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MAKING SANITATION HAPPEN: AN ENQUIRY INTO MULTI-LEVEL SANITATION GOVERNANCE

EBA

Making Sanitation Happen

An Enquiry into Multi-Level Sanitation Governance

Nelson Ekane

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Expertgruppen för Biståndsanalys (EBA)

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ABSTRACT

This cross-national comparative research in Rwanda and Uganda draws on institutional, policy and implementation theories and empirical research to disentangle how sanitation policies are articulated at multiple levels of governance and among various actors in the sector. The findings show that the basic institutional environment and the right governance structures are yet to be fully put in place to effectively transform sanitation and hygiene conditions. In the case of Rwanda and Uganda, ambitious policy commitments and objectives at higher levels of governance and extensive policy reforms are not matched by adequate resources to support effective action on the ground. Further, increasing numbers of actors with different agendas and approaches produce 'hybrid' modes of governance, which are prone to known complications of fragmentation and coordination which affect interactions between practitioners and target populations. Privatised service delivery with minimal state control or oversight poses accountability problems and compromises effectiveness in service delivery, especially to the poor and underprivileged. In terms of political leadership and governance arrangements, Rwanda's predominantly top-down political leadership and oversight which allows for inclusion at the household and community levels seems to work better in making things happen on the ground and in maintaining accountability. Inclusive development within existing local structures and cultures as in Rwanda reflects 'backward mapping' which emphasises inclusion at the ground level and could potentially lead to consensus for change.

INTRODUCTION

Background and Rationale

General problem field – Sanitation challenge in Sub-Saharan Africa (SSA)
In sub-Saharan Africa (SSA), only 28% of the population has access to basic sanitation facilities (WHO/UNICEF 2017: 106). In this region, open defecation (OD) is still rife in some communities and hygiene behaviours leave a lot to be desired in many communities. Even though the practice of OD is generally declining in most of the developing parts of the world, it is still practiced by about 23% of the population of SSA and is prevalent mainly in the rural areas (WHO/UNICEF 2017:106). Of the 27 countries with highest rates of OD, 19 are in this region (WSP 2015). On-site sanitation solutions are predominant in rural and urban settings in the region (WHO/UNICEF JMP 2017, 16), and mainly consist of pit latrines of varying standards (Morella et al. 2008). In addition, the coverage of basic handwashing facilities in the region is reported to be only 15% with 3 out of 5 people (about 89 million people) having these facilities living in urban areas. This includes handwashing facilities with soap and water at home (WHO/UNICEF 2017: 5, 18). Reported progress in sanitation coverage remains slow or limited in SSA. Most countries in the region missed the sanitation target of the Millennium Development Goals (MDGs)[1] (WHO/UNICEF 2015).

Poor sanitation and hygiene is reported by the Water and Sanitation Programme of the World Bank (WSP) to cost between 1% and 5% of Africa's Gross Domestic Product (GDP) which is equivalent to about US$80 billion annually due to losses attributed to morbidity, mortality, productivity, and access time (WSP 2015). Investing in sanitation and hygiene has been shown to lead to direct health and indirect economic

[1] The MDG sanitation target was to halve the proportion of people without access to basic sanitation facilities by 2015.

benefits. In terms of health benefits, Wolf et al. (2014) report that improved sanitation can decrease diarrhoeal diseases by 28%, and that there are notable differences in illness reduction according to the type of improved water and sanitation system implemented. Similar studies on handwashing with soap show a reduction of about 48% in diarrhoeal diseases (Cairncross et al. 2010; Esteves and Cumming 2016). Regarding economic benefits, WSP (2015) estimates that a return of more than US$6.60 can be derived for every US$1 invested in sanitation in SSA. These are good arguments for universal compliance in handwashing and defecation practices, but due to different factors these are yet to trigger a complete transformation of undesirable behaviours and practices in communities where they prevail. High prescribed standards for sanitation facilities, high cost of piloted solutions (McGranahan 2015), structural inequalities and remoteness of rural settlements (O'Reilly et al. 2017), and unavailability of building materials and expertise (Pickering et al., 2015) are some of many factors perpetuating the problem.

