within the last 5 years			
Within the last 10 years			
Other. Specify			

13. How does the council involve you in decision-making? (Che	ck for a	attenda	ance a	and minute	es)
	Yes	No	Ι	Oon't	
			k	now	
Attend sanitation finance meetings					
Attend district sanitation review meetings					
Contribute to the development of district sanitation plans					
Participate in facilitating sanitation activities in the					
communities					
Other. Specify					
E. Finances, transparency, and accountability.					
14. Do you know or be told how much funds are allocated for sa	nitatio	n proj	ects in	n the distri	ict
annually?					
Yes No					
If yes,					
		Yes	No	Don't	
				know	
The members know the annual sanitation budget for the distric	t				
The committee has a copy of the annual sanitation budget					
The council shares monthly sanitation expenditure reports wit	th the				
committee					
The council shares quarterly sanitation expenditure reports with	th the				
committee					

There is a bulletin in sanitation finance expenditure shared with	the			
committee				
The committee was trained in sanitation finance				
Other. Specify				
15. Does the district have a sanitation finance committee?				_
Yes No				
If yes:				
	Yes	No	Don't	
			know	
Minutes of the recent meeting are available				
Membership criteria are available				
Records for members are available				
Other. Specify				
16. Does your committee have a finance transparency and accounta	ability r	nechan	ism? Con	ıfirı
using the checklist				
Yes No				
If yes, observe.				
	Yes	No	Don't	
			know	
The documents are observed				
Financial reports are shared with committees				

The council shares month	ly sanitation expenditure	reports with			
the committee					
The council shares quarter	ly sanitation expenditure	reports with			
the committee					
There is a bulletin in sanita	ation finance expenditure				
The committee was trained	d in sanitation finance				
Other. Specify					
7. What were the criteria for	or the selection of member	rs for the commit	ttee?	? Conf	irm the cri
ising the checklist					
Criterion		Y	es	No	Don't
					know
Include those from the cor	nmunity sanitation structu	ires			
Signatories include those f	rom the community struct	ture			
Include community memb	ers trained in sanitation fi	nancing			
Other. Specify					
8. Was the committee train	ned in sanitation financing	g?			
Yes No					
f trained, when was the las	t time the was committee	trained			
Period	Tick the right				
	answer				
Within the last 2 years					

Within the last 5 years	
Within the last 10 years	
Other. Specify	

Appendix F: Questionnaire for households.

Your household was randomly selected to participate in this interview. The interview is being conducted to obtain information regarding sanitation governance in your district. The information you shall provide shall be treated with confidentiality and the analysis shall not indicate the names of participants. The information shall be used to generate reports in sanitation governance in the district. Although the survey is not compulsory, your participation is imperative for the success of this study. However, you have a right to withdraw from participating should you feel uncomfortable with the interview.

A. Identification of respondent.			
1. Questionnaire ID no			
2. Date of interview			
3. Name of interviewer			
4. Name of the district council			
B. Sanitation institutions and regulations			
5. Are people still practicing OD in this area? If no skip question			
Yes No			
If yes, why are people still practicing OD in your area?			
If yes, observe.			
Reasons for OD	Yes	No	Don't
			know

The frequent collapse of latrines due to poor soil structure		
The frequent collapse of latrines due to a lack of durable		
construction materials		
Child headed families		
Widow		
Female-headed families		
Elderly		
Other. Specify		

7. Who is responsible for ending OD in your area?

Responsible stakeholder	Strongly	Agree	Don't	Don't
	agree		agree	know
Government				
Health workers				
Traditional Authority				
All stakeholders				
My family				
Sanitation committee				
Other. Specify				

8. Who is responsible for ending OD in your area?

Responsible stakeholder	Ι	I agree	Partly	I don'
	strongly		agree	agree
	agree			
It is your responsibility to end OD				
It is the government's responsibility to end OD				
It is the responsibility of both you and the government				
to end OD				
You need to have community roles to govern				
sanitation projects in your community				
If yes, allow the respondent to give examples.				
Examples of sanitation documents	,	Yes N	lo D	on't
			kr	now
National sanitation policy				
National sanitation and hygiene strategy				
District TORs				
MOU for WASH stakeholders in the district				
Other. Specify				

