Landscape analysis of faecal waste management policy gaps in Eastern Africa

Agnes Nanyonjo, Caroline Kabaria and Blessing Mberu

Department of Urbanization and Wellbeing, African Population and Health Research Center, Nairobi, Kenya

ABSTRACT

International and national development agendas acknowledge the need for equitable sanitation services. The presence of comprehensive policy documents is crucial for guiding implementation in line with set goals. Beyond mapping the scope of existing policy documents, this landscape analysis examined existing policies for comprehensiveness, coordination and equity. Policies were characterised for content, processes and actors in relation to faecal waste management (FWM) along the entire value chain (capture, containment, emptying, transportation, treatment and safe disposal) in Kenya, Tanzania and Uganda. We found that FWM was sub-optimally represented in the broader environmental, water and sanitation policies scattered in multiple policy and legal frameworks. Other than Kenya, no country had a ratified stand-alone sanitation and hygiene policy or a ‘home-ministry’ for sanitation. Several aspects of the FWM chain were not exclusively addressed by the policies. Although the responsibility for FWM was shared between the private sector and several relevant government institutions (ministries of health, education, local government and environment), the burden of FWM disproportionately lay on individual households with minimal subsidies for the urban-poor. Comprehensive policy frameworks addressing FWM along the entire value chain are needed to foster the implementation of equitable sanitation services in cities.

Introduction

East African countries like many other sub-Saharan African countries are faced with both rapid population growth and rapid urbanisation (AFIDEP 2018). The rapid urbanisation has not been matched with proper city planning paving way for the rise of slums and slum-like conditions among marginalised groups (Fox 2012, 2014). Sustainable Development Goal 6.2 (SDG 6.2) of Agenda 2030 among other things, seeks to achieve access to adequate and equitable sanitation and hygiene for all by ending open defecation while paying special attention to the needs of women and girls and those in vulnerable situations. At the regional level, the Africa Ngor declaration in pursuit of achieving universal access to adequate and sustainable sanitation and hygiene services and eliminate open defecation by 2030 requires individual countries to create a separate sanitation and hygiene budget line with a target of at least 0.5% of GDP by 2020 (AMCOW 2015). Moreover, slum dwellers, rural populations and other marginalised groups tend to lag behind their wealthier city counterparts in all water and sanitation indicators outlined in SDG 6 (Semiyaga et al. 2015, Hutton and Chase 2016, Ezeh et al. 2017). Sanitation per se and specifically faecal waste management tends to be a private and personal matter that cannot be disentangled from human dignity. In a free ideal world, it is a right for every individual to have access to proper waste disposal facilities. However, inequitable access to disposal facilities is still pervasive in several low and middle-income countries with only 68% households able to access improved sanitation facilities globally (Blackett 2014, Hutton and Chase 2016). While proper FWM has the potential to improve health outcomes and provide livelihood opportunities for the population, the contrary is true for poor FWM. The negative effects of poor FWM go beyond the primary individual and households to cause public health concerns and human rights violation through contamination of the environment, water bodies and public spaces (Semiyaga et al. 2015, Hutton and Chase 2016). Such environmental and public health threats have been documented to cost African economies vast amounts of money to address, undermining human welfare and national economic development aspirations (Mara et al. 2010).

Whilst sanitation encompasses safe faecal waste disposal practices, appropriate FWM comprises a system of interlinked steps that start with containment of faecal matter and subsequently progress to the collection, transportation, treatment and safe disposal or reuse of the same (Semiyaga et al. 2015). The term faecal value chain has been used to describe the steps through which faecal waste flows right from containment to safe disposal. It is therefore necessary to address inequities in access to sanitation and hygiene
services in rapidly urbanising East African cities through the faecal value chain lens.

The first step to addressing inequities in access to sanitation facilities as it pertains to FWM is the creation of inclusive concrete and comprehensive national sanitation policies. Though not sufficient by themselves as their subsequent implementation is vital, the presence of supportive and effective FWM public policy can act as an enabling factor for increased sanitation at scale (Galan et al. 2013). A public policy is broadly defined as a system of laws, regulatory measures, courses of action (and inaction), and funding priorities concerning a given issue that is adopted by the government or its entity at the national, subnational or local level (Water Supply and Sanitation Collaborative Council, World Health Organization 2005, Evans 2008). Policies that are more inclusive and realistic in resource allocation and that have clarity on how well services will be delivered are crucial for benchmarking service delivery. Similarly issues not identified or specifically prioritised by policies are less likely to be operationalised through programmes (Water Supply and Sanitation Collaborative Council, World Health Organization 2005). There is a limited body of research evidence on sanitation policies in the East African region. Where such literature exists, the focus has been on analysis of broader environmental, sanitation and hygiene and water policies with greater mention of sanitation policies as a whole at the expense of specific faecal waste management policies (De Palencia and Pérez-Foguet 2011, Ekane et al. 2016, 2020). Lost in such study agendas, is the need to analyse faecal waste management policies comprehensively along the entire value chain. This paper fills this gap by presenting an FWM policy landscape analysis along the FWM value chain for Kenya, Tanzania and Uganda. The review crucially examined the existing policies for comprehensiveness, coordination and equity with respect to FWM among vulnerable groups including slum dwellers. Furthermore, the review sought to examine the policy content, processes and actors. Such analysis is necessary for the understanding of underlying complex problems, and fronting avenues through which such problems can affect policy implementation and service delivery.

Methods and data

The review draws on policy landscape analysis to identify policy gaps in order to contribute to the generation of evidence that can inform policy change, priority setting and ultimately action. The review was conducted as part of a wider project on FWM in six East African cities across Kenya, Tanzania and Uganda. The project is in response to an evidence gap to strengthen advocacy towards policy change and action in pursuit of inclusive urban sanitation in the wider urban Africa region whose description is available at https://aphrc.org/backup/post/projects/fecal-sludge-management.

Data sources

A desktop review of publicly available key national sanitation and hygiene policy frameworks, plans, strategies, laws, and operational guidelines was conducted to inform pertinent questions on the existence of national policies on FWM, their equitability and adequacy in addressing issues that affect the urban-poor along the entire FWM value chain. More specifically, the documents included in the review broadly consisted of discrete but interrelated policy tools including i) laws and regulations that provide a supportive environment for FWM by setting the overall framework and standards for service delivery and ii) institutional frameworks in which faecal waste management is positioned as part of the rights and responsibilities delegated or assigned to institutions.

Search strategy

An extensive internet search of operational sanitation policy and policy-related documents, statements and research was conducted. Key search terms included ‘sanitation’, ‘policy’, ‘faecal waste management’, ‘faecal sludge management’, ‘regulations’, ‘legal frame work’, ‘Act’, ‘laws’, ‘Institutions’, ‘responsibilities’, ‘formal position’, ‘Kenya’, ‘Tanzania’, ‘Uganda’, ‘memo’, ‘city’, ‘Dar es Salaam’, ‘Nairobi’ and ‘Kampala’. The key search terms were also combined to maximise results generated. In the event that there was more than one version of the sanitation policy document, the content of the most recent acting and updated document was analysed.

Inclusion criteria

All government documents or communicated formal positions at the national, subnational or local level accessible on the internet were included in the review. A few additional documents posted by key sanitation stakeholders that provided insights into national and city policy formulation processes in the absence of government documents were also included in the review.