Specific problem area – Governance gaps surrounding sanitation in Sub-Saharan Africa (SSA)

The role of governance and awareness of constraints and opportunities at different levels of society in achieving sustainable sanitation outcomes is increasingly being recognised (Van Vliet et al. 2011; Oosterveer 2009; ODI 2011; ODI 2012; ECA 2012; Ekane et al. 2014; Ekane et al. 2016a; GLAAS 2017; Ekane et al. 2019). Widespread public sector reforms have engendered involvement of non-state actors operating in networks. These are characterised by different modes of public-private partnerships in service delivery. Multi-lateral development organisations and donor agencies play a major role in agenda setting, global and regional policy formulation at the macro-level (supranational policies) e.g. the MDGs and now Sustainable Development Goals (SDGs)[2], and in promoting and financing different

[2] The SDG sanitation Target 6.2 is to achieve access to adequate and equitable sanitation and hygiene for all and end OD by 2030.

approaches. Philanthropic organisations are also increasingly participating in financing and promoting research and development. At the national level, governments formulate policies in line with global visions and goals albeit with limited resources. This is usually done at the central ministry level (macro-level), with the implementation responsibility being that of the district government, communities, and households at the micro-level. The micro-level actors de facto have a high responsibility in realising sanitation (Morella et al. 2008). In-between the macro and micro-levels is the meso-level web of actors, ranging from government agencies to civil society organisations, and private sector formal and/or informal service providers. These meso-level actors operate in relation to the macro-level policies, plans, and programmes of national governments, multi-lateral development organisations, and donor agencies. Whereas clear messages from the highest governance levels are important, there are many layers of policy interpretation before policy messages reach the community and household levels (Ekane et al. 2014).

From a multi-level governance perspective, a number of factors are reported to contribute to governance gaps. Namely: ambitious policies and inadequate funding; low prioritisation of sanitation as it is often included within water supply and not adequately budgeted for; sectoral fragmentation and coordination problems between actors; unclear roles and responsibilities of different actors; contradictions between formal and informal institutions; multiple barriers to change in sanitation practices and hygiene behaviours; inadequate capacity for reliable data collection, monitoring and evaluation (M&E), and operation and maintenance (O&M). Most of these gaps also prevail in other sectors and contexts (Akhmouch and Kauffman 2013).

Part of the problem is that governance gaps in general in the SSA context are poorly understood and even neglected as a result of their multifarious, cross-cutting, and complex nature (Burns and Worsley 2015). This partly explains why development problems such as those in the sanitation sector

have predominantly been approached in a linear manner which misses the complexity of the context and problem (Nordtveit 2010; Van Vliet et al. 2011; Burns and Worsley 2015, 1). This has also been shown to be the case in the water sector (Suleiman and Khakee 2017) and constitutes a major flaw of top-down development planning (Burns and Worsley 2015, 2). This reiterates concerns regarding the complex or so-called 'wicked' nature of planning problems which Rittel and Webber (1973) describe as 'malignant' (social) and 'benign' (technical) (Rittel and Webber 1973, 160). Pertaining to problems related to sanitation, hygiene and behaviour change, this distinction is relevant in describing issues connected with technology and design which may be easily resolved by engineers ('benign') and societal and behavioural issues ('malignant') which we continually grapple with without definitive solutions. In this thesis, emphasis is placed on exploring the 'malignant' social problems surrounding sanitation and hygiene from an empirical point of view.

Generally, some of the perpetual development challenges highlighted by Caiden and Wildavsky (1974) continue to plague many sectors in the region, with the sanitation sector being no exception. These include general poverty characterised by lack of money, a capable workforce, useful data, essential information and governmental capacity to mobilise existing resources especially at the local government level where resource constraints are rife (Wunsch 2001). GLAAS (2014) emphasise the funding, monitoring and evaluation, and enforcement gaps hindering full implementation of national sanitation plans and programmes in several countries. Recent global estimates show a tremendous gap in the financing needed to meet the water supply, sanitation, and hygiene SDG 6 targets, with capital investment needs alone three times higher than current investment levels (Hutton and Varughesen 2016). Moreover, approaches for implementing sanitation and hygiene behaviour change programmes and projects have been predominantly supply or technologically-driven (WSP 2010), and subsidy-driven or donor-dependent (ECA 2012). These have ingrained different forms of path dependent behaviour among actors at different levels of

society (Ekane et al. 2014) wherein more emphasis is being placed on infrastructure provision than on supporting sustainable service delivery (GLAAS 2014) including hygiene behaviour change. A major part of the problem has been to have sanitation included within water supply. Again, in this arrangement, water supply generally takes precedence over sanitation and thus receives more attention and resources (Elledge 2003; Galan et al. 2013). Consistent with the unequal policy attention paid to water and sanitation, progress towards the provision of sanitation facilities perpetually lags behind water supply (WHO/UNICEF 2017).

