

Report

A political economy analysis of Uganda's rural water supply sector

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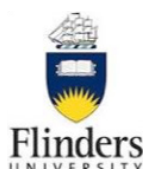


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Cover photo: Children in Uganda transport water by bicycle. © Pixabay.

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- British Geological Survey
- Sheffield University
- Overseas Development Institute
- Flinders University, Australia
- Addis Ababa University, Ethiopia
- Makerere University, Uganda
- University of Malawi
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All findings, conclusions and errors are the authors’ own.

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Acronyms

CDO	Community Development Officer
DWD	Directorate of Water Development
DWO	District Water Officer
DWSCG	District Water and Sanitation Conditional Grant
GDP	gross domestic product
GIZ	Deutsche Gesellschaft für Internationale Zusammenarbeit
HPMA	Hand Pump Mechanic Association
IRC	formerly International Water and Sanitation Centre, now IRC
LC	Local Council
MoFPED	Ministry of Finance, Planning and Economic Development
MWE	Ministry of Water and Environment
NDP	National Development Plan
NGO	non-governmental organisation
NWSC	National Water and Sewerage Corporation
O&M	operation and maintenance
PEA	political economy analysis
PPDA	Public Procurement and Disposal of Assets Authority
RWS	rural water supply
SNV	SNV Netherlands Development Organisation
TA	technical assistance
TSUs	Technical Support Units
UBOS	Uganda Bureau of Statistics
UGX	Ugandan shilling
ULGA	Uganda Local Governments Association
UNICEF	United Nations Children's Fund
UWASNET	Uganda Water and Sanitation NGO Network
WASH	water, sanitation and hygiene
WUC	Water User Committee

Executive summary

Many rural communities in sub-Saharan Africa still lack clean water for basic needs such as drinking and washing. Even where water points have been constructed, many break down prematurely or provide inadequate, seasonal or poor-quality water supplies. While techno-managerial factors are relevant in explaining these problems, attention is needed to the institutional and political-economic dynamics shaping policy outcomes on the ground. This report presents the findings from a political economy study of Uganda's rural water supply. Combining a review of the literature with in-country interviews at national and district level, the analysis identifies underlying causes of bottlenecks in the service delivery chain.

Challenges for Uganda's rural water supply sector

In its examination of the relationships between communities, political-administrative actors, District Water Officers, and private companies reveals the discrepancies between the 'theory' and reality of community-based management.

Inadequate financing is a key challenge for the sector – a result of its low political ranking among other more 'productive' sectors such as transport and energy. The ongoing creation of new districts through Uganda's policy of decentralisation necessitates the division of available financial and human resources, and this puts further strain on existing districts to meet their water supply mandates.

These mandates also increasingly prioritise piped water systems over point sources, in line with the urban development policies promised under Uganda's *Vision 2040*. But piped systems are often not a viable means for delivering improved water to poor communities in remote, low-density areas.

Moreover, when point sources are included in district plans, the majority of funds are channelled towards establishing new point water systems, with less directed towards maintenance, rehabilitation, software activities and monitoring, thereby compromising their long-term sustainability.

Opportunities for change

A focus on both the structural barriers, and the ways in which key actors in the rural water supply sector navigate and negotiate these, has given rise to several interesting coping strategies and innovations (formal and informal) that could be useful entry points through which to support positive change.

A wealth of INGO- and government-led initiatives are ongoing, and to avoid duplication of efforts and to maximise results, UPGro Hidden Crisis should forge partnerships with those relevant to its own aims. This could include contributing to advocacy agendas that call for increased prioritisation of the water sector in national policies and budgets, and a higher allocation of resources available to districts for maintenance, rehabilitation, software activities and monitoring activities.

Based on interviews with key informants, we also recommend that the UpGro Hidden Crisis project:

- involves stakeholders (particularly government) early on during project planning and shares preliminary findings
- engages district-level actors and not only ministry experts in planning and undertaking the research
- shares findings with *politicians*, as well as technical experts and development partners
- produces *accessible* written outputs (e.g. reports and briefings) and disseminates these widely
- hosts multi-stakeholder workshops or forums in which to discuss the research findings and their implications for policy and practice.

1 Introduction

1.1 Background

Achieving ‘water for all’ while ensuring the sustainable management of water resources is a global priority under the Sustainable Development Goals (SDG 6), and increasingly urgent in the context of rapid population growth and climate change. Despite significant progress made to date, many communities in rural sub-Saharan Africa (SSA) still lack clean water for the most basic of needs, such as drinking and washing (WHO/UNICEF, 2015). Even where water points have been constructed, many break down prematurely or provide inadequate, seasonal or poor-quality water supply (e.g. Bonsor et al., 2014; Haysom, 2006; Rietveld et al., 2009; RWSN, 2009; MoEWR, 2012).¹

Building on research undertaken in Uganda under a catalyst grant (Bonsor et al., 2014), the UpGro Hidden Crisis project seeks to strengthen the evidence base on the sustainability of rural water services in Ethiopia, Malawi and Uganda. Focusing on the most prevalent technology, namely boreholes (deep wells) with handpumps, the project aims improve understanding of the complex, multi-faceted causes of water point failure (or success).

One major gap in current understanding is the ability to identify the extent to which service failures are attributable to local institutional arrangements (e.g. Water Point Committees), as opposed to the broader societal structures and dynamics that shape an environment in which failure is more or less likely (i.e. factors beyond the control of communities). This suggests that a study of water points and their users should be complemented by a diagnosis of the wider political economy of water service delivery. Political economy analysis explores the workings of various governance arrangements and institutions operating at multiple scales and the distribution of power and resources among key actors, which affect service outcomes (Jones, 2015; Franks and Cleaver, 2007; Mollinga, 2008; Harris et al., 2011; Pahl-Wostl et al., 2011).

This report presents preliminary findings from one such political economy analysis, led by the Overseas Development Institute (ODI) in Uganda as part of the UpGro Hidden Crisis project. Although necessarily light-touch due to the limited time available for fieldwork, the analysis usefully reveals some of the informal processes

and power dynamics at play in Uganda’s rural water supply (RWS) sector that work alongside (and sometimes counter to) formal policies and institutions.

1.2 Research aim and objectives

The political economy research component of UpGro Hidden Crisis aims to contribute to an understanding of the underlying factors that influence water point (non-) functionality, specifically those factors pertaining to the wider political, institutional and social context of service delivery. Key to this is understanding the motivations and strategies of the actors involved, and the constraints they face in ‘getting the job done’ (Long, 2001). The research includes investigation of both formal institutions (their mandates and actions) and informal arrangements or interactions that are present in shaping decisions and determining outcomes.

We follow a ‘problem-driven’ approach to political economy analysis (PEA), meaning that the research focuses on a specific issue, or set of issues, to identify ways in which these might be addressed, rather than providing a general analysis of the sector. In the PEA framework adopted, the problem is conceptualised and analysed according to three layers: structural factors; actors’ decision-making logics; and ‘room for manoeuvre’ (Figure 1) (see Booth and Golooba-Mutebi, 2009; Harris, 2013).

In line with this conceptual framing, the UpGro Hidden Crisis political economy research is guided by the following questions:

1. What are the systemic constraints – that is, constraints arising from historical legacies, institutions (formal or informal) or other contextual factors (e.g. geography) – that actors face in delivering sustainable RWS services?
2. What power and influence do different actors have on the policy-making and implementation process, and what are their incentives and motivations? What strategies do different actors employ to ‘get the job done’?
3. What are the outcomes of points two and three for RWS sustainability and what opportunities exist to support better ones?

¹ Current evidence, albeit patchy and fragmented, suggests more than 30% of new groundwater-based supplies are non-functional within a few years of construction (RWSN, 2009).

Box 1 What is political economy analysis?

The acknowledgement that politics matters has been one of the trademarks of international development thinking and practice over the last decade. Several authors have argued that political and economic factors intrinsically influence whether and how reforms happen, and that poor performance cannot be explained by technical or managerial factors alone (Fritz et al., 2009; Hudson and Leftwich, 2014). With regard to the water sector, Molle (2009) maintains that the development and management of resources is inherently a political process, characterised by shifting political alignments and contestations. Social and political structures, and differentials in access to various forms of capital, shape power relations, interests and positions and therefore decisions, stakes and claims to water resources (Cabral, 1998; Madison, 2007).