Exclusion criteria

The policy landscape analysis excluded any information that was not referenced on the internet or that could not be obtained from the internet.

Data analysis

Data analysis was framed within the policy analysis triangle and analytical codes sought to characterise the
policy content, context, process and actors in Kenya, Tanzania and Uganda with respect to FWM in city settings. The policy triangle postulates that policies are a result of policy content, context, actors, and the processes of policy making and the interplay between the constituent elements (Walt and Gilson 1994, Buse et al. 2012). According to Walt and Gilson, policy content refers to the detailed constituent parts of a policy and its objectives. Policy context refers to systematic political, social, economic and cultural factors at the national and international levels that can have an effect on health policy. Policy actors refer to individuals, organisations, groups or government branches that participate in the policy process that subsequently affects policy. Where the policy process refers to the way in which policies are initiated, formulated, communicated and negotiated (Walt and Gilson 1994, Buse et al. 2012). Analysis of the policy content was further guided by pre-existing guidelines for the assessment of national sanitation policies (Elledge et al. 2002). The guidelines for the assessment of national sanitation policies recommend that analysis of policies examines i) political will (as evidenced by public statements, presence of legislature, establishment of relevant ministries), ii) acceptance of polices by stakeholders as evidenced by their participation in policy formulation among other things, iii) existence of a legal framework, iv) population targeting for the urban poor, small towns and rural population, women and refugees, v) levels of service, vi) institutional roles, vii) health considerations, viii) environmental considerations and ix) financial considerations.

Findings

Key findings of this policy scan are drawn from the analysis of 35 policy frameworks (43% from Kenya, 25% Tanzania, and 31% Uganda) and presented based on policy context, content, actors and process. The range of policy documents in which

Faecal waste management policies were legitimatated was broad, spanning high-level strategic plans to implementation guidelines.

Context

Kenya is undergoing rapid devolution and has the highest devolution of power within the East African community and has three spheres of government operating at the national, county and urban councils under the overall governance of the constitution of Kenya as outlined in the County Governments Act (2012) and the Urban Areas and Cities Act (Po 2010, Republic of Kenya 2010). County governments have the mandate to collect local revenue through taxes, user fees and charges. The local revenue is supplemented with at least 15% revenue from the central government as specified in Article 203 (2) of the constitution. The revenue is also supplemented by the central government block grants through the Local Authorities Transfer Fund (LATF). Under the fourth schedule of the constitution, county governments are assigned 14 public service work functions, which include water and sanitation planning among others. Thus in relation to FWM policies, the county government is expected to exercise legislation, inclusive local policy formulation in terms of by-laws while allowing for better supervision and implementation of the national sanitation policies at the grass-root level.

Tanzania with the least level of devolution of powers is a unitary republic with a central government and a devolved government of Zanzibar. The devolved government of Zanzibar has autonomy for non-union matters. Both Tanzania and Zanzibar have local governments that are governed by Article 145 of the constitution, the Local Government (District Authorities) Act (1982), and the Local Government (Urban Authorities) Act (1982) (The Government of Tanzania 1982a, 1982b). The local government is governed by the Ministry for Regional Administration and Local Government located within Prime Minister’s Office in mainland Tanzania. Three types of urban authorities exist in mainland Tanzania including the city, municipal and town councils. The rural areas are limited to the district councils with the township authorities and the village council authority. In the semi-autonomous Zanzibar, urban authorities are either town councils or municipalities, while all rural authorities are district councils. Local government authorities (LGAs) have the power to collect revenue through levy taxes, fees and charges but this is mainly supplemented by sector-specific conditional transfers from central government. LGAs have the mandate to uphold the law, promote economic and social development, ensure social welfare, consolidate local services and effective and equitable delivery of quality services to the people (Republic of Kenya 2010). The implications of this governance structure for FWM are that policies and programmes are formulated and financed from the central level and can only be consolidated and implemented by the local city authorities.

Uganda with some level of power decentralisation is composed of a central and local governments governed by both the constitution and the Local Governments Act 1997 (Cap. 243) (The Government of Uganda 1995, 1997). Urban settings are administratively divided into city, municipal, division or town, ward and cell councils. Similarly, rural areas have district councils, counties, sub-county councils, parish councils and village councils. Local governments have the mandate to raise revenue through property taxes, licenses and user fees. However, the main source of revenue for the local governments is transfers from the
central government. The responsibility for transport and environmental protection is shared between central and local governments. Districts and municipal councils are responsible for local economic development and the provision of sanitation among other services. They are generally encouraged to devolve some services to lower tiers (LED). In such a governance structural context, the central government makes policies and regulations, offers financial support for sanitation programmes while local governments implement the programmes and regulations.

Some commonalities observed at the national level are that all three countries are democracies with some level of decentralised administrative or governance systems. The decentralisation of power implies that central governments maintain overall regulatory powers, formulate policies and offer technical support through building capacity for local governments to rule effectively. However, the variation in the levels of power devolution means that most administrative decisions are made at the central government level in the less decentralised countries (Uganda and Tanzania) while in Kenya the local governments have more power to make their own administrative decisions. Central governments still play a critical role in the financing of implementation of local sanitation programmes and services including FWM.

From the more global context and international perspective, Kenya, Tanzania and Uganda all show some level of commitment to achieving universal sanitation by being signatories to the Africa regional Ngor declaration (AMCOW 2015). All three countries adopted the Millennium Development Goals (MDGs) and subsequently the Sustainable Development Goals (SDGs). Thus, all three countries are expected to meet the minimum sanitation targets outlined in the SDG agenda and targets of the Ngor declaration. This subsequently affected the framing of the sanitation policies in order to align with either the millennium development goals (Uganda and Tanzania) and SDG 6 (Kenya) as evidenced by sanitation targets mentioned in the country visions, and the Kenya Environmental Sanitation and Hygiene Policy (KESH) (Republic of Kenya 2007, Government of Uganda 2010, United Republic of Tanzania 2010, Republic of Kenya (MOH) 2017). For example, Kenya vision 2030 sought to attain 70% and 65% access to safe sanitation and 40% and 10% sewerage access in urban and rural areas, respectively, while the KESH aimed at 100% coverage. The National Strategy for Growth and Reduction of Poverty II aimed at increasing sewerage coverage from 17% in 2003 to 30% by 2010 in order to meet the MDG and vision 2025 was aimed at achieving 100% coverage. Although no actual target was mentioned in the Uganda National Development Plans 2010–2015 (NDP), the plan suggested that the progress achieved by then was not sufficient to meet the MDGs (Republic of Kenya 2007, Government of Uganda 2010, United Republic of Tanzania 2010, Republic of Kenya (MOH) 2017).

**Content**

The content of the policies is presented according to criteria for the assessment of national sanitation policies recommended by both the Environmental Health Project and the Water Supply and Sanitation Collaborative Council (Elledge et al. 2002, Water Supply and Sanitation Collaborative Council, World Health Organization 2005).