While the policy implementation related gaps at different governance levels are known, much is still to be done to improve understanding of how these can be addressed or tackled in different circumstances or contexts (Ekane et al. 2019). In addition, there is a need to ascertain which policies, institutional arrangements, approaches and instruments contribute to desired and sustained increase in coverage of sanitation facilities and change in hygiene behaviours.

Research Aim and Questions

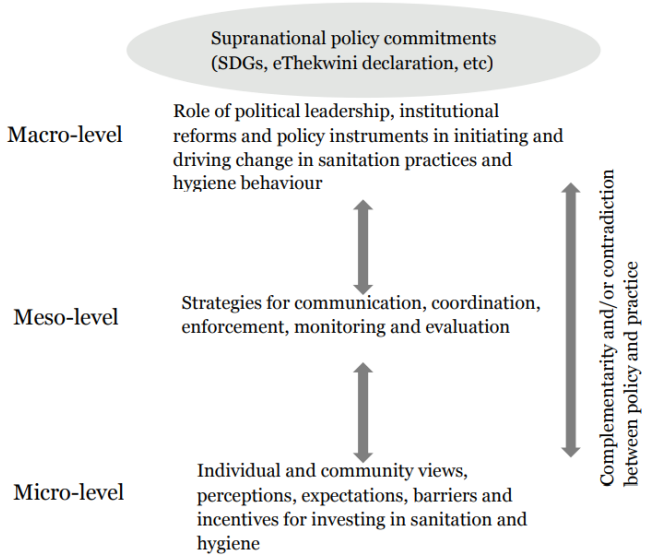
This thesis disentangles how sanitation policies are articulated at multiple levels of governance and among various actors in the sector, and eventually translate into investment and behaviour change at the community and household levels. From a multi-level governance perspective, this research is designed to unravel what kind of policy measures or strategies translate into outcome, i.e. changing hygiene behaviours and promoting greater access to decent and functional toilet and handwashing facilities at the community and household levels. This is done by examining sanitation governance structures in selected countries in SSA. Specific emphasis is placed on the actors and actions at national, sub-national community and household levels.

The specific research objectives are the following:

- **Objective 1**: Examine the role of political leadership, institutional reforms and policy instruments in initiating and driving change in sanitation practices and hygiene behaviours (Macro-level policy assessment);
- **Objective 2**: Explore sanitation policy implementation mechanisms and strategies for coordination and communication between actors at different levels of society (Meso-level mapping of actors and actions);
- **Objective 3**: Examine individual and community views and perceptions of existing sanitation systems, policy instruments, barriers and incentives for investing in sanitation and hygiene, and expectations of who should provide for basic sanitation and hygiene services (Micro-level investigations).

The above objectives reflect issues raised by Bevir (2013, 15) regarding new patterns of governance at local, national, and global levels. This pertains to the type of leadership that is appropriate, how networks are managed, and how the common good is collectively protected.
Figure 1 illustrates how the research objectives relate to each other in a multi-level governance framework.

Figure 1: Research objectives in a multi-level governance framework



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Rwanda and Uganda are selected as case study countries for empirical investigations. These countries showed different progress records towards the sanitation target of the MDGs as reported by the Joint Monitoring Programme (JMP) of the World Health Organization (WHO). Rwanda is reported to have made 'good progress' towards this target whereas 'limited or no progress' is reported in Uganda (WHO/UNICEF JMP 2015).