Political economy analysis (PEA) has emerged as a useful approach to understanding the dynamics surrounding national and sectoral policy-making and implementation, and has usefully been applied to the water supply and sanitation sector in a number of contexts (e.g. Harris et al., 2011). PEA provides:

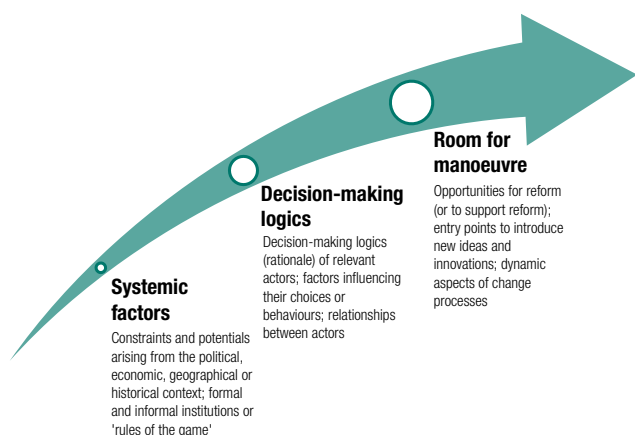
A systematic approach to analysing relationships between key structural factors (such as historical processes and environmental issues), institutions (formal and informal rules, norms and arrangements) and actors in a given country or sector context.

(Jones, 2015; see also Landell-Mills et al., 2007; Duncan and Williams, 2012)

Such analysis can be used to support more politically and culturally feasible development strategies, helping to set realistic expectations of what can be achieved and identifying potential entry points for intervention (Booth and Golooba-Mutebi, 2009).

Source: Matoso (2016, unpublished).

Figure 1 A layered approach to political economy analysis



Source: Mosello et al. (2017)

The objective of the fieldwork undertaken in Uganda in 2016 (described in section 1.3) was to interview a range of key stakeholders in the rural water supply sector, at the national and district levels, to:

- **better understand the nature of bottlenecks in the service delivery chain**, from the enabling environment (policies, planning and budgeting, monitoring) to development of water points (targeting of investments, siting, and construction) and their subsequent management (community institutions, backstopping support, supply chains) (see Table 1)
- **begin to unpick the underlying reasons as to why bottlenecks arise**, looking at the stakeholders involved (their capacities, motivations, constraints), institutional structures and processes (formal or informal), and the broader political and economic context that has a bearing on RWS service delivery
- **make recommendations** to the UpGro Hidden Crisis team regarding in-country project engagement and communication.

Table 1 Key components of the service delivery chain

Enabling environment	Developing services	Sustaining services
Policy and legislation	Targeting of investments	Water point management, operation and maintenance
Planning and budgeting	The siting process	External support/backstopping
Monitoring and regulation	Water point construction	Supply chains for spare parts

Source: adapted from the AMCOW country status overviews (e.g. World Bank, 2011).

1.3 Data collection

Data on Uganda's RWS sector was collected from primary and secondary sources, combining a review of research papers and policy documents with in-country interviews.

Literature review. A rapid desk-based review of secondary, country-specific literature on rural water supply was undertaken to identify key actors, governance issues and sector bottlenecks. This literature was used to inform interview questions and to strengthen analysis.

Fieldwork. Interviews were conducted in-country over eight days in December 2016. Miriam Denis Le Sève (ODI) conducted the fieldwork, accompanied by Felece Katusiime (Makerere University, Uganda). Additional and logistical support was provided by Gloria Berochan (WaterAid Uganda).

The team was primarily based in Kampala, where WaterAid's office, the university, government ministries, development partner organisations, INGOs and several drilling companies are located. Two days were spent meeting stakeholders at the district headquarters of Mityana and Luweero (see Annex 1 for details on these districts). These districts were 2 of the 10 identified for the first phase of the UPGro Hidden Crisis project, and were selected for this study primarily because of their proximity to Kampala.

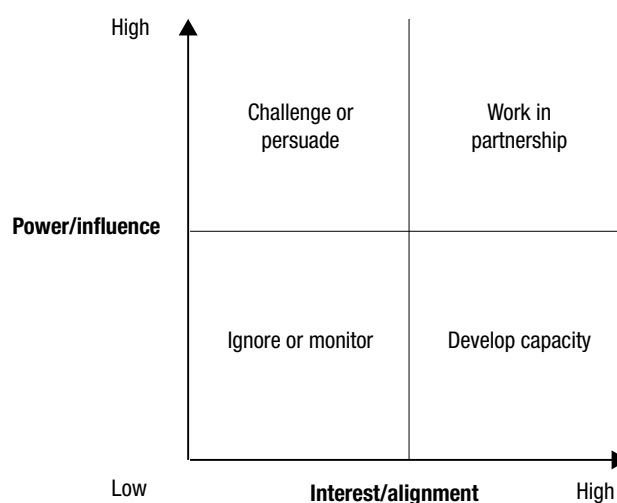
Interviews. We conducted 19 semi-structured interviews with key actors in the sector². Interviewees were selected based on their current role, knowledge, experience, and willingness to meet. They included representatives from:

- the Rural Water Supply Department within the Ministry of Water and Environment (MWE)
- the Production and Trade department at the National Planning Authority (NPA)
- District Water, Community Development and Administration Offices in Mityana and Luweero
- development partners funding or implementing water supply projects
- major INGOs in the water, sanitation and hygiene (WASH) sector based in Kampala
- private-sector players, including drilling companies and consultancies.

In addition to these interviews, we also conducted a short focus-group discussion in Mityana with three representatives from a newly formed community Water User Committee (WUC). Although communities were not the focus of this research, this discussion helped clarify the processes taking place between local actors and administrative-political levels.

We tailored questions to each interviewee depending on their area of expertise, covering specific aspects of the service delivery chain, and subtly probing to understand the political economy dynamics at hand. We were particularly interested in how participants perceived

Figure 2 A matrix to map actors' influence on, and interest in, a given outcome or project objective



Source: adapted from Young et al. (2014).

problems and their own role in addressing them, as well as the ways in which actors 'get the job done' despite various constraints. We concluded some interviews by asking the participant how the UPGro Hidden Crisis research might be useful to their work, which other stakeholders should be targeted, and recommended forums or formats for engagement and dissemination.

Stakeholder mapping. The team undertook a stakeholder mapping exercise with three representatives from WaterAid, including members of the Policy and Programme teams, at the end of the fieldwork. This exercise helped us to reflect on the interview findings and to visualise the relationships between actors in terms of their relative influence and interest in the long-term functionality of RWS (Figure 2).

1.4 This report

This report presents findings of the Uganda PEA fieldwork. It examines important systemic factors constraining sector performance, including the status of the water sector in national plans and budgets, the low prioritisation of rural, water point sources, political decentralisation and the partial decentralisation of service delivery and significant human and financial resource constraints. The report then looks in more detail at the actors involved in Uganda's RWS sector, their interests and influence on service delivery. This includes national and district government offices, development partners (international non-governmental organisations – INGOs), the private sector and, to a lesser extent, local communities. Finally, the report provides preliminary

² All individuals were very willing to participate and showed interest in the UPGro Hidden Crisis research.

conclusions and recommendations to UPGro partners vis-à-vis project engagement in Uganda.

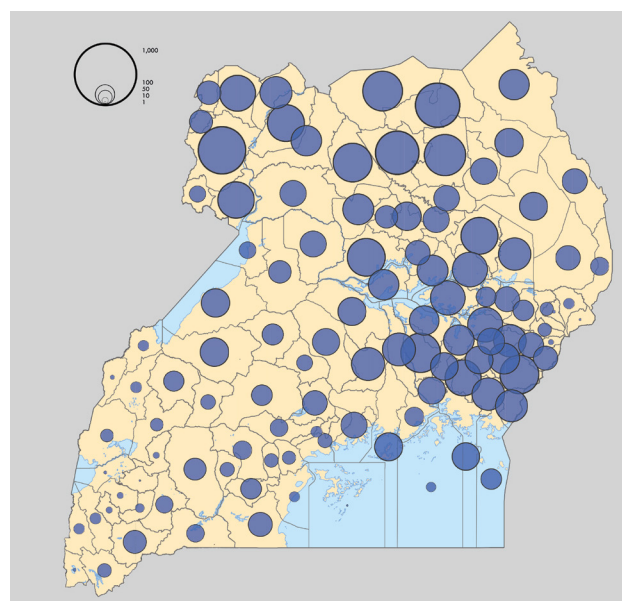
We recommend that this report is read in conjunction with the Uganda RWS country briefing. The briefing provides an overview of key sector policies, formal institutions and planning processes, and covers some aspects of RWS project and programme implementation. Whereas the briefing captures ‘how things should work in theory’, the PEA report is more concerned with ‘what happens in practice’.