**Political will and the existence of sanitation policies for urban dwellers**

The political will of the governments to address the sanitation needs (including FWM) of the urban and peri-urban populations was often expressed through policy development, preambles in existing polices when available, passage of legislation and establishment of relevant institutions. There were multiple policy instruments at the national level through which sanitation needs of urban dwellers were addressed. Table 1 provides a summary of the policy documents identified and subsequently analysed. The policies were domesticated by local city authorities in all countries and were supplemented by by-laws in Kenya and Uganda. The policy instruments broadly fell into two categories. The first category consisted of policy frameworks providing official guidelines through which national priority services and programmes can be implemented in both rural and urban areas. The second category was composed of legal and regulatory frameworks such as laws, legislative acts, and decrees that underpinned the national policies. The policy frameworks ranged from high-level sector strategic plans to simple implementation guidelines.

There was sub-optimal sanitation policy coordination at the national level exhibited by the general tendency to combine sanitation policies with broader water and environmental and development policies. The unifying and ratified sanitation policy document in Kenya was the National Sanitation and Hygiene Policy (Republic of Kenya (MOH) 2017). There is evidence suggestive of the presence of a draft national sanitation and hygiene policy, 2009 for Tanzania, led by the Ministry of Health and Social Welfare (MoHSW), now renamed the Ministry of Health, Community Development, Gender, Elderly and Children (MoHCDGEC) that needs to be finalised. This draft is not publicly available through internet search but it is referred to in several studies (World Bank 2011). There is evidence that in 1997 Uganda drafted a National Sanitation Policy (The National Sanitation Task Force 1997). The policy
Table 1. Policy, legal and institution frameworks for sanitation.

| Country   | Policy framework                                                                 | Legal framework                                                                 | Institutional framework                                                                 |
|-----------|----------------------------------------------------------------------------------|----------------------------------------------------------------------------------|------------------------------------------------------------------------------------------|
| Kenya     | National Environmental Sanitation and Hygiene Policy 2016–2030                    | Constitution of Kenya 2010                                                      | Ministry of Water, Sanitation and Hygiene Planning (MKUKUTA)                               |
|           | Kenya Vision 2030                                                                 | County Government Act 2013                                                       | Ministry of Health and Social Welfare Services Regulatory Board                           |
|           | Kenya Health Policy Framework 2012–2030                                          | Environmental Health and Sanitation Bill, 2016                                   | Ministry of Education and Vocational Training                                             |
|           | National Health Sector Strategic Plan.                                            | Public Health Act 2012                                                           | Prime Minister’s Office                                                                  |
|           | Water Policy 1999, National Water Services Strategy (NWSS) 2007–2015             | Water Act, 2002                                                                  | Ministry of Environment National Sanitation and Hygiene Steering Committee               |
|           | Water and Sanitation Concept (WSSC)                                               |                                                                                  | Water Supply and Sanitation Authority                                                    |
|           | Water Sector Strategic Plan (WSSP)                                                |                                                                                  |                                            |
|           | Pro-Poor Implementation Plan (PPIP)                                               |                                                                                  |                                            |
|           | Water Sector Strategic Plan                                                        |                                                                                  |                                            |
|           | National ODF Kenya 2020                                                            |                                                                                  |                                            |
|           | Campaign Framework 2016/2017                                                        |                                                                                  |                                            |
|           | Kenya Environmental Sanitation and Hygiene Strategic Framework (KESSF) 2016–2020    |                                                                                  |                                            |
|           | Environment Management and Coordination Act (EMCA) 1999                           |                                                                                  |                                            |
|           | County Environmental Sanitation and Hygiene Strategic and Investment Plans (CESHISPs) |                                                                                  |                                            |
| Tanzania  | Water Sector Development Programme Implementation Manual, 2015                    | Water Supply and Sanitation Act (2009)                                          | Ministry of Health and Social Welfare Services Regulatory Board                           |
|           | Water Sector Development Programme, 2006                                          | WAWSA Act, Cap 273                                                               | Ministry of Water                                                                        |
|           | 2002 National Water Policy                                                          | Local Government Act (district and urban authorities) (1982)                    | Ministry of Education and Vocational Training                                             |
|           | Ministry of Health and Social Welfare. National Sanitation Options and Construction Guidelines, 2012 | Public Health Act (2009)                                                        | Prime Minister’s Office                                                                  |
|           | National Development Vision 2025                                                  | Energy and Water Utilities Regulatory Authority Act, 2001                         | Ministry of Environment National Sanitation and Hygiene Steering Committee               |
|           | Guidelines on Management of Liquid Waste, 2013                                     | Water works Order, 1998                                                          | Water Supply and Sanitation Authority                                                    |
|           | National Strategic Plan for School Water, Sanitation and Hygiene (SWASH) (2012 – 2017) | Water Resources Management Act, 2009                                             |                                            |
|           | National Guidelines Water, Sanitation and Hygiene in Health Facilities              |                                                                                  |                                            |
|           | National Strategy for Growth and Reduction of Poverty (NSGRP) I and II (MKUKUTA)   |                                                                                  |                                            |
|           | National Strategy for Growth and Reduction of Poverty (NSGRP) I and II (MKUKUTA)   |                                                                                  |                                            |
| Tanzania  | Water Sector Development Programme Implementation Manual, 2015                    |                                                                                  |                                            |
| Uganda    | Water Sector Development Programme Implementation Manual, 2015                    |                                                                                  |                                            |
|           | The National Health Policy (1999)                                                  |                                                                                  |                                            |
|           | National Environmental Health Policy, 2005                                        |                                                                                  |                                            |
|           | Universal Primary Education Policy, 1997                                           |                                                                                  |                                            |
|           | National Sanitation Guidelines, MoH (2000)                                         |                                                                                  |                                            |
|           | Poverty Eradication Action Plan, 2004                                               |                                                                                  |                                            |
|           | National Development plan II, Vision 2040                                          |                                                                                  |                                            |
|           | Uganda Country Strategy (2013–15–20)                                               |                                                                                  |                                            |
|           | The National Development Plan 2010/11–2015/15 7                                    |                                                                                  |                                            |
|           | Water and Sanitation Sub-sector Gender Strategy (2010–15)                          |                                                                                  |                                            |
|           | Sanitation and Hygiene Promotion in Uganda Part II                                 |                                                                                  |                                            |
|           | 10-year Improved Sanitation and Hygiene Promotion Financing Strategy                |                                                                                  |                                            |
|           |                                                                                  |                                                                                  |                                            |

underwent some revision in (2000) and is currently under discussion (Ministry of Health Uganda 2000). However, the operational sanitation guidelines in Uganda are available as part of the 2005 National Environmental Health Policy by the Ministry of Health ((MOH) TRoU 2005). The policy acknowledges the need for streamlined legal instruments and guidelines for sanitation ((MOH) TRoU 2005). The operation guidelines for implementation FWM policies in Tanzania are expressed in the programme implementation manual for the Water Sector Development programme phase II (Ministry of Water 2015).

Acceptance of polices by urban sanitation stakeholders

Acceptance of policies by stakeholders is a sign of relevancy and is often achieved through stakeholder participation in policy formulation and stakeholder agreement with policy among other things. The study methodology does not allow for comprehensive assessment of stakeholder engagement beyond their participation in policy formulation and being allocated key roles in the policy. However, there is indication from the operational policy documents in all three countries that a set of stakeholders acting within
both rural and urban areas were involved in the formulation of the policies. The scope of stakeholders involved and their roles are discussed in the section on actors further below.