These countries have a number of factors in common: they are signatories of the eThekwini Declaration on sanitation and hygiene[3] (Ministerial Statement 2008); sanitation is a salient issue in both countries and is high on

[3] This eThekwini declaration was an expression of the commitment to prioritise and support efforts in terms of policies, leadership, coordination, funding, monitoring and evaluation, and capacity development to improve water and sanitation in the entire continent.

the national development agenda as indicated in the poverty reduction strategic papers; numerous policy and institutional reforms, in particular clarification and reassignment of roles and responsibilities for sanitation and hygiene are common; both countries have predominantly rural populations with large numbers lacking basic sanitation; levels of inequality and informality are high; levels of economic development are quite similar - GDP (PPP) per capita of US$ 1762 for Rwanda and US$ 1851 for Uganda[4]; both countries have a history of armed conflict and political struggle and are ruled by strong and long-serving presidents in a benign or semi authoritarian political set-up but with incorporated democratic innovations in varying degrees (Sjögren 2007; Straus and Waldorf 2011, 27; Purdekova 2011). The countries also differ in a number of ways: progress records towards the sanitation target of the MDG; trends in population growth since 1990; urbanisation trend; size; different growth rates - GDP annual growth of about 7% for Rwanda and 5% for Uganda.[5]

The following research questions are explored:

- **Research question 1 (RQ1)**: How is the implementation of sanitation in Rwanda different from that in Uganda?
- **Research question(s) 2 (RQ2)**: How are commonly used instruments viewed by target populations in communities where different approaches are implemented? How does the choice of approaches affect compliance of target populations with community health club (CHC) and community-led total sanitation (CLTS) interventions and the views they have of their own responsibilities and their expectations from government?
- **Research question 3 (RQ3)**: What are the driving psychological mechanisms underlying sanitation and hygiene related perceptions, judgment, and behaviours?

[4] GDP (PPP) per capita, World Bank 2017.

[5] GDP annual growth, World Bank 2017.

Delimitation of the Scope of Research

The word sanitation[6] is ubiquitous and can include many aspects. An important part of sanitation relates to technologies, systems and related services ('hardware') (Stenström et al. 2011; Tilley et al. 2014). Nevertheless, another important part of sanitation relates to hygiene behaviour ('software'), which is almost entirely at the discretion of private individuals – typically in conformity with norms and codes of conduct at the household and community levels particularly in the SSA context (Van der Geest 1998; Akpabio and Takara 2014). These facets of sanitation are examined in this thesis from a social science perspective. This departs from the engineering or technology perspective which has hitherto been dominant in the sanitation sector (Van Vliet et al. 2011).

It is not my intention to delve into an in-depth analysis of the root causes of factors characterising the SSA context such as poverty, inequalities, informality, and the power and geopolitical dynamics perpetuating them. These complex and cross-cutting factors are important but warrant a different research agenda and theoretical background which I am not employing in this research. I merely emphasise that governance gaps and multiple barriers to behaviour change emanate from such factors and stress the need to identify the most pressing gaps and barriers and the instruments that are appropriate and effective in either managing them continuously or completely transforming them.

Relevance and audience of research

The research gaps and questions addressed in this thesis are of relevance to the ongoing debate in the sanitation sector on what works on the ground.

[6] In the context of this thesis, I use sanitation to refer to the provision of services and facilities for the collection, handling, treatment, disposal and/or use of mainly human excreta (faeces and urine), and the related health and hygiene behavioural aspects.

The insights are directed to sanitation and hygiene researchers, practitioners, decision-makers, and other experts at different levels of society.

Methodology

I adopt a cross-national comparative case study approach (Pennings et al. 2006; Yin 2014; Saetren, H. 2014; Hupe and Saetren 2015). Mixed methods were used to collect and triangulate data (Creswell 2009, 203). Data collection was performed at the national level and at selected case study sites within Rwanda and Uganda. Study sites were selected as illustrative cases for comparison - representing rural and peri-urban/urban settings.

Core subject of research

The ways in which collective impacts are produced in a social system is the core subject of this thesis (Hill and Hupe 2014). This entails turning policy objectives into outcomes during the policy process. The policy process is defined by Weible (2014) as interactions between policy and the surrounding actors, events, contexts, and the outcome of policy. During this process, decisions and actions are taken with respect to a public problem such as sanitation which is to be addressed through a collective course of action for collective interest or the common good (Zürn et al. 2010). This also includes private solutions to public problems (Ostrom 1990), which is becoming increasingly popular in contemporary governance.