1.5 Rural water access and functionality in Uganda

The Water and Environment Sector Performance Report for 2015/16 (MWE, 2016) includes the latest government figures on rural safe water coverage³ and water supply functionality in Uganda (Annex 1). But these figures do not distinguish between the different types of technology and so include protected springs, shallow wells, gravity flow schemes, and rainwater harvesting tanks, as well as ground water pumped schemes, deep boreholes and even piped water supply outlets.

In 2010, the Ministry’s *Water Supply Atlas* published information on the number of different sources and their functionality across Uganda. This report focuses on deep boreholes in particular. Figure 3 shows that those in the central-eastern to north-western belt are better served by handpump or ‘deep’ borehole technology. Figure 4, which charts national-level figures, shows that in 2010 the number of deep boreholes was in the realm of 25,000, of which 5,000 were non-functional. The

Figure 3 Deep boreholes in Uganda

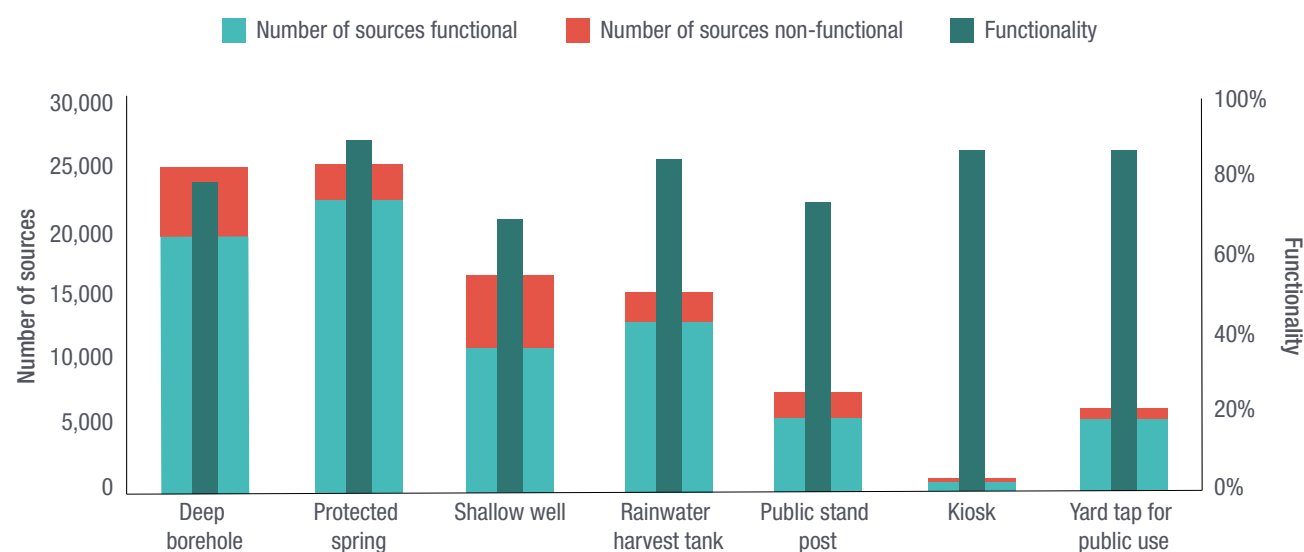


Source: MWE (2017)

functionality rate, defined as the ‘percentage of improved facilities found functional at the time of spot check’ (MWE, 2016: 24) was around 80% for this technology.

The Ministry’s new interactive ‘Water Supply Atlas’ on its website should, theoretically, be updated continuously to present current data on technology types vis-à-vis access and functionality (MWE, n.d.). However, given the considerable human and administrative resources needed to monitor RWS, this is not the case: currently, the Atlas stands incomplete.

Figure 4 Functionality per technology at national level



Source: MWE (2010)

3 Defined as the ‘percentage of people within 1 km of an improved water source’ (MWE, 2016: 22).

2 Structural factors affecting rural water supply

2.1 Prioritisation of water in national plans and budgets

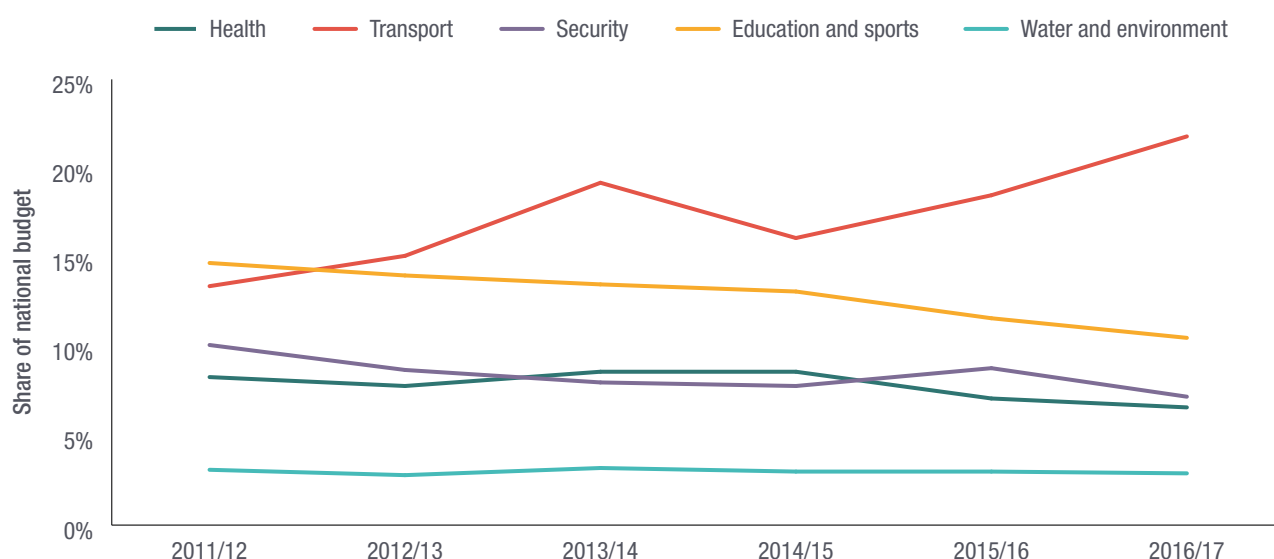
The Ugandan government's National Development Plan (NDP) sets the direction of development in the country, and since 2015, Uganda has been pursuing its second NDP (NDPII). All sector priorities are geared towards achieving the plan's objectives which, concurrent with the National Budget, guide overall resource allocation.

Increasing access to quality social services is one of the plan's eight objectives. Access to water sits under this objective, with two main aims: to increase access to safe water supply in *rural* areas from the baseline figure of 65% (June 2016) to 79% by 2020, and from 70% to 90% in *urban* areas (NDPII, 2015: 203). To

achieve these aims the water (and sanitation) sector receives 0.6% of Uganda's Gross Domestic Product (GDP) according to the Parliament Committee on Budget (Renouf and Norman, 2016). This is just part of the overall on-budget⁴ allocation to the water and environment sector, headed by the Ministry of Water and Environment (MWE), which receives on average 3% of the national budget, equivalent to 561 billion Ugandan shillings (roughly US\$156 million).

Inadequate financing is a key challenge for the sector in achieving the water supply targets (MWE, 2016). Over the years, government contributions to the sector's budget have gradually increased, but compared to the overall national budget, the allocation has remained stagnant (Figure 5).

Figure 5 Share of the national budget to key sectors of the economy



Source: MWE (2016: 7)

⁴ Off-budget allocation was 344 billion Ugandan shillings (US\$95.8 million). As this report focuses on the consideration of rural water point functionality within Uganda's national systems, on-budget support is given priority

These figures illustrate the sector's low ranking in national policies and budgets. As outlined by a representative from the Rural Water Supply (RWS) department at the MWE, 'the four main government priorities are energy, roads and transportation, defence and education ... 3% compared to other ministries is very low.' An International Water and Sanitation Centre (IRC) representative explained further that 'water is seen as less economically productive. The priority seems to be in investing money in productive sectors, like energy and roads.' 'Exciters', as termed by the Uganda Water and Sanitation NGO Network (UWASNET), such as energy, industries and rural electrification, have political mileage, while water is 'taken for granted' and 'marginalised'. As parliamentarians discuss the national budget before it is passed, it is their political will that is key to resource mobilisation.