**Existence of a legal framework**

All three countries had legal frameworks addressing some but not all of the aspects of the FWM value chain in their sanitation policies for urban and peri-urban populations. However, sanitation legal frameworks were often shadowed under the umbrella of water and environment legislation. Regulation of the private sector which dominates provision of non-sewered sanitation services was essentially weak or lacking. Kenya had laws and regulations relating to the sanitation and the environment that were spread over different government acts, bills that are now consolidated in the KESH (Table 1). Although the regulations cover most of the components of the FWM value chain, the regulatory framework for pit latrines and septic tanks remains unclear. Tanzania has several legal frameworks for sanitation fragmented across the water and local governments acts and regulatory frameworks in the institutions responsible for water and sewerage, health, education, and community development. Efforts were made to strengthen and harmonise the legal framework through the 2009 Water Supply and Sanitation Act (WSSA) that mandates decentralisation of the management and provision of sanitation services to the lowest levels through autonomous and self-sustaining authorities whilst setting enforcement standards. According to the National Water Policy whose principles are envisaged to be backed by legislation, the management of urban water supply and sewerage services is guided by the right to sanitation for everyone including the urban poor. On the contrary, the same guiding principles recommend a mandatory payment for wastewater treatment by users. The exact components of FWM value chain being regulated are not exclusively mentioned in the operational legislation. Uganda has several laws and regulations that are spread across the various government Acts that speak broadly to sanitation including the Public Health Act, the Water Act, and the National Environment Management Act (NEMA). However, these regulations do not cover the entire FWM value chain. Critically lacking were regulations on the emptying of pit latrines and septic tanks. Regulations on the transportation of faecal waste are also ambiguous. A more detailed description of the content of the various legal frameworks that govern FWM is outlined in Table 2.

**Population targeting**

Policies can be used to target the populations on whom sanitation resources should be spent and for

| Country                | Legal framework                                      | Sanitation content                                                                 |
|------------------------|------------------------------------------------------|-----------------------------------------------------------------------------------|
| Kenya                  | Constitution of Kenya 2010                          | Provides frameworks for all policies                                              |
|                        |                                                      | Promotes equity                                                                   |
|                        |                                                      | Declares sanitation a basic human right                                           |
|                        | County Government Act 2012                          | Devolves sanitation functions to county governments                              |
|                        | Cities and Urban Areas Act, 2011                     | Delegates responsibility for sanitation service delivery to county governments    |
|                        | Public Health Act, 2012                              | Recommends possible service delivery arrangements                                |
| Tanzania               | Water Supply and Sanitation Act                      | Gives guidelines on sanitation from a public health perspective                  |
|                        | Environmental Management Coordination Act            | Sets standards for sewage treatment                                               |
|                        | Local Government Act, 1982                          | Promotes equitable sanitation                                                     |
|                        | Dar-es-Salaam Water Supply and Sewerage Authority Act| Promotes decentralization of sanitation services                                 |
|                        | Energy and Water Utilities Regulatory Act            | Promotes public private partnerships                                              |
|                        | Public Health Act                                    | Promotes the establishment and enforcement of standards                          |
| Uganda                 | Constitution of the Republic of Uganda 1995         | Designates powers for sanitation control and delivery to local government authorities|
|                        |                                                      | Complements other sanitation related acts                                         |
|                        | The National Environment Act                         | Outlines the roles and responsibilities of the autonomous bodies in providing sewerage services in Dar-es-Salaam |
|                        | Public Health Act                                    | Establishes a regulatory body for sewerage services                              |
|                        | Water Statute                                        | Gives guidelines on sanitation from a public health perspective                  |
|                        |                                                      | Provides guidelines for the safe storage, treatment, discharge, and disposal of waste that may pollute water |

Table 2. Faecal waste management-related content in key legal frameworks.
what aspects of sanitation. The groups of people that are often marginalised with respect to sanitation services include the urban-poor, peri-urban, small towns and rural areas and special needs groups such as refugees. The FWM related policies in all three countries acknowledge the need for equity in sanitation. However, there was no clear inclusion of guidelines on how the marginalised groups were to be targeted especially in poor urban neighbourhoods. Specifically, there was a lack of clarity on how local governments or city council authorities were supposed to prioritise resources for marginalised groups. Furthermore, any attempts at inclusivity in FWM were limited to containment strategies at the expense of emptying, transportation, treatment and safe disposal of faecal waste. For example, the KESH emphasises the principles of inclusivity based on article 10 of the constitution (Republic of Kenya (MOH) 2017). It seeks to target the financially excluded and people with special needs including the chronically ill, the elderly and persons with disability through the government-led appropriate market-compatible financing options, which are envisaged to constitute new types of cash transfer and social subsidies (Republic of Kenya (MOH) 2017). Although some of the usually marginalised groups are mentioned in the policy as part of the sanitation market development, the policy further specifies that state subsidies shall only subsidise demand and not supply of sanitation services. It also states that ‘Households and landlords in peri-urban, slum shall bear the cost of providing, improving and maintaining environmental sanitation and hygiene including the costs of operation and maintenance of the technology chosen’ (Republic of Kenya (MOH) 2017).’ This is contrary to what the policy’s promise of taking into consideration different equity-related access bottlenecks among those residing in areas with rocky ground, high water tables, congested areas, low-lying areas, flood-prone urban areas as well as sanitation in non-owner occupied houses in low-income slum and peri-urban settlements. The mandate to enforce polices that affect women and children, older members of society and persons with disability is left to the ministry and county departments of gender. Similarly, the role to promote social and gender mainstreaming in national development agendas including sanitation is left to the National Gender and Equality Commission (Republic of Kenya (MOH) 2017).

The Water Sector Development Plan II implementation manual is the operational document through which sanitation policies in Tanzania are implemented (Ministry of Water 2015). Through the rural water supply and sanitation component of the development plan, the policy guidelines aim to establish an equitable service delivery system. However, sanitation in the cities is mainly run by autonomous Urban Water Sanitation Authorities, which predominantly are based on a cost-recovery model and mainly run sewer-based systems. Gender differences are not explicitly stated in the policy document in relation to faecal waste management although they are mentioned for the water sector. Nonetheless, the development plan requires that water authorities should be cognisant of the needs of the economically disadvantaged and vulnerable who should be identified through close collaboration with the Local Government Authorities. Furthermore, there were eminent plans to expand sanitation policies in the new National Sanitation Campaign Phase II to cover sanitation for both rural and urban settings among other things contrary to their initial focus on sanitation and water at the household level and sanitation and hygiene education only (Ministry of Water 2015).

In Uganda, the draft sanitation guidelines and the National Environmental Health Policy aim to address inequities by targeting low-income households, refugee camps, schools, hospitals, high cost set up areas and encouraging the participation of women at all levels. The Environmental Health Policy Strategy for service delivery explicitly mentions that ‘environmental health interventions should be implemented on an equitable basis of some for all rather than all for some’. Interventions should respond to the differing needs of men, women and children while recognising that women are the main users of sanitation facilities and yet they depend on men to finance latrines.” Notwithstanding, the policies recognise the lack of government funding towards subsidies for construction of household latrines. The policy further asserts that such subsidies will need to be considered when addressing the challenge of stimulating demand for improved sanitation and hygiene amongst the more disadvantaged or marginalised sectors of the society as well as those living in difficult areas (rocky ground, sandy soils or high water table areas) and where innovative low-cost sanitation technologies are being pioneered for future scaling up.