Conceptually, I combine institutional, policy and implementation analysis, with an analysis of what motivates hygiene behaviour change at the community and individual levels. This is done by adopting a multi-level governance framework in studying multi-actors and processes (Goggin et al. 1990; Jann and Wegrich 2007, 45; Hill and Hupe 2014). In this thesis, multi-level governance is used as a conceptual framework for analysis as it offers a pragmatic approach to thinking and allows for the use of different theories to explain different governance phenomena (Zürn 2010). It is a

heuristic device to help understand how policy decisions made at the top levels of governance are translated into action at the level of target populations (Lynn et al. 2000; Roll et al. 2017). Moreover, Roll et al (2017) observe that little is known empirically about the extent to which research on implementation is situated across multiple levels of governance. This thesis is a worthwhile attempt to contribute to filling this gap. Similarly, institution is examined in this thesis as a source of both social order and social change drawing mainly on North (1990). North (1990) separates institutions into two sets of rules or norms, either formal (i.e. devised and designed by human beings) or informal (conventions and codes of behaviour), which actors generally follow, whether for normative, cognitive, or material reasons. Institutions change with time and shape the way societies evolve (Williamson 2000, 597).

New modes of sanitation governance are characterised by the state acting through non-state actors in flexible and inclusive state-citizen interactions. Oosterveer (2009) and Van Vliet et al. (2011) refer to these modes of governance as 'network states' which acknowledge the limitation of traditional modes of command-and-control mechanisms in contemporary society. Even though these modes of governance include stakeholder participation and enable context-specific solutions, they are institutionally weak and non-state actors face problems of legitimacy (Van Vliet et al. 2011). In response to implementation failures attributable to the proliferation of non-state actors, coordination challenges and flexible rules, the need for policy instruments that increase or re-establish the capacity of the state to govern, steer or guide is emphasised (Mayntz 2006; Le Galès 2013, 145). This reflects the notion of the 'neo-developmental state' with the active role of government which Oosterveer (2009) and Van Vliet et al. (2011) argue is necessary for the provision of basic sanitation services, particularly to the poor and underprivileged.

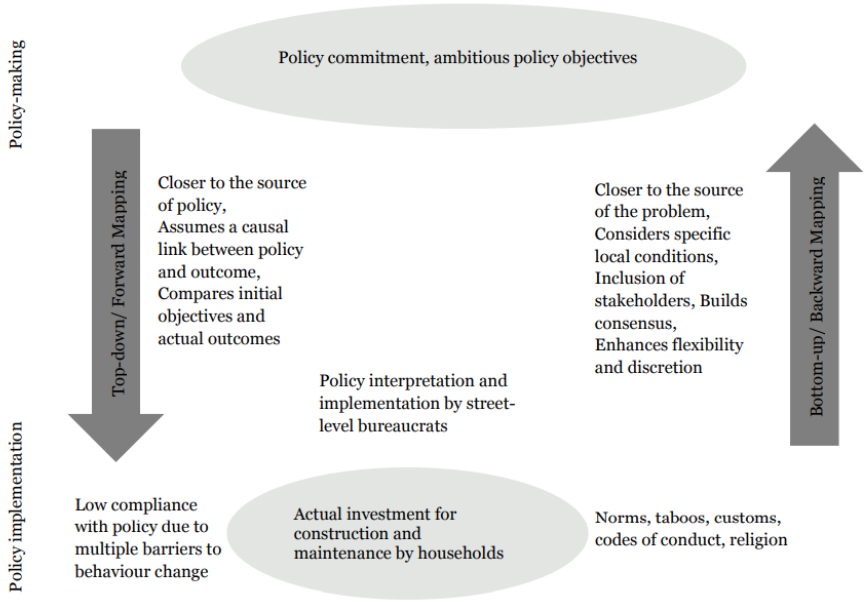
Multi-actors in the policy implementation process can be organisations or individuals, some of whom actively seek to influence public policy (Weible

2014: 5). This influence is exerted at the frontline (micro-level) where the policy system interacts with the target population through programmes; by organisation factors (meso-level) such as resources, structure, cultures, competing programme objectives which shape frontline conditions; and at the policy field (macro-level) consisting of networks that are structured by specific policy environments in a given geographical area (Roll et al. 2017). The choice of policy instruments has been shown to depend upon the national context and style. Context influences the choice of instruments in different ways. Two important ways this happens are the institutional, organisational and systemic setting in which decisions are made and the problem situation that leads to the choice of instrument (Linder and Peters 1989). Along similar lines, countries reveal distinctive policy styles characterising the policy process which in turn influences the nature and design of their policies, including the choice of policy instruments (Linder and Peters 1989 and Knill and Tosun 2012: 4). Policy style here refers to the characteristics of a government's approach to active or reactive problem-solving and its consensual or impositional relationship to other actors in policy-making and implementation (Richardson 1982: 13).