Adding to the sense of fatigue in the water sector is the fact that MWE is one of the oldest traditional ministries. It remains 'business as usual', according to UWASNET, '100% coverage hasn't been achieved for all this time we have sung about water'.

It is hoped that, by better promoting the economic contribution of water, the sector will move up the government's priority list. In September 2016, the MWE released a report on the economic value of water and environmental goods and services, and the costs of degradation and inadequate action in the sector⁵. The report suggests that reliable water services will need to be triple what they are currently to meet the NDPII targets, demanding heavy investment in environmental management and water resources. Aimed at the sector ministry, the report seeks to provide solid evidence to help lobby for increased funding for the sector (MWE, 2016). But, although seen as a move in the right direction, it has been met with some reservation. The MWE's RWS representative stated, 'I am not optimistic that this document will make a difference. Decisions are made on political decisions, not on technical decisions'.⁶

2.2 Prioritisation of piped water sources over point sources

The NDPII is in line with Uganda's Vision 2040, a strategic plan that sets out the long-term ambition for Uganda's transformation from 'a peasant to a modern and prosperous country within 30 years' (NPA, 2013: 3). The Vision aims for 100% access to piped water supplies:

The government will construct and extend piped water supply and sanitation systems to all parts of the country. Bulk water treatment and supply systems that cover significant areas will be promoted. (ibid.: 65).

Framing this aim is the government's broader ambition, as outlined in the Vision, to urbanise the country by 60% by 2040, or 6% annually. To reduce the influx of people to Kampala and to address the balance of people across Uganda, there is a plan to create urban 'nodes': five regional cities (Gulu, Mbale, Kampala, Mbarara, and Arua) and five strategic cities (Hoima, Nakasongola, Fortportal, Moroto, and Jinja). The Vision states that this will be facilitated by 'planned movement of people from rural to urban areas' (NPA, 2013: 94). Following similar urban plans in Kenya, Ghana and South Africa among others, it is hoped that these developments will 'create centres of urban excellence', while helping to overcome some of the geographical challenges in providing services to dispersed, low-density areas (NPA, 2013).⁷

Meanwhile, the National Water and Sewerage Corporation (NWSC), a government-owned utility that operates and provides water and sewerage services for 23 large urban areas across the country, is being encouraged to expand its operations. In recent years, numerous small towns and rural growth areas have been gazetted for management by NWSC and the corporation is now operational in 170 towns, from 66 in 2015 (MWE, 2016: 3; Otago, 2016).

Although deep boreholes are still the main technology option in rural areas (44%), there is increasing demand for piped water schemes (gravity fed and pumped), which currently make up 11% of investment (MWE, 2016). This demand was outlined by a representative from the District Water Office in Luweero: 'There is high demand for piped services especially in the small towns.' Furthermore, in December 2015, NWSC announced plans to start serving some of Uganda's rural areas (Otago, 2016). The Rural Water and Sanitation Department (based in MWE) and local governments now plan for piped water systems, through the NSWC, including large systems covering several administrative areas (MWE, 2016). For instance, during 2015/16, 700 million Ugandan shilling was spent on eight multi-year piped water schemes in rural areas under phased implementation by district local governments (ibid.).

When asked about the likelihood of the achievement of 100% coverage of piped water supplies, drilling company Sumadhura was sceptical:

⁵ At the time of writing, this report is not yet available on the Ministry's database.

⁶ The awareness of the role that politicians play in deciding the national budget, has significantly influenced WaterAid's political engagement strategy: 'For our financing and advocacy they are positive partners to work with' (Grace, WaterAid). For instance, WaterAid played a key role in providing politicians with knowledge of WASH in preparation for the establishment of a WASH Parliamentary Forum.

⁷ See Kermeliotis (2013) for more information on Africa's 'new cities'.

National Water is trying but they don't have the kind of budgets. We work for National Water and they don't pay us for one year. They give out tenders but don't pay. We don't have the resources to make 100% coverage a reality.

This corresponds to the claim by the World Bank Group's Water and Sanitation Program that the 'government and NWSC do not have the financial and other resources to meet the requirements of the growth and number and size of small towns' (WSP, 2016: vi). Without high levels of private investment, such statements cast doubt on the likelihood of achieving the goal of 100% access to piped water.

Even so, a consequence of this focus on piped water supplies and the expanding presence of the NWSC has been the reduction in the construction and maintenance of boreholes, particularly those in small towns but also in rural areas (MWE, 2016). With the expectation that piped water systems would have fewer maintenance challenges than boreholes and would help alleviate the challenges arising from increasingly unreliable underground sources, the DWO in Mityana claimed:

We are shifting now from point water sources to piped water supply. Me, I believe we can reach all of the district with piped water. This Is my vision.

But the poorest and most economically disadvantaged people are not necessarily concentrated in small towns or rural growth areas, and these systems are often not a cost-effective way to deliver improved water in low density areas. As such, it is critical that the focus on piped water does not detract from the needs of poorer and rural populations.

2.3 Uganda's decentralisation policy and impact on service delivery

In 1997, under the Local Government Act, Uganda embarked on an elaborate process of government decentralisation where public service delivery (including water, health and primary and secondary education) became the responsibility of local government. By devolving duties and power from central to district governments, it was hoped that democratic control and participation in decision-making would increase, which would in turn mobilise support for development activities that were relevant to local needs.

Uganda is currently comprised of 111 districts (112 including the capital city). This number has increased from 33 in 1986, when the National Resistance Movement (NRM) came to power. The formation of new districts is widely acknowledged to be fuelled by ethnic communities or local politicians seeking autonomy. It is, generally, a political manoeuvre: in the run up to the 2011 elections, for example, 25 new districts were formed and approved by Parliament.

The increasing number of districts poses a challenge for water service delivery. New districts are carved out of the original district, which has to share its staff and financial resources. As the representative from IRC explains: 'We have the problem of new districts that keep on coming up all the time. You build up the capacity of one district but then it goes down by half.' In addition, there are public administrative costs associated with the formation of a new district, which has implications on the amount of financial resources available for district and sector budgets (AMCOW, 2011). The *MWE Sector Performance Report* (MWE, 2016) claims that the decline of the District Water and Sanitation Conditional Grants (DWSCG) is largely to do with the need to use more of these funds to establish District Water Offices in each newly created district. For instance, the achieved number of water facilities in rural areas for 2015/16 was lower than in 2014/15, due to the planning of 16 new districts and the consequential procurement of new vehicles with an expenditure estimated at 2 billion Ugandan shillings (MWE, 2016: 15). For this reason, the representative from German development agency GIZ stated, 'the district issue, you have more buildings but not enough technical people to help you out. It's making Uganda poor.'

Conditional Grants. Under decentralisation and the community-based planning principle, districts are should provide financial and back-up support to sub-counties, plan for technician training, provide toolkits on operation and maintenance (O&M), and supervise sub-counties as well as the private sector. They are also supposed to plan and carry out rehabilitation of water sources, monitor the water quality and stock spare parts that are not readily available in the local market (Aworti and Musahara, 2015: 221).

The decentralised implementation at district level is achieved through Conditional Grants, which are transferred in quarters every year directly to local governments from the Treasury. Disbursed quarterly, each sum of money is small. In most cases, districts plan for each quarter, limiting the ability to plan and mobilise resources for larger and more expensive projects. These allocations are 'sometimes short' of what is initially asked for in the MWE's Indicative Planning Figures. These outline how much each district should receive for what activities (Luweero's Chief Administrative Officer). According to the Mityana District Chairperson, 90% of their budget comes through these grants.

Representing a small and declining share of the overall water and sanitation budget is the DWSCG for rural water, which provides a clear process for the planning and budgeting for water and sanitation activities at the district level. This includes an explicit formula for the allocation of resources for different cost categories, such as capital expenditure, O&M and rehabilitation. Of the 68.2 billion Ugandan shillings given in Conditional Grants (representing 12.1% of the total water and environment sector (on-)budget), the DWSCG received

60.4 billion shillings. This figure is kept low ‘to maintain the government’s influence. To keep the power in government’s hands over expenditure,’ according to the MWE’s RWS Department.