Levels of service

Minimum levels of service can be assessed through promotion efforts and increments in the provision of simple sanitation systems to improve levels of services. All three countries made commitments to achieving adequate and sustainable universal sanitation coverage by 2025, 2030 and 2040 for Tanzania, Kenya and Uganda, respectively. The sanitation plans and policies aim to increase the coverage of water and sanitation systems both sewered and non-sewered in urban and rural areas across the countries. However, the responsible corporations or designated urban utility authorities tended to be more biased to providing clean
water and sewered sanitation systems. The minimum standards for FWM along the value chain were more comprehensive for containment and limited for other components. The KESH proposes a range of complementory services including the provision and maintenance of sanitation services through proper collection, treatment and environmentally sound disposal of faecal waste, public education, sanitation marketing and regulation as well as increased public participation in both urban and rural areas (Republic of Kenya (MOH) 2017). The services are supposed to be provided through collaborative efforts between the National, County and Local Governments. The institutions are expected to create a technical advice motivation programme and minimal subsidisation of material supplies to indigent communities. The policy proposes giving priority to individual disposal system such as septic tanks and urinary diversion toilets in the urban environmental sanitation but regards sewerage systems with proper treatment facilities as the better option. Peri-urban areas are encouraged to explore appropriate technologies and each household is expected to own and have access to safe sanitary facilities from which faecal sludge can be safely collected and treated. The Environmental Sanitation Coordinating and Regulatory Authority (NESCRA) and other relevant regulatory agencies have the responsibility to ensure that these minimum standards are in place. Together they are supposed to enforce proper and safe containment, collection, transport, treatment and reuse of faecal waste through the provision of standards and protocols and licenses for both sewered and non-sewered systems. Notably, the policy is explicit on the minimum standards for containment but remains unclear on the precise minimum levels of service for emptying, transportation, treatment and disposal.

The Water Sector Development Programme (WSDP) for Tanzania aims to ensure the promotion of sanitation through the National Sanitation Campaign that targets awareness creation, education and construction of sanitation facilities especially in schools, health-care facilities and in transport hubs (Ministry of Water 2006). The National Sanitation Campaign seeks (which falls under the second component (Scaling up Rural WSS Service Delivery) to achieve its goal through the development of a behaviour change communication strategy, school and household engagement using community-led total sanitation, conducting trainings on construction and household sanitation and development of guidelines. The minimum sanitation standards for urban areas across the FWM chain are not outlined in the available policies except for school water and implementation guidelines that require a toilet or latrine connected to a sewer or septic tank, ventilated improved pit latrine, ecological sanitation or pour flush latrine. The National Strategy for Growth and Reduction of Poverty (NSGRP) II requires at most 20 pupils per latrine. The facilities should be private and child friendly and there should be a nearby soak pit for waste water (United Republic of Tanzania 2010). The National Sanitation Options and Construction Guidelines (2012) designed for local government authorities and other stakeholders offer a descriptive view of possible options in the planning design and implementation for sanitation programmes but do not dictate any minimum standards or levels of service (Welfare MoHaS 2012).

The National Environment Health Policy for Uganda recommends the presence of a pit latrine, VIP latrine or flush toilets, at home. The safety criteria include pit latrines being deeper than 15 feet depositing waste 3 feet below the latrine hole and privacy of individuals using the latrine must be guaranteed. The policy embarks on enabling behaviour change amongst community members and not just latrine construction. The policy recognises that users largely pay for sanitation facilities and therefore communities should be encouraged to adopt facilities that they can afford. The policy further proposes a drift away from the lecture approach of telling people what to do to a more participatory approach involving discussion between community extension workers and households for problem solving ((MOH) TRoU 2005). There are no clear guidelines set out for the emptying, transportation, treatment and disposal of faecal waste.

**Institutional roles**

In all three countries, policies that are related to faecal waste management were spread across relevant government ministries and institutions. For the most part, the coordination, regulation and enforcement of FWM related policies lacked a designated ‘home’ ministry and various components of the FWM value chain at times fell under different ministries. Through the presidential decree of the Executive Order NO 1 of 2018, a Ministry of Water, Sanitation and Irrigation was created to coordinate sanitation services in Kenya (The Republic of Kenya 2018). Under its sewer and non-sewer services sub-sector, the ministry aims to formulate policy, regulate non-sewer sanitation service providers to promote consumer protection, develop sewer public infrastructure and provide sewer services and technologies for non-sewer sanitation services through appropriate planning, financing and developing infrastructure. There were limited coordination mechanisms outlined in the policies in both Uganda and Tanzania. However, there were memorandum of understanding for the relevant ministries in both countries. A group of non-government organisations working on sanitation in Uganda known as the Uganda Water and Sanitation Network.
(UWASANET) raised the need to review the Sanitation hygiene tri-partite memorandum of understanding between line ministries (Health, Education and Water and Environment) for better alignment with sector priorities (UWASANET 2018). In all three countries private providers were often viewed as implementation partners and service provider usually for pit-latrine construction, social marketing and as operators of other waste management services. Despite the above view, clear descriptions of the coordination of institutions in enforcement of private sector regulation along the components of the FWM value chain were often lacking with a few autonomous authorities being designated to regulate private service providers.

The Water and Environmental Coordination Act and KESH policy describe the institutional framework through which sanitation improvement efforts should be coordinated among the key stakeholders (citizens, communities, private sector enterprises, NGOs, development partners, government ministries, departments and agencies at various levels). Most sanitation functions and services are devolved to County Governments with the Central Government retaining responsibility for national policy formulation, training, capacity building, technical assistance to Counties, generating population statistics, sanitation planning, financing, resource mobilisation, public and private partnership coordination, standards formulation and consumer protection. The roles of the Central Government are spread across several departments, which have responsibility for various aspects of these functions. The KESH at the central level previously mandated the MoH as the lead agency and local government authorities as implementers. Since 2018 the lead role has been designated to the new Ministry of Water, Sanitation and Irrigation to which most sanitation functions have been ceded. The Environmental Sanitation Coordinating and Regulatory Authority (NESCRA), the National Environmental Management Authority (NEMA), and other relevant regulatory bodies enforce safe FWM policies across components of the value chain that are stated in the policy and legal frameworks (Republic of Kenya (MOH) 2017). They regulate private sector service providers and provide standards and protocols. The urban water utility bodies are responsible for the operation and maintenance of sewerage infrastructure in addition to water supply.

In Tanzania at the central level, the MoHCDGEC, provides overall oversight and monitoring of the sanitation sector by providing regulatory and implementation frameworks, and technical assistance to local government councils and other stakeholders. The Ministry of Health works closely with the Ministry of Education and Vocation Training, the Ministry of Local Government, and Ministry of Water and the Prime Minister’s office to implement sanitation policies in the various institutions. The four Ministries have a memorandum of understanding for integrated implementation of sanitation and hygiene services in mainland Tanzania. The memorandum of understanding emphasises coordination and cooperation among the Ministries and outlines the obligations of each of them (Prime minister’s office 2009). Under the leadership of the Prime Minister’s Office, the MoH coordinates sanitation committees and implementation of sanitation activities in addition to formulating policies. The Ministry of Education and Vocational Training (MoEVT) coordinates sanitation and hygiene in schools while the Local Government Authorities (LGAs) in collaboration with the Ministry of Health and Social work, coordinate on-site sanitation (household level). The Ministry of Water and Irrigation coordinates resources for sanitation and sets standards for sewerage facilities in addition to monitoring and evaluating sanitation services. In Urban areas such as Dar-es-Salaam, there are Urban Water Supply and Sewerage Authorities at the municipal or town council levels responsible for sewerage services. The private sector is recognised as a key player in sanitation mainly as an implementer of the National Sanitation Campaign at the various levels of the government. The private sector also plays critical roles as donors, contributors to the formulation of national policy, and as commercial implementers and constructors.