Subjectivity in the choice of policy instruments is argued to be an issue of concern by Linder and Peters (1989, 35, 51) who point out that instruments often represent the values of decision-makers and their policy advisors. They add that how these actors perceive the instruments conditions their views of problem situations, biases their expectations of performance, and shapes their choices. This raises the issue of the locus of power which Rothschild (1999, 28) argues is actually with individuals in a free-choice society. This implies that if behaviours that are sought are not perceived to be of self-interest to target populations, then desired changes may not be realised. The above assertions raise questions regarding legitimacy, which involves the degree of actual support a government may realise for its choices because the actors involved, including the target population, perceive them as corresponding to their own views, feelings, or objectives. This is the stance

taken by Bemelmans-Videc (2007, 8) who stresses that acceptance is crucial for actual effectiveness of a policy or programme.
The role that households play in providing sanitation cannot be overemphasised (Letema et al. 2014). Households remain the major source of financing, contributing up to 66% of the investment for water, sanitation and hygiene (GLAAS 2014; GLAAS 2017:17). This is explained by the fact that sanitation practices and hygiene behaviours are predominantly at the discretion of the individual in a more or less private setting. This is most easily discernible in the SSA context where informal norms and codes of conduct prevail and often contradict public policy (Ekane et al. 2012; Ekane 2013). With little or no straight-forward relation between policy objectives and individuals and collectives, this disconnect perpetuates variation in policy outcomes. One plausible way of analysing this is through 'backward mapping' which enables inclusion of stakeholders into the process of designing and implementing reforms, builds consensus for change based on experience with small-scale policy modifications, and enhances flexibility and discretion at the ground level (Elmore 1979-80, 604; 1985; Fiorino 1997, 253). This is summarised in Figure 2.

Figure 2: Entry points for analysing policy outcomes from top-down and bottom-up perspectives



Source: this research

Findings and discussion

The findings of this research are presented in four articles as outlined below:

Article I:

Multi-level sanitation governance: Understanding and overcoming challenges in the sanitation sector in Sub-Saharan Africa.

In this article, I question the path and pace of development of sanitation in SSA and argue for the need to draw on a multi-level governance perspective and institutional theory in analysing sanitation governance. The paper is

based on a review of literature on sanitation, hygiene and related governance gaps. The discussion in this article sets the scene for my research and in a direct way serves as an introduction to the problem, context, and some of the concepts that are subsequently use in this research.

In this article, I contend that the multi-level mode of governance is prone to known complications of coordination. This is exacerbated by severe resource constraints endemic in the SSA region. Path dependence and institutional inertia are used to attempt an explanation of the supply and technology driven approaches that have hitherto been dominant in the sector.

Article II:

Linking sanitation policy to service delivery in Rwanda and Uganda: From words to action.

This article is based on both an assessment of policy objectives and empirical research on the policy implementation processes in Rwanda and Uganda. It directly addresses the gap between policies for sanitation and hygiene, implementation processes, and outcome drawing on policy and implementation theories.

Following Jann and Wegrich (2007, 51) decisions on a specific course of action and the adoption of a problem do not imply that action on the ground will strictly follow policy-makers' objectives. Along similar lines, I reiterate that implementation is critical to the success of policy and therefore failure to anticipate implementation problems in policy making and policy reform processes may lead to failure to achieve programme objectives (Weaver 2014). Most importantly, I point out that, specifically for sanitation and hygiene, one of the main sources of the implementation gap is the disconnect between policy objectives set at the macro-governance level, usually in response to international and regional development goals and

commitments, and basic actions at the household and community levels where investment in latrine and handwashing facilities is predominantly made (GLAAS 2017, 17). Further, the increasing number of actors present coordination and harmonisation problems. This partly contributes to deviations from policy objectives and can be said to be the case in Rwanda and Uganda where different actors with varying agendas are promoting and funding different approaches.