10. What do you feel are the roles of the government in the campaign to end OD in your area?

Providing durable construction materials for latrines in	n the communitie	es	
Developing guidelines in sanitation			
Construct latrines for disadvantaged groups			
Providing support for the construction of latrines i	in areas with po	oor soil	
structures			
Enhancing stakeholder collaboration			
Other. Specify			
11. Why are you saying the government should do wha	t you have menti	oned abo	ove?
		Yes 1	No Don't know
It's the government's responsibility			
Not all families can afford to buy durable latrine constr	ruction materials		
Constructing a latrine in poor soil structure is more ex	pensive		
Other. Specify			
12. Who should lead sanitation activities in your area?			
	Strongly Agr	ee Don	't Don't
	agree	agre	e know
Government			

Council officials				
Extension health workers				
Community leaders				
Community members				
Other. Specify				
13. How do you work with HSAs in sanitation activities	s?	Yes	No	Don't
				know
Through dialogue				
Taking up action points we set through dialogue session	ons			
Help them in action points follow-ups				
Other. Specify				
14. How often do HSAs visit your area to facilitate and	monitor sanita	tion sta	tus in No	your area Don't know
Every week				
Every fortnight				
Every month				
Every two months				
More than 6 months go				
Other. Specify.			I	L

written evidence for the visit.			
	Yes	No	Don't
			know
This month			
Last month			
Two months ago,			
6 months ago,			
Other. Specify.			<u> </u>
12. How often do officials from the council visit your area for sanita	ation a	ctivitie	es?
	Yes	No	Don't
			know
Every month			
Every two months			
Every three months			
Every 6 months			
Other. Specify			<u> </u>
13. When was the last time the council officials visited your area?	Check-	in visi	tors' books to
confirm the visit.			
	Yes	No	Don't
			know
This month			
Last month			

15. When was the last time the HSA visited your areas for sanitation activities? Check for

Two months ago,				
6 months ago,				
Other. Specify				
C. Finances, transparency, and accountability.				
14. Do you have a sanitation committee in your area? C	onfirm usir	ng the ch	ecklist	
Yes No				
If no skip question 15				
15. What are the functions of the committee regarding s	anitation in	your are	ea?	
	Strongly	Agree	Don't	Don't
	agree		agree	know
Planning and budgeting sanitation activities for the				
community				
To monitor finance management				
To hold those in authority accountable				
To ensure equity of resource allocation				
Other. Specify				
16. Who selects the committee members?				
	Yes		No	Don't
				know
Council officials				
Extension workers				
Local leaders				

The community members				
Other. Specify				
17. What were the criteria for	r the selection of memb	ers? Confirm the	availat	oility of
selection criteria guide				
		Yes	No	Don't
				know
Include members from commu	unity structures			
Include PLWH				
Include youths				
metade yourns				
Include women				
Include physically challenged	people			
Other. Specify				
A	41- 15-4-5-4 1			
Appendix G: Checklist for bo		ity stakenoiders.		
1. Checklist ID no		•••		
2. Date of interview		••		
3. Name of interviewer			• • • • • • •	•••••
4. The entity of the respondent.		•••••		
5. Position of respondent		• • • • • • • • • • • • • • • • • • • •		
6. Name of the district council.				
Governance principle	Status			
Available sanitation	Tick those available			
guidelines	National Sanitation	Policy		

	National Environmental Policy
	District MOU
	District TORs
	District by-laws
	Regulations
	SOPs
Sanitation institutions	Tick those matching
	Written criteria for membership
	The written record of members
Evidence of functionality	Tick those matching
	Training reports
	Meeting minutes
	The last meeting minutes date not later than 6 previous
	months
	Number of members attending meetings in the past three
	meetings
Evidence of enforcement	Tick those matching
	Enforcement reports
	Compliance reports