In Uganda at the central government level, the Ministry of Health (MoH) is the lead agency in the sanitation policy design and implementation. The Ministry of Health designs technical and implementation guidelines for local governments and other implementing bodies. According to the National Environmental Health Policy, the MoH exerts its policy and technical stewardship responsibilities by supporting and coordinating the activities of the National Sanitation Working Group, which makes sanitation-related policies and sets standards of service delivery. Institutional responsibilities for sanitation at the Local Government level are shared between the MoH, Ministry of Education and Sports, Ministry of Water, Lands and Environment and the Ministry of Local Government. The roles are not exclusive and policy frameworks urge that environmental health strategies should maximise cooperation and collaboration between departments to enhance impact and efficiency. The National Environment Management Authority regulates and licenses all waste transporters and operators of waste treatment facilities. The Ministry of Local Government has the mandate to provide service through its agencies and projects as outlined in policy frameworks (Ministry of Health Uganda 2000, (MOH) TRoU 2005). The private sector
plays key roles in the planning, development, and production of sanitation facilities, raising awareness about sanitation, delivery of communal latrines and implementation of other local sanitation interventions including district sanitation plans (Ministry of Health Uganda 2000, (MOH) TRoU 2005). The Central Government through the Environment Act provides regulations for private operators and Local Governments, co-ordinates private sector activities such as management of contracts for services provided by the private sector. The National Water and Sewerage Corporation is responsible for the operation and maintenance of sewerage infrastructure in addition to water supply in mainly urban and peri-urban areas.

Health considerations

All sanitations policies for the three countries had health considerations. However, the policies tend to aggregate sanitation risk into urban and rural areas while neglecting other high-risk groups like the urban-poor and peri-urban areas. The risk due to poor sanitation also tends to be general without clear indication of disease risk at each step of the FWM chain. The Kenya Sanitation Policy acknowledges that the lack of improved sanitation in Kenya has major health, economic and social impacts. Lack of sanitation is identified as the leading risk factor and contributor to mortality and morbidity in Kenya. The policy also acknowledges that the lack of sanitary facilities can predispose women to other health risks such as rape and gender-based violence.

Under its guiding principles, the KESH recognises sanitation and hygiene promotion as a cost-effective preventive means in public health. The Water Sector Development Programme of Tanzania and Tanzania’s National Poverty Reduction Strategy II recognises sanitation as a key measure in safeguarding the health of the public. It is against this backdrop and the prevailing poor sanitation conditions among the majority of Tanzanians that a National Sanitation Campaign was designed and expanded to comprehensively cater for both rural and urban areas. According to the National Environmental Health Policy for Uganda, there is a high burden of diseases related to poor access to sanitation overall that became even more evident in schools following the declaration of universal primary education in 1997. The policy argues that aforementioned conditions warrant the need for improved access to sanitation services in order to reverse associated detrimental trends. The Public Health Act, 2000 contains provisions for infectious disease containment, sanitation, sewerage and drainage and mandates Local Government Authorities to supervise on-site sanitation facilities.

Environmental considerations

The policies of all three countries acknowledge the need to protect the environment. The National Sanitation Policy for Kenya acknowledges sanitation as a human right that should be enjoyed by everyone. Contamination and pollution of the environment through uncontrolled sewage flows, solid and liquid waste disposal, industrial waste discharges, chemical fertilisers and pesticides are forbidden by the guiding principles of the policy. The Environmental Sanitation Coordinating and Regulatory Authority (NESCRA), the National Environmental Management Authority (NEMA), Water Services Regulatory Board (WASREB) and other relevant boards are also expected to produce Environmental Sanitation Impact Assessments (ESIAs). The 2006 Water Sector Development Programme for Tanzania triggers three environmental safeguard policies including Environmental Assessment, Involuntary Resettlement and International Water ways. The Environmental Impact Assessment and Audit Regulations, 2005 and the Environmental and Social Management Framework, 2014 that provide a strategic guide of legal approaches to assessing and dealing with environment impacts including the composition of those affected (Ministry of Water 2006). The National Environmental Health Policy for Uganda acknowledges environmental sanitation as a basic human right. Polluters are expected to pay punitive charges and the cost of cleaning up their pollution. Uganda’s National Environment Act forbids the disposal of hazardous and non-hazardous waste into the environment.

Financial considerations

Financial considerations refer to clear targeting of resources to be spent on specific aspects of sanitation or faecal waste management and a clear statement of to what level the services are subsidised and what support is given to the providers. In terms of actual costs for meeting sanitation target, the policies of all three countries do not clearly indicate the amount of resources required to meet various components of sanitation needs. However, some lump-sum estimates are provided in the policies. Resources to be budgeted for are broadly mentioned and often limited to some guidance on sources of funding. In terms of sanitation financing at the local level, Kenya and Uganda recommended subsidies for the poorest household but there are no clear guidelines on how the poorest household will be identified or how such subsidies will be operationalised among the targeted urban sub-populations.

The Sanitation Policy for Kenya refers to three funding streams including treasury funds transferred
from the Ministry of Finance to the Ministry of Health, funds from donors to the Ministry of Health and other relevant and off-budget funds that are not captured at the National or County level. This, however, might require a policy change in view of the new Ministry of Water, Sanitation and Irrigation. National and County Governments and Municipal Authorities are required to make yearly budgetary provisions and sanitation budgets remain spread across relevant Ministries, Counties, NGOs and the Private Sector. The first NESHF 2015–2020 is expected to guide the Counties in developing their respective first 5-year County Environmental Sanitation and Hygiene Strategic and Investment Plans (CESHSIPs). The CESHSIPs are expected to provide an itemised approach for resources needed to provide comprehensive-tailored services. Budgetary allocations for sanitation are expected to be done through Urban Environmental Sanitation and Hygiene Strategic and Action Plans (UESHSAPs) and Urban Strategic Environmental Sanitation Investment and Financing Plans (USESIFPs). However, there is no clear indication of what elements of the FWM value chain will be financed by these budgets. The National Policy and its Implementation Framework promise to develop and ensure transparently, effectively and equitably applied material supply subsidies for vulnerable and indigent groups. However, the policy also states that for efficiency purposes subsidies will be directed at demand rather than supply.

Budgetary responsibilities for sanitation and hygiene in Tanzania were distributed between four key ministries: MoHCDGEC, Water, Regional Administration and Local Governments and Education and Vocational Training. Sanitation and hygiene activities in Tanzania are undertaken based on financial resources that come from the central government, development partners and locally mobilised revenues. There were no clear budgets lines allocated for sanitation except as lump sum amounts disembarked to districts. Urban sewerage investments were budgeted together with urban water supply investments. The National Water Policy and the National Health Policy stipulate that operation and maintenance of household sanitation facilities is the responsibility of households. There were no guidelines on how budget lines should be distributed among various components of the strategic plans or departments of the Local Government. It was also not clear which aspects of the FWM value chain were being financed.