The approach to sanitation in Rwanda is predominantly top-down but aimed at involving local communities. This is explained by the institutionalisation of stringent performance contracts and the Community Health Club (CHC) approach, both of which have their roots in the Rwandan culture. Within the performance contract scheme, line ministries, public agencies and district officers sign formal performance contracts with the president to deliver on specific outputs. The CHC approach involves the promotion of inclusive development within existing local structures and builds on trust, collaboration and mutual benefits which are some of the characteristics of networks. On the other hand, Community Led Total Sanitation (CLTS) and sanitation marketing (SanMark) are promoted as flagship approaches within policy in Uganda. In both countries, private operators and NGOs play key roles in filling the finance and human resource gaps. The move towards the private sector for service delivery is, however, more evident in Uganda where market development has taken precedence (WSP 2016: 23). Increasing involvement of non-state actors presents problems regarding the legitimacy of private actors and ineffectiveness in service delivery, particularly to the poor and disadvantaged (Van Vliet 2011). Following from the above, sanitation governance arrangements in Rwanda and Uganda are 'hybrid'. The governance arrangement in Rwanda can be described as predominantly 'neo-developmental' with some elements of 'network' whereas that in Uganda is predominantly a 'network' (Oosterveer 2009; Van Vliet et al. 2011).

Article III:

Risk and benefit judgment of excreta as fertiliser in agriculture: An exploratory investigation in Rwanda and Uganda.

This article directly addresses perceptions and attitudes of sanitation and hygiene related practices from a risk governance standpoint with specific emphasis on excreta management practices. This is an empirical account of how the nature and characteristics of excreta (faeces and urine) shape perception and drive individual judgment and decision-making regarding their productive use.

In this article, I explore the assertion that people tend to judge risk emotionally. I argue that human excreta generally evoke repugnance because they are marked with a negative image in people's minds. This is part of the instinctive mechanism deterring people from coming into contact with substances or objects that can potentially contaminate and cause harm. In addition, I posit that negative emotional reactions towards excreta, faeces in particular, are so strong that they persist even after the substances have been properly treated and rendered innocuous. This indicates that individuals do not rely only on risk management information they receive concerning excreta and related risks but also depend, to an extent, on their feelings about these substances when making judgments and decisions regarding the purposes to which excreta used as fertilizer can be put and the level of exposure they can tolerate and manage. This is an important insight for risk governance which encompasses risk communication and risk management. Another key insight that can be discerned from this study is that the judgment of OD being highly risky and handwashing as highly beneficial by individuals from different backgrounds and settings is an indication that there is a common understanding of the risks and benefits of these practices (Ekane et al. 2016b).

Article IV:

Carrots', 'sticks', 'sermons', and 'nudges': perspectives on the sustainability of changing sanitation practices and hygiene behaviours.

This article builds on theory and previous research and draws on empirical evidence from Rwanda and Uganda where different policy solutions are adopted to tackle the sanitation challenge – CHC in Rwanda and CLTS in Uganda. I argue that the choice of instruments depends on the influence the policy community has on the policy agenda. From a target population point of view, I show that a combination of instruments is perceived as effective in changing sanitation practices and hygiene behaviours irrespective of the approaches respondents are exposed to. This insight is important for policy efforts to eliminate negative externalities of OD and poor hygiene behaviours, and to reach a critical mass for universal compliance. Universal compliance is most likely achievable through approaches like CHCs partly due to their wider community outreach and the creation of a 'culture of health'. However, universal compliance is not achievable in the short-term using only educational appeals, which are the most legitimate instruments. Other instruments can trigger short-term desired changes but may not always be legitimate.

In terms of performance and effectiveness of CHCs and CLTS, differences are observed in study sites with CHC and CLTS interventions, including best performing CLTS (ODF declared) compared to sites with no CHC and CLTS interventions and poor performing CLTS (ODF not declared). Observed latrine (traditional pit latrine) coverage is generally higher in most of the study sites than the reported national latrine coverage and the reported WHO/UNICEF JMP improved sanitation coverage.