In Luweero, the DWO spoke about the lack of funds provided by the DWSCG:

The biggest challenges are issues relating to funding and this is a national problem. We don’t have enough funds. Our conditional grant for water is 629 million Ugandan shillings and we have 10 sub-counties and 3 town councils. The demand is high and when it comes to the current strategy of ensuring most water sources within towns are motorised [piped], the resources aren’t much so the best we can do is to implement point water sources. We do what we can fit into the resources. If the funding was raised, we could do wonders.

Being conditional, the funds are earmarked so that local governments – despite the objectives of building support relevant to local needs – have limited influence on the direction of expenditure. In Mityana, a representative from the District Office explained, ‘We are operating under a decentralised system but most of the funds that come here are conditional and we don’t have a say on where they go. We’re not supposed to touch them, not even a single shilling.’ The breakdown below outlines the allocation criteria:

- The implementation of rural water supply facilities: to be no less than 70%
- Rehabilitation of boreholes and piped water schemes: up to 13%
- Software activities for rural water supply and sanitation: up to 8%
- Construction of sanitation facilities: up to 3%
- Supervision, monitoring and Directorate of Water Development operational costs: should be 6%, but where 6% of the grant is less than 32 million Ugandan shillings, then the district can budget for up to 32 million Ugandan shillings (MWE, 2014: 27)

These figures show that the majority of funds are channelled towards establishing new point water systems, with less directed towards maintenance, rehabilitation, software and monitoring. In fact, an analysis of expenditure on maintenance and rehabilitation of rural facilities by the IRC (based on 2013/14 figures for the Kabarole District) showed that

the financing received from the DWSCG and water users was only 18% of the costs required to keep all the water supply facilities in the district fully functional for their lifespan.⁸ According to the Mityana District Office:

I have down there 30 or so boreholes that are not functioning. But each quarter, we find out that the government wants us to construct seven boreholes, each one at 24 million Ugandan shillings. However, if I was to rehabilitate the boreholes that are not functioning, I will not even spend 20 million Ugandan shillings with the water engineer, but I cannot. We passed a resolution in the council to divert fees from the construction of one borehole to rehabilitate others and wrote to the centre [Directorate of Water Development] to ask their permission but we weren’t allowed. If the boreholes are constructed, it still won’t solve the problem because it will only be in seven areas. If we repair the 30 boreholes, we could reach 30 areas. This is how conditional grants are affecting us. You don’t participate in the planning- the directive comes from the Ministry of Finance or the Ministry of Local Government. We need to have flexibility. If they say we can have UGX 270 million to construct seven boreholes, allow us to use our own discretion to plan for that money. Out of that money, let’s use UGX 30 million to rehabilitate existing boreholes and where necessary to work on the few sources we have.

This view was shared by the District Water Office:

A certain percentage is meant to go on rehabilitation and repairs. When it comes to Mityana, we are supposed to spend less than 15% of the money on rehabilitation from the amount we get for development. This is very little.

Luweero district also experiences this challenge with breakdowns. Having been made a priority area after the guerrilla war that waged between 1981 and 1986 (see Annex 2.1), hundreds of boreholes were dug in the district by the United Nations Children’s Fund (UNICEF). Currently, the majority of these boreholes are in a state of disrepair.⁹ According to the District Water Office, ‘these boreholes can’t be fixed by the communities. They need complete overhaul and as UNICEF is no longer involved, this has to be done by the district.’ This legacy represents a significant cost for the district.

⁸ Estimated costs included costs for preventive maintenance, minor repair, major maintenance and rehabilitation. The rehabilitation costs were calculated for the lifespan of the water facilities and an annual cost was derived (IRC, 2014).

⁹ An interesting explanation for the high levels of breakdown for these UNICEF boreholes was provided by the representative of drilling company, Sumadhura. He claimed that in the 1990s, with no privatisation in the industry, UNICEF was running the drilling programme. However, according to the representative, they only had one drilling rig which was not equipped to go beyond 100 m in depth. In water stressed areas this is problematic as drilling must go beyond 200 metres.

In addition to rehabilitation, the small percentage of funds allocated for software activities is problematic. Software activities relating to boreholes with handpumps include the training of masons, community mobilisation and capacity-building at the user level required for effective use and sustainable operation. It became apparent during the interviews that these elements are central to functionality, but that this is a severely underfunded area. A representative from Luweero's District Water Office stated:

We need to engage the people, train them and give them facts. The principle is community-based so we need to focus on their roles, otherwise they will not appreciate that the facilities are theirs and expect the government to come in. I cannot direct more funds to these activities – they tell you that only 8% of your grant should be earmarked for them so I can't change it.

As the UWASNET representative explained: 'At least you can see water supply but water management doesn't capture anyone's eye. No one takes us seriously when we call for water management.'

The Allocation Formula. Each district in Uganda is granted a different amount of money, decided by the Allocation Formula. The formula for district water and sanitation is a financing mechanism designed to ensure that the districts lagging in terms of service provision catch up with the national average. This runs in line with a statement from a representative from GIZ that 'weaker local councils need to be firm enough not to be trounced by the powerful districts with better service delivery.' This is particularly important for RWS, where access and functionality figures differ dramatically between districts (Annex 1).

The Allocation Formula takes into account population, investment costs of the appropriate technology and the water supply coverage at sub-county level within the district. Recently, the formula has been a point of contention between different Ministerial actors. Developed by the Ministry of Finance, Planning and Economic Development (MoFPED), the 2015/16 formula was met with criticism from the MWE. As well as the MoFPED not fulfilling its promise of an increment of funds for the grant, the MWE observed that it made drastic changes to the previous allocations. The MWE anticipated numerous complaints from the districts, especially those whose grants would be significantly reduced (MWE, 2016). Another concern was that the number of new districts, allocated many funds, would be unable to absorb them as they were still in the process of being formulated. The desire to avoid non-absorption when performance cannot be guaranteed, vis-à-vis the need for better equality between and support for districts, is an ongoing debate in Uganda.

2.4 Human resource and capacity constraints

District Water Officers. Human resource and capacity constraints also plague the RWS sector. The IRC representative was of the opinion that 'most of the capacity challenges are at the district level. If you're supporting someone who is under resourced, it is challenging for them to do what you tell them'. The *Water and Environment Sector Report* states that, 'under-performance in a few districts is expected to be mainly due to low staffing levels, especially in the district water offices' (2016: 16). The challenges faced now are a consequence of the lack of investment in districts since decentralisation began, as captured by the representative from Sumadhura:

I started here when the decentralisation process started. Many districts did not know how to go about the water programme. I had to go to some districts and taught them how to call for tenders because they were given the power to get the contractor to do their work. The Water Officers were there to guide but many were not educated and didn't know what to do.

Still, at the district level, District Water Offices lack the facilities and personnel to carry out the tasks required. For example, post-implementation visits to sub-counties and communities are reportedly rare (Aworti and Musahara, 2015), even though in Mityana and Luweero District Water Offices reported high levels of supervision during implementation. A representative from the drilling company Galaxy explained the problems in trying to engage with the DWOs: 'they often don't answer, they're often out. They may send someone after one month but it is a long process.' The importance of such supervision is outlined in more detail in section 2.

At this level, staff recruitment and retention is effected by the district's geographical context:

If you have the best people, more people want to settle in cities where they have a better life. In rural areas there is no piped water or electricity. Most people who have received training want to settle their family in cities. In marginalised districts, most highly skilled people would not want to be situated there. (GIZ representative)

According to the representative from the MWE, capacity challenges are also a result of the low status of the water sector in comparison to other industries:

The biggest challenge is capacity. We try to make sure that there is appropriate technical capacity but if things are working, these individuals move on to go to work in the road sector, in the private sector

or other greener pastures. We build capacity, the district does well and then it goes down.

Despite the latter claim, interviews conducted for this research highlighted limited opportunities in capacity-building and training:

I wish to build my capacity but it is expensive. The only training in Uganda I know about is from the National Water Training Institute but they only focus on their own staff- not on local government. I have done the Good Governance training programme which was organised by the Ministry¹⁰ but it was online and there were problems accessing the internet. It would have been better to do the training in person for one week rather than online for three. (Luwero District Water Office)

Acknowledging such issues, the MWE has stated that training and capacity-building of local governments should be made a priority (MWE, 2016).