The Sanitation and Hygiene Promotion in Uganda Part II, 10-year Improved Sanitation and Hygiene Promotion Financing Strategy makes a bold attempt of defining unit costs both capital and recurrent based on selected activities in the sanitation strategies (Ministry of Health, Ministry of Water Lands and Environment, Ministry of Education and Sport 2006). The Sanitation Policy for Uganda recommends the development of a strategy with clearly defined goals budgeting mechanism and institutional responsibilities. The Government showed commitment to establishing clear budget mechanisms for sanitation through the undertakings of the water and sanitation joint sector review in 2003. The review recommended revision of the district guidelines on the use of central government funds. It encouraged pooling of funds from the various sources at the district level which should be deployed within the framework of a comprehensive sanitation plan. Although the general practice at the local level is that the user pays, the National Environmental Sanitation Policy and the Uganda National Sanitation Guidelines state that a capital subsidy should be allowed for the poorest households, those living in areas with poor ground conditions, tenants and people in transit and primary schools. The policy recommends that such a subsidy should be in the form of a hardware cost subsidy for latrines for poor household.

**Actors**

The actors were often mentioned in the acknowledgement sections of the policies or their key implementation guidelines. While it was at times not possible to identify key actors involved in policy formulation except for the lead department, it was evident that in all three countries several actors were involved in relevant policy formulation. It was also evident that all policies acknowledged several categories of actors as implementers of the policy. The categories of the actors identified in the review varied from central government ministry representatives, donors, civil society organisations, international organisations, development partners, urban and rural councils to local government representatives from key relevant departments. The Water and Sanitation Program-Africa Region (WSP-AF) was an international partner that played a key role in the formulation of national policies in all three countries. However, there was no conclusive evidence that private enterprises serving the urban-poor were involved in policy formulation. Table 3 provides an overview of the scope of actors listed in the reviews. A summary of the policy context, content and actors is presented in Table 4. A summary of the policy processes is presented in Figure 1.

**Policy process**

The policy processes identified in the reviewed documents of all three countries involved the acknowledgement of the poor sanitation state of all three countries and the subsequent need to step up sanitation. The identification of the need to step up sanitation was followed by incorporation of sanitation goals into
Table 3. Sanitation actors.

| Country       | Operational policy document                                                                 | List of actors                                                                 | Categories of actors represented                                      |
|---------------|------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------|------------------------------------------------------------------------|
| Kenya         | National Environmental Sanitation and Hygiene Policy 2016–2030                                   | Ministry of health division of environmental health World Bank Group’s Water and Sanitation Program Africa Region | National, sub-national and local public authorities, International organisations, Civil society organisations, Donors, Researchers, Non-governmental organisations, Development partners |
|               |                                                                                               | Environmental Sanitation and Hygiene Inter-Agency Coordinating Committee        |                                                                                                                                   |
|               |                                                                                               | Technical Working Groups (KWAHO, UON/KEMRI WSSCC, AMREF, WASH Alliance Kenya, WASH United, WSUP, PS Kenya, UNICEF, APHOK) |                                                                                                                                   |
|               |                                                                                               | County Health Departments, Ministry of Water and Irrigation.                   |                                                                                                                                   |
|               |                                                                                               | Ministry of Environment and Natural Resources, National Environmental Management Authority (NEMA) |                                                                                                                                   |
|               |                                                                                               | Water Services Trust Fund                                                      |                                                                                                                                   |
|               |                                                                                               | Ministry of Health CLTS Hub Team                                               |                                                                                                                                   |
| Tanzania      | Water sector development programme implementation manual, main document, 2015                 | There is no acknowledged section in the main operational sanitation policy implementation document | National, sub-national and local public authorities, International organisations, Civil society organisations, Donors/funders |
|               |                                                                                               |                                                                                  |                                                                                                                                   |
| Uganda        | National Sanitation Guidelines, 2000                                                           | Ministry of Health                                                             | International organisations, Civil society organisations, Donors/funders                                                      |
|               |                                                                                               | Water and Sanitation Program-Africa Region (WSP-AF)                            |                                                                                                                                   |
|               |                                                                                               | District and urban councils                                                    |                                                                                                                                   |
|               |                                                                                               | Ministry of Gender and Community Development                                  |                                                                                                                                   |
|               |                                                                                               | Ministry of Local Government                                                  |                                                                                                                                   |
|               |                                                                                               | Ministry of Natural Resources                                                  |                                                                                                                                   |
|               |                                                                                               | DANIDA UNICEF WHO RUWASA AMREF NETWAS WATERAID                                |                                                                                                                                   |

Development agendas an aspect that was also encouraged by the MDGs to which all three countries were signatories. The policies were further framed within the Agenda 2030 based on initial commitment to the MDGs and the eThekwini Declaration (Republic of Kenya 2007, Prime ministers office 2009, Government of Uganda 2010, United Republic of Tanzania 2010, Republic of Kenya (MOH) 2017). The policies were further driven by Ministries of Health together with other relevant ministries and key regional development partners such as the (WSP-AF). However, it is evident from the policy documents reviewed that the availability of funding from key donors affected policy formulation as donors were often acknowledged as the people who financed the policy formulation. The policy formulation has been lengthy with various guidelines speaking to sanitation being issued over several years. For example, the Tanzania National Sanitation Policy is still under formulation and recommendations have frequently been made to speed up the process (World Bank 2011). The National Sanitation Policy for Uganda was drafted in 1997, underwent some revision in 2000 and is still being formulated up-to-date (The National Sanitation Task Force 1997, Ministry of Health Uganda 2000).

Discussion

Policy existence

The key findings from this policy landscape analysis show that only Kenya has a sanitation policy that was ratified by the parliament. Uganda and Tanzania have several policy documents that speak to sanitation and key documents through which sanitation policies are implemented. However, the widespread of policies across several policy and legal frameworks expressed in a multitude of documents can prove to be challenging for an average implementer at the local government. There is increasing pressure for countries who have not consolidated sanitation policies, which ultimately speak to the area of FWM to update their policies. Such pressure is mounted by both local NGO networks and international agencies that work in the sanitation area including Kenya Water and Sanitation Civil Societies Network (KEWASNET), Tanzania Water and Sanitation Network (TAWASANET), Uganda Water and Sanitation NGO Network (UWASNET) and the African Ministers’ Council on Water (AMCOW) among others (UWASNET 2000, KEWASNET 2007, TAWASANET 2008, World Bank 2011). It is therefore essential that there are well-coordinated and consolidated sanitation policies that speak clearly to FWM among other sanitation issues. Such consolidated policies might go a long way in fostering operationalization and smooth implementation of sanitation services by the local governments to achieve the much needed universal access to safely managed sanitation under SDG 6.2. Nonetheless, further research is needed to establish specific impact of the various policies and their lack thereof on various public health and social economic outcomes.