Regarding handwashing, more handwashing facilities are observed in intervention sites than in sites with no intervention. Similarly, more handwashing facilities are observed in the best performing CLTS site than

in the poor performing CLTS site. This is the same for soap observed at the handwashing facility and water observed at the handwashing facility apart from Tororo district where slightly more households in the site with no intervention had water at the facility. Further, reported handwashing with water and soap is higher in all sites than the JMP estimates on basic handwashing with water and soap. Similarly, reported handwashing with water and soap is higher in intervention sites than in non-intervention sites. This is the same for best performing CLTS compared to poor performing CLTS. However, the reported water availability and poverty constraints may hamper proper handwashing practices (with water and soap) and construction and maintenance of latrines.

These findings are indications of the effectiveness of CHC and CLTS interventions. The difference between the best and poor CLTS cases underlines the importance of proper implementation of approaches. Findings also reveal that there is a common understanding among respondent that provision of resources for construction and maintenance of sanitation and hygiene facilities is a shared responsibility and that they also have a key role to play. However, reported poverty and water availability related constraints, among other things, hamper the ability of respondents to fulfil this responsibility.

Conclusion

Key insights that can be discerned from the findings of this research are the following:

- Sanitation remains a low priority in national budgets despite proclamations of political commitments to tackle the problem. Policies by themselves do not solve problems. Implementation is the key to the success of policies. Policy fragmentation and coordination problems are rife as increasing numbers of non-state actors, notably multi-lateral organisations, local NGOs, and private operators take up key roles in filling the resource and service

delivery gaps. As shown with examples from Rwanda and Uganda, the institutional environment and governance structures remain incapable of overcoming the challenges that the new modes of governance present. Following Williamson (2000), the basic institutional environment and the institutions of governance or governance structure must be rightly set.

- Political leadership and commitment in combination with top-down authority and oversight as in the case of Rwanda ensures accountability and contributes to improved sector performance.
- How to get people to build and properly use latrines remains a key challenge. Subsidy, technology, and supply-driven approaches have produced sub-optimal results in addressing this challenge. This predicament can be explained by 'forward mapping' which views policy design and implementation from a top-down fashion (Elmore 1979-80, 604; 1985; Fiorino 1997) with multi-lateral organisations and other supranational actors setting the development agenda and vision - and promoting and financing different approaches. The dependence of national governments on external funding and the lack of national ownership and follow-up of programmes, particularly when external funding ends, compromise sustainability of programmes.
- Sanitation and hygiene are behavioural matters which are largely influenced by context and culture. These factors pose multiple barriers to behaviour change, particularly in the SSA context. Barriers to behaviour change relate to cognition (thought or understanding), attitudes (feelings or emotions), and intentions to change (actions). Systematic analysis of these barriers is required to improve understanding of what actually encourages the behaviours and practices that are being discouraged. Practices and behaviours embedded in cultural norms, codes of conduct and religion change slowly over very long periods (Williamson 2000).
- Sanitation and hygiene are public problems that require collective action for the common good. This implies that self-interest must be

limited if universal compliance is to be attained. This pertains to OD and other poor hygiene practices which constitute habits and routines that can be desirably changed with the use of appropriate instruments. A mix of instruments is needed to provide information about recommended behaviours, to initiate behaviours, and restrict, deter, and punish undesirable behaviours.

- Individuals at household and community levels remain key implementers of basic sanitation facilities as they enjoy discretion in determining what actions to take, what choices to make or which options to adopt, and whether to comply or not. 'Backward mapping' has the potential to include them in designing and implementing reforms, building consensus for change, and allowing for more discretion and flexibility (Elmore 1979-80, 604; 1985; Fiorino 1997).
- Negative emotions play a major role in influencing judgment and decision-making regarding the productive use of excreta. This insight is relevant for risk governance as it indicates that individuals do not rely only on risk management information they receive concerning excreta and related risks but also depend, to an extent, on their feelings about these substances when making judgments and decisions regarding the purposes to which excreta used as fertilizer can be put and the level of exposure they can tolerate and manage.

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Sanitation is high on the international development agenda, but how is sanitation policy actually put into practice on the ground? This DDB examines governance structures in sanitation on multiple levels across Rwanda and Uganda.

Sanitet står högt upp på dagordningen i utvecklingssammanhang, men hur omvandlas egentligen målsättningar till förändring i vardagen? Denna DDB undersöker hur policy översätts till verklighet genom olika styrningsnivåer i Rwanda och Uganda.

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