Technical Support Units. Technical Support Units (TSUs) are the regional arm of the MWE. There are eight regionally based TSUs in Uganda. Following the decentralisation of WASH service delivery functions, TSUs are responsible for capacity-building and monitoring at the district level. They were intended to be temporary and to gradually withdraw from high performing districts but the MWE has started to contract permanent TSU staff. Here, the representative from Luwero's District Water Office describes the interaction with the TSUs:

We follow TSU number five and do what we are supposed to do under their supervision. When you prepare a document or work plan, they go through it and then the Ministry goes through it. They come here and supervise what we do. Their support is useful. Their main role is basically to enforce standards and policies to ensure what we do is within the guidelines. They always follow up with us on a quarterly basis, saying: 'You've planned to do this, have you done it?'

Again, challenges lie in limited human resources: 'You find that a TSU has a team of about four to five people responsible for 15 districts – some have up to 18 districts' (IRC representative). In Uganda, a water, sanitation policy & environmental governance advisor stated that 'TSUs need more capacity enhancement so they can well coordinate what is happening and provide up to date information'. In addition, according to Sloots (2010), district local governments often do not recognise TSUs as

technical advisers, so their expertise goes unacknowledged. Financing handpump mechanics associations (HPMAs) still remains a major challenge, with services currently funded through a blend of public financing and membership fees, and share capital contribution.¹¹

Community Development Officers. Community Development Officers (CDOs) are responsible for planning and mobilising communities regarding development (McBrien and Byers, 2015). For water projects, they carry out software activities, sensitising communities and training Water User Committees (WUCs) on the correct use and maintenance of the water point. But, as the Mityana CDO explained: '[CDOs] have limitations of resources and transport. This is in the whole of Uganda, especially for CDOs as we do things that are invisible. People like to fund the things you can see.' Expressing similar sentiments as the DWO, a Galaxy representative claimed that:

CDOs are there but I don't know what they do. Okay, they are selected but sometimes they don't help, they are nowhere to be seen. They have a lot of activities, their personal works but they're not specifically put there to help. You end up waiting for two months for a CDO to come to a village. It's not good.

Central government. Staffing and capacity challenges extend to higher levels of government. In fact, it is a challenge for the public sector as a whole. Salaries are not competitive with what the private sector offers for similar qualifications and competence levels (MOFPED, 2015). The representative from the MWE's RWS department, states that:

Staffing challenges have continued to stifle the full operationalisation of the department to the required levels. The current approved structure is only 21% filled due to limitations imposed by the wage ceiling for the ministry under the government budget.

In the department there is reportedly 'always a movement of people,' and at the time of interviewing, there had recently been an exodus of 15 staff.

UWASNET's concern was that the senior positions in the MWE were occupied by engineers, without inclusion of social scientists:

For government I would say they are more specialised in terms of hardware and they leave software activities for NGOs ... they prefer to stay in technical areas. They've got personnel who

10 This training was part of a Good Governance Awareness campaign (2015), under the Good Governance Action Plan, which aims to create awareness on governance practices in the sector to increase the efficiency and effectiveness of water provision. MWE organised an interactive e-Learning course on the applicability of governance principles, which was attended by 45 senior and middle managers from all sector players (MWE, 2016).

11 The MWE, IRC and SNV are working in partnership to accelerate and improve HPMAs (IRC, 2014).

give technical support but of late they are also looking at software. In the new strategy it's there – been the case for 10 years. They've brought social scientists on board but when you look in there, their titles and levels of placement are still low. I have not seen a Director, Commissioner, any senior positions for decision making. They are all engineers. Social scientists are buried in there in some department with a small budget.

It is likely that this has contributed to the inadequate recognition of and fund allocation for software activities.

Capacity of private companies. Private sector involvement is still a new phenomenon in Uganda's water sector (Aworti and Musahara, 2015), and it too has capacity challenges. Ron Sloots (2010) provides an assessment of groundwater investigation, borehole drilling and supervision capacity in Uganda. Sloots states that the 'technical capacity of drillers and consultants is sufficient to implement standard rural water supply projects' (2010: i) and that, in their assessment, quite a few companies were operating at higher standards while very few were operating below standards. The two drilling companies that were interviewed for this project – Technologies Limited (established in 1998) and Galaxy Agro Tech (established 2008) are two of better equipped drilling companies in Uganda. For instance, while Sloots (2010) states that few companies employ their own hydrologists for borehole siting, employing instead groundwater consultants or consultancy companies, Sumadhura and Galaxy both have their own teams of hydrologists.:

We have our own supervisors, documentation and reporting systems. We're always in contact with the field teams. From March [2017] we will be the first drilling company in Uganda to have certification of quality assurance from a body in Europe. (Samadhura representative)

But Sloots' study also highlights that drilling companies often lack data management skills and procedures, with only a small number of drillers keeping their own databases. In addition, many companies reported suffering from cash flow challenges and so typically only operate for a limited number of years. The study also showed that most companies are unable to formulate budgets and take on high-risk projects without doing evaluations beforehand (Sloots, 2010). Finally, Uganda's procurement policy, which favours low-prices for works over quality, further hinders private companies (section 2).

Handpump mechanics. One of the challenges for addressing the breakdowns and failures of RWS facilities is the availability of technical support for maintenance and repair (IRC, 2014). Handpump mechanics play an important role in contributing to the improvement

of functionality through repair and O&M works. The government has committed itself to nurture and train handpump mechanics primarily through the introduction of HPMAAs in every district (Aworti and Musahara, 2015). Established in 2011, it was hoped that these associations would bring together the mostly segregated individuals into a pool of professional and coordinated mechanics to support districts and WUCs.

The IRC (2014) provides an assessment of the HMPAs, outlining that, although there has been an observed increase in functionality, which was partly attributed to the work of HPMAAs, there are ongoing challenges facing these associations. The current level of investment in O&M limits the ability of HPMAAs to provide maintenance support, and for the intervention to have the necessary impact on functionality. As revealed in this research, often mechanics do not have the capacity to make certain repairs. It is for this reason that drilling company Sumadhura involves district technicians during the installation of projects to familiarise themselves with the infrastructure.

The availability of spare parts can also be problematic. For example, the representative from Galaxy stated that a simple handpump chain (costing around 200,000 Ugandan shillings (approximately US\$56)) could take six months to locate and replace. District Water Offices should store spare parts so that, in the case of a breakdown, local hand-pump mechanics can easily and affordably access materials.¹² This was indeed the case in Luweero and Mityana, though not in many other poorer districts. The process was detailed by the District Water Office representative in Luweero:

As a district we stock spare parts to make it easier for local technicians to access them. Otherwise they would have to go to Kampala which is hectic. We do the procurement and we put the supplies in the store. The technician, after paying to the bank account using the fees from the community bring the receipt and can access it. The system is working and we had to replace the stock recently.

When dealing with handpump mechanics there are other difficulties, as outlined by Mityana's District Water Office. At the time of writing, there were 20 mechanics in the district who were part of an HPMA. However, the administration of the association has proven difficult, and there have been reports that the mechanics were either not delivering a quality service or overcharging users. The representative stated: 'You found something that was so little and simple and they wanted 200,000 Ugandan shillings, 400,000 shillings. They ask for money that is so much higher than the cost of the spare parts.' After complaints from communities, they decided to drop the whole team and instead use contractors, or only the most trustworthy mechanics, explaining that this was easier than attempting to reorganise or retrain the HPMA.

12 Some drilling companies (such as Sumadhura) also provide maintenance kits, free of charge to each community directly.

3 Actors' interests and incentives

Uganda's decentralised structure and principle of community-based management means that, theoretically, development needs or issues at local levels are relayed upwards through the five levels of local councils – LC1 (village), LC2 (parish), LC3 (sub-county), LC4 (county) and LC5 (district) – while centrally planned directives are relayed downwards until they are implemented at the local level.

Applied to the water sector, this means that communities requesting that a borehole be built or repaired in their area need to approach the LC1 chairperson, from which the request will be relayed upwards until it reaches the LC5 chairperson. After an issue is raised to the district level, it is escalated to the DWO who carries out a needs assessment to determine a community's eligibility to receive the service. There is no standard way of doing the needs assessment: 'We basically go and see if it is true that they are badly off' (Luweero District Water Office).