Policy coordination

Given the coordination issues that arise from widely scattered policies across several frameworks, the minimum expected standard would be the existence of
Table 4. Comparative summary of the policy context, content, process and actors in Kenya, Tanzania and Uganda.

| Attribute/ country | Kenya | Tanzania | Uganda |
|--------------------|-------|----------|--------|
| **Policy context** | Kenya is under going rapid devolution with the highest devolution powers in East Africa. | Tanzania has the least level of power devolution acting as a unitary republic. | Has some level of power decentralisation. |
| **Policy framework** | Main policy framework is expressed in the National Environmental Sanitation and Hygiene (KESH) Policy 2016–2030, a stand alone policy document. | Main policy framework is expressed in the Water Sector Development programme Implementation Manual, main document, 2015. A document that is complemented with other key policy and legal frameworks. | Main policy framework is expressed in the National Environmental Health Policy, 2005, policy that is complemented with several other policy and legal frameworks. |
| **Legal framework** | Several acts and bills specified in KESH Policy. | Policies aim to establish equitable service delivery. | A number of regulatory acts and statutes addressing sanitation. |
| **Population targeting** | In order to achieve equity, the policies prioritise the chronically ill, the elderly and persons with disability. | However service delivery in the cities is mainly privatised and favours those who can access sewered sanitation. | Low income households, refugee camps, schools, hospitals, high cost set up areas, and women are targeted by the policy. |
| **Level of services** | Minimum standards for containment are comprehensively outlined in the policies. However, minimum level of services for the complementary collection, transportation and treatment and environmentally sound disposal of faecal waste are not comprehensively addressed. Urban utility corporations tend to be biased towards sewered services. | Minimum level of services and standards are outlined in the policies. However, the standards do not comprehensively cover the entire FWM value chain. Urban utility corporation acts are biased towards sewered services. | Minimum standards for containment are comprehensively outlined in the policies. There are no clear guidelines set out for the emptying, transportation, treatment and disposal of faecal waste. Utility corporations focus more on sewered sanitation. |
| **Health** | Health risks are outlined in a general way. The policies do not disaggregate sanitation risk of urban and rural areas. There is no clear indication of disease risk at each step of the FWM chain. | The link between health and sanitation is discussed. There is no differential discussion of risks by urban or rural areas or across the different steps of the FWM value chain. |
| **Environmental considerations** | Environmental considerations are comprehensively outlined in the policies. | Environmental considerations are comprehensively outlined in the policies. | Budgetary responsibilities are spread across the relevant ministries. Sanitation funds come from the central government, development partners and local revenue. Water and sewerage budget investments are often lumped together with no clear budgeting for activity lines of the FWM value chain. Users are expected to pay at the household level. |
| **Financial considerations** | Funds are drawn from the central government and donors and sanitation budgets are spread across relevant ministries. Lump sum and not activity specific estimates of sanitation funds are often presented. However, tools have been developed to foster future budgeting along specific activity lines but the are not along the FWM chain. Users pay at the household level. | FWM responsibilities are spread across relevant government ministries and institutions working under a memorandum of understanding. They are coordinated by the MoHCDGEC with oversight from the prime minister's office. | Sanitation activities pertaining to FWM are centrally coordinated by the MoH. At the Local Government level responsibilities are shared between relevant government ministries. |
| **Districts are encouraged to pool funds from various sources that should be deployed within** | A comprehensive sanitation plan. A 10 year sanitation and hygiene plan made an attempt at defining unit costs on selected sanitation strategies. Still no budgeting along the lines of the FWM chain has been outlined in the policies. Users are expected to pay at the household level. | | |
| **Institutional framework** | The new ministry of water, sanitation and irrigation coordinates all activities that are related to FWM. Activities are implemented in collaboration with other ministries. | | |
| **Policy actors** | Groups of national and international organisations identifying as public, civil society, donors or research organisations. | Groups of national and international organisations identifying as public, civil society, or donors. | Groups of national and international organisations identifying as public, civil society, or donors. |
clear guidance on how the various laws, regulations and policies will be operationalised to deliver sanitation services. However, such clear guidance was often lacking across all three countries. Furthermore, the policies that addressed sanitation were often lumped together with water and environmental policies. Lost in this marriage was the need to develop comprehensive sanitation legal frameworks that adequately address FWM challenges along the entire FWM value chain. The coordination issues were also expressed in institutional roles whereby the responsibility for sanitation does not lie with a single Ministry but is spread across several relevant institutions. However, this institutional spread was often not matched by equal collaboration among key Ministries to achieve desired sanitation outcomes. The mandates of the various Government Entities were either overlapping, duplicated or contradicting. Coordination mechanism where often limited to technical working groups and memorandums of understanding between relevant Ministries with no incentives for sustainable collaboration. Such arrangements might not work out pretty well in practice. In the case of Kenya, this is beginning to change with Executive Order 6 of 2018, which created the Ministry of Water, Sanitation and Irrigation, with a clear mandate to address sanitation policies and programmes across the country, powered by the creation of a specific Directorate of Sanitation headed by a Director. Though in its infancy, we are beginning to see a focused coordination of sanitation stakeholder and moves to take charge and offer leadership to the sanitation sub-sector by the Ministry. Such a move suggests the way to go for other countries within the region specifically for Uganda and Tanzania. Operational research in this area will need to focus on the various arrangements of service delivery through various institutions and best guideline approaches to effective policy coordination.

**Equity in policy**

Although equity is important in achieving universal sanitation policy, but recommended subsidies were often restricted to the poorest household with no clear guidelines on how the poorest household will be identified and reached. Yet it is known from studies conducted in West Africa and elsewhere that operational challenges are quite real in defining, characterising, and identifying overall nature and determinants of poverty as well as reaching out to the poor and vulnerable (Silver 1994, Ajakaiye and Adeyeye 2001, Mberu et al. 2016). Poor communities such as urban slum dwellers were often ignored by the policies, which put urban utility bodies with an ultimate agenda to expand sewer services, at the centre of service provision. Yet, most urban dwellers live in slum-like settings that lack access to sewer sanitation services. The focus placed on expansion of sewer sanitation services has huge financial and social cost implications for informal settlements. We recommend further research that will identify and advocate for various financing streams.
that will improve sanitation as a whole but especially among the vulnerable sub-populations within communities. Furthermore and in view of the fact that poor sanitation leads to disproportionately poor outcomes among vulnerable communities, there is a need for policies to outline disease risk and its aversion at each step of the FWM chain.

**Study limitations**

Our analysis was based on document review of the existing policies. Therefore, we were not in a position to identify some of the processes implemented in practice that can affect sanitation policies and outcomes. Therefore, future research should focus on how the policies are implemented in practice. We were also not able to identify some of the actors that participated in policy formulation.

**Conclusion**

Despite the known detrimental effects of FWM acknowledged by national development agendas, multiple institutional and policy governance arrangements often put FWM at the periphery of sanitation strategies. Well-coordinated, comprehensive policies and legal frameworks explicitly addressing all areas of the FWM value chain are required to foster implementation of sanitation services at the local level in order to achieve universal sanitation. Central to this effort should be huge investments in data collection as a policy priority to help implementing agencies and local governments pinpoint priorities, measure progress, and identify interventions that work among different segments of the urban poor living in slums where sanitation challenges remain profound and daunting.

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**Notes on contributors**

*Agnes Nanyonjo* is a medical doctor who specialises in health systems and policy research.

*Caroline Kabaria* is an engineer who specialises in spatial epidemiology.

*Blessing Mberu* is a demographer who specialises in migration, urbanization and urban health issues.

**ORCID**

Agnes Nanyonjo  [http://orcid.org/0000-0002-2036-9548](http://orcid.org/0000-0002-2036-9548)

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