Following this, the issue is discussed at a local council meeting, which takes place quarterly and involves representatives from all council levels. The Chief Administrative Officer provides information on the availability of the DWSCG. Before the work plan is forwarded to the MWE for approval, they have to be approved by the regional TSU. If approved, the DWO then contracts the project out to a private company through a tendered process. At the same time, for borehole implementation, the DWO with the Community Development Officer (CDO) and LC1 chairperson, works with the community in deciding upon a suitable place for siting. It is then the CDO's role to form the Water User Committee (WUC) and improve community awareness around the importance of safe water. Once the structure has been built, the CDO must train communities on the correct use of the handpump.

In reality, the trajectories behind each individual, relationship and institution with a stake in the water provision process are dynamic, ad hoc, largely unstructured and crucially, shaped by other actors: 'every point is political and rungs are bypassed' (IRC representative). To examine this further, this section will

look in more detail at the actors involved, their interests and influence on service delivery.

3.1 The community level

The assertion of power and influence starts at the community level, which has a profound effect on the functionality of handpump boreholes in rural areas. Although a focus on the community level is outside the remit of this analysis, we considered it important to include findings that arose organically.

Wealthier or well-connected individuals can use their influence to lobby for a borehole or for it to be repaired, having repercussions down the line. The University of Makerere's social science researcher related the following story from a village in Luweero:

The district wanted the community to co-fund a new borehole with 200,000 shillings.¹³ The community said that they didn't have money but one man saw the opportunity and said he would pay it himself. The result was that he personalised it so whoever comes to get water now has to pay him.

In this case, it was fully functional at the time of the functionality assessment during phase one of the UPGro Hidden Crisis research, largely because 'each family gets charged 5,000 Ugandan shilling a month and if it breaks down he repairs it straight away, using this money. He is at the borehole all the time.' This has implications for who can access water. In the example given by the social scientist, the man knows the community, meaning that: 'If there's an old person who has family he won't reduce the price – he'll say why can't the family stay. With poor people, he'll say "You eat salt? Then you can buy water".'

There are also impacts on relationships with higher levels of governance: 'the community went to the district to report the man, saying "Why do you charge us money on a government facility?". The DWO knew the story and chased them away.' It is possible that because of this experience the community would be unwilling in the future

13 The government requires a 200,000 Ugandan shilling capital contribution from communities for every borehole. This is to increase the sense of community ownership

(when the current management system changes) to interact with the DWO if necessary.

A common occurrence is the influence of individuals over the siting of the borehole. Even though the DWO, CDO and local councillors are responsible for ensuring that it is sited on public land, this is often given little thought and largely relies on the honesty of community members. The social scientist reported:

We found in Mbarara that functionality was being affected by private individuals fencing farmland. The government could bring a borehole but place it in farmland. Then somebody fences off the land and use it as personal property.

In some cases, the DWO, CDO and/or LC1 chairperson do not visit the site to make the siting preparations. This means people can then influence drilling companies:

Certain people can even personalise facilities. Say they welcome and cook for the drillers and supervisors, they can then make their own rules for community access, saying 'Only come in the morning' or even fence it. Then, in the case of break down, the community would say 'It's your well – you fix it.' (The researcher)

When it comes to rehabilitation, communities can continue to exert their power. In Luweero, during the interview with the representative from the District Water Office, a head teacher from a village entered the District Water Office, wanting to give his thanks to the engineer. He claimed:

We had been without water for 10 years. The previous head teacher hadn't done anything about it- never minded about the importance of clean water. I came to the district offices and the Water Officer said I could ask. I wrote a letter and then in one and a half weeks he came and repaired it. I was planning where to get the money and the first person that came to mind was the District Water Engineer. We knew each other – we were at the same school as children.

This is illustrative both of the power of certain individuals in communities but also that personal relationships are often central in 'getting the job done' and how individuals can 'leapfrog' administrative rungs.

Communities can also exploit the 'rules of the game' to benefit from rehabilitation investments. The distinction between minor and major repairs is ambiguous when it comes to the application of local government support

to communities (Carter and Kidegak, 2013). In some districts, a financial test is required and if repair costs exceed 300,000 Ugandan shillings, the water point can qualify for rehabilitation.¹⁴ This is the case for Mityana and Luweero, with the representative from the former office stating: 'It has to reach a certain level of disrepair before it can be repaired by the district.' However, as outlined by a Galaxy representative, 'there are circumstances when the community waits until the borehole gets even worse, to avoid having to pay for the repairs.' This, in addition to the lack of knowledge on how to maintain them, has a negative impact on functionality.

The importance of paying attention to these issues is widely known:¹⁵ 'The community is key. They should be involved from A to Z,' explained the Galaxy representative; 'districts should better plan for community mobilisation to avoid delays and problems during the actual siting and drilling of the water sources' (Sloots, 2010: 52). But improvements in this area would rely on increased funding and resource allocation towards software activities.

3.2 Political-administrative actors

The impact of power and patronage runs through Uganda's political administration. A village is the lowest political administrative unit, with each village run by a local council (LC1), governed by a chairperson – ordinarily resident in that district – and nine other executive committee members. It is the chairperson's duty to oversee and monitor the implementation of projects in the area on behalf of the council (ULII, 1997). They are therefore intended to be the first point of call for the community to raise issues which are then the responsibility of the chairperson to relay upwards through the various political levels.

However, instead of being viewed as facilitators for development, LC1 chairpersons are commonly seen as barriers to local issues. They may not have enough capacity or influence to see requests through to completion, and communities may be wary of approaching them to start with, as previous research in Wakiso District showed: 'there is no interaction with the council. The chairman is too busy, he cannot spare time for us' (Wakiso District community member in Denis Le Sève, 2014). This sentiment was echoed by the Luweero District Water Official: 'LC1 follow my requests but they need their capacity to be improved. They can sometimes be a bit lazy', while the social science researcher stated:

People may not approach LC1 because they might be told to go away straightaway. In most

14 The National O&M Framework supports this process, making distinctions between routine maintenance, minor and major borehole repairs.

15 Sector Performance Review outlines eight of the main challenges and causes in the CBMS model (see Annex 2).

councils, the councillors are rich. Poor people do not manage to be in leadership positions. Richer people identify with similar income levels – apart from political campaigns when they seek the votes of the poorer people.

This quote highlights the local impact of inequality, where social and economic marginalisation has political repercussions.

This impasse between the community and higher levels of government from LC1 is broken during political campaigns. On the 18 February 2016, Ugandans voted in presidential,¹⁶ parliamentary¹⁷ and local elections in the third polls since 2005, when multiparty politics was restored. During the campaigns, posters, billboards and leaflets were widely distributed in villages, towns and cities. While presidential candidates focused mainly on rallies, parliamentary candidates focused on door-to-door canvassing and meetings in local neighbourhoods (The Commonwealth Observer Mission, 2016). To persuade voters, candidates use various tactics:

Everyone has tricks. Some use water facilities depending on context. If it is a water stressed area, the priority goes to water infrastructure. Other tricks include church contributions for renovations, bridges, feeder road maintenance, alcohol, money and small benefits like salt and sugar. (Social science researcher)

For this reason, ‘it is during or straight after election times when boreholes are functioning. They only repair during campaign periods’ (ibid.). A short field visit to a village in Mityana that was in the process of having a borehole drilled (by Galaxy Agro Tech) was proof of this. The newly assigned Secretary of the Water User Committee (WUC) described how:

We had been demanding water for three years. This one was given by LC5 chairperson. He doesn’t come to this place but he promised it during campaigns, saying if you vote for me, I’ll put one in. He lives in town. It was a political operation. The chairman lobbied the district to bring the borehole to this area.

In addition to the flurry of development activity occurring as a result of election processes, it is common at all times for politicians to directly influence implementation, making use of their ‘authoritative resources’ (De Koning, 2011: 77), links and networks. For instance, the

representative from the Luweero District Water Office admitted, ‘some communities go straight to MWE and bypass me. They could be big, big politicians that go straight up there.’ The primary interest in doing so would be to provide benefits for their home towns or villages. In Mityana, a district official explained:

I wanted this position to do something for my people, I can use this position to lobby the government. I know the president well and everybody that moved with me knows me.¹⁸ I think I can use this position to bring in more funds than what is being given to us. Convince them to give us more projects.

He sought to employ similar relational methods to increase the number of NGOs in the district:

I am widely travelled so I am in the process of lobbying for more NGOs to operate here. They can do a lot to complement what we are doing – bring funds. So the more NGOs we have in the district the more development we are going to get.

Though politicians should not construct facilities in their own constituencies, this is often the case, and they can bypass the needs assessments:

The government doesn’t want to talk about political manipulation but this is a big issue. People that are smarter than others can forge forwards. Those who may not be able to argue their case can be left behind. Any intervention should be based on criteria – what communities are underserved, what sources they are using, are their capacities – taking stock of where vulnerability is and where marginalised groups are. (GIZ representative)

This was also a key issue for UWASNET:

A politician giving a borehole is crossing their mandate. They shouldn’t give boreholes because they must be sited, with technical reasons. It shouldn’t be supply driven; it should be demand driven based on equity, the people who need it. Supposing the needs assessment takes them across another constituency, would they accept that the people in the other constituency are needier? So they’re going to make an assessment in line with the constituency.

16 During presidential elections, the president is elected for a five-year term.

17 The parliamentary elections decide on members to represent constituencies for every district, as well as special interest groups, such as youth, the elderly and people with disabilities.

18 Previously a lawyer working in the President’s Office.

Repair and maintenance of handpumps can also be attributed to politicians:

One borehole was functioning well. We found out that the Politician had said to the community ‘Whenever it gets faulty, call me’. It was at her home village and she needed to get votes from there. The community doesn’t have any responsibility for it and there is no need for a committee or meetings. But the system works. The politician pays the mechanic from her salary. (Social science researcher)

3.3 District Water Officers

An interesting point of study is the enabling or constraining role of the District Water Officers (DWOs). As outlined in the section on capacity-building, the lack of resources allocated to District Water Offices mean that they are not well facilitated and often lack personnel to carry out the tasks required. However, interviewees also revealed that, in certain situations, they are able to assert their own influence, capitalising on links with other institutions: ‘You have to work hand in hand [with the MWE]. They are the major supervisors of all water offices countryside. There’s no way we can’t work with them. I believe you can influence them – almost 100%’ (Mityana District Water Office). In this case, the officer had a good relationship with a senior staff member at the RWS department at the MWE who ‘can influence how much can go to a district.’ This demonstrates that the supposed rigidity of national-level principles and directives – such as the Allocation Formula – can be manipulated through informal relationships and trust between district and central levels of government.

At the same time, District Water Officers are often pressured to follow through the requests of the political wings of the district and higher-level politicians. In Luweero for example, the District Water Office representative said, ‘they have power. They want to ask implementers for things that are against the law and if you don’t they could threaten your salaries or your jobs.’ This might include demands to approve needs assessments, as outlined by UWASNET in the previous section.

3.4 Private companies

In Uganda, informal and unspoken ‘rules of the game’ influence rural water supply implementation and functionality. One example is the role that corruption plays in the private sector. For instance, Sloots (2010) states that demanding commissions by the private

sector¹⁹ on the completion of projects is common and a danger for the sustainable development of the water sector. Such commissions compromise some of the activities that are specified in their contracts, endangering the quality of the services and work.

Of course we have a lot of corruption in Uganda. It’s systematic corruption and becomes very difficult to manage. Either procurement people do not have the skills to evaluate or you find that someone is proposing a tariff that is far lower. It can happen in so many ways. I may have already spoken to the person in the procurement process and I put him a bid which is lower but then he makes an amendment after winning and you need to pay him more money. Or you can agree on a product on paper but end up going for a cheaper one and keeping the money. Then you give the auditors some money. (GIZ representative)

This is illustrative of numerous reports of district officials colluding with construction companies to defraud funds using several ways, including inflating costs and carrying out shoddy works (Advocates’ Coalition for Development and Environment, 2012). Likewise, for private companies, ‘a challenge when working with the districts is the lack of resources to keep them working with you. When you work with them, they want money’ (Sumadhura representative).

Procurement and quality assurance are concerns, for all working in the sector, including private companies. Uganda’s Public Procurement Disposal of Public Assets Authority, with the aim of promoting the achievement of value for money in public procurement (PPDA, 2016), means that contracts have to be given to the lowest bidder, endangering the quality of works delivered by the contractors. The Sumadhura representative explained that, ‘drilling companies can exploit the system.’ In addition, companies are not classified depending on the resources and capacity a company have so ‘people just look straight to the price ... There are 112 districts and most of them are looking at the money side, not at the technical abilities’.

This process has repercussions on the sustainability of the infrastructure, when the project is outside of the six-month guarantee agreement:

You have to use certain drilling diameters for certain cases. Suppose you have to put 5-inch casting, the diameter of the drilling has to be a minimum of 10 inches. You try and reduce the annulus²⁰ and the filter pack is not packed properly. Then what happens, slowly, slowly, if the filter is not packed, the silt comes inside. Other

19 As well as government officials and NGOs.

20 The annulus is the void between any piping, tubing or casing and the piping, tubing or casing immediately surrounding it.

companies don't care about these things. For them it's cheaper, it's faster not to care. The bigger the drills, tools and equipment, the more expensive they are. (Sumadhura representative)

This would presumably be the case for most companies as, according to Sloots (2010), few companies are able to drill large diameter boreholes and most have a maximum drilling capacity of 10 inches. There are also reports of private companies drilling down only to the 'first strike' water levels. This was the case in Mityana: 'Some drillers, after seeing the first waters they stop' (social scientist researcher), reinforcing the call for proper supervision by DWOs.

Lacking the ability to discern quality, reputation is important. This was particularly apparent for Sumadhura: 'Oxfam has known us for such a long time. They have seen, we have delivered every time and the first borehole, I tell them, 18 years back, is still working in Uganda. It shows the quality.' Next door to their building is the MWE's office, the work of which is directed by 'strict guidelines'. According to the representative from Sumadhura, 'the Ministry says, "if you go to this company, they will do a good job". We have that kind of relationship.' A result of this relationship is that Sumadhura can access Ministry

resources, such as guidelines and water point maps – 'everything they can offer'.

When probing further on the relationships between private companies and partner institutions, different issues came to light. For instance, the Sumadhura representative stated that with the MWE and districts:

It takes time for money to come. Can take six months afterwards! We prefer to work with NGOs like Oxfam and WaterAid because with them the system is faster. With the government, you can have done work a year back and still not be paid.

This was also the case for the representative from Galaxy: 'payments take long to come from district. Sometimes do the contract even when not be paid – not assured that money is there. It's risky.' This relates to Sloots' observation that 'delays in payments, poor payment schedules and poor contract conditions are a major challenge for the cash flow of all drillers' (2016: 40). When entering into agreement with NGOs, there are other challenges. According to Galaxy, they 'tend to be more rigid and concerned about areas that are really dry, want us to prove and prove. Sometimes NGO say that they want a borehole there but it is not possible.'

4 Conclusions and recommendations

This political economy analysis provides insight into the systemic factors constraining the performance of hand-pumped boreholes in rural areas in Uganda, and the power and influence that different actors have on decision-making, implementing and sustaining processes with regards to rural water supply. Weaving together secondary literature with primary data collected in the field, this report attempts to capture the complexity of this topic and the actors, relationships, policies and procedures involved.

A number of specific recommendations, of interest to the UPGro Hidden Crisis stakeholders, can be drawn out of this research.

Prioritise advocacy at the national level. On average, only 3% of Uganda's national budget is allocated to the water and environment sector, of which the rural water supply sub-sector receives just a fraction. Understanding the power and influence that politicians have over the budget, their awareness of the importance of safe water needs to be improved and their support galvanised by a targeted advocacy campaign. This campaign should highlight the contribution of WASH to the national economy.

Promote the importance of hand-pumped boreholes for hard-to-reach rural areas. Under Uganda's Vision 2040, piped water is increasingly favoured over point sources. Inappropriate for low-density and geographically challenging areas, it is unlikely that the aim of 100% access to piped water will be achieved. Investment into point sources in rural areas must therefore be continued, if not increased.

Advocate for an increase in resources for rehabilitation, software activities and supervision. The DWSCG allocates, on average, only 13% to go towards the rehabilitation and even less for software activities and supervision. These aspects, crucial to the long-term functionality of water points must be increased, depending on the requirements of the districts.

Districts lagging behind in capacity should be adequately supported. Newly formed districts often lack capacity to both attract and absorb funds. Those falling behind should be well supported to improve equity between districts in terms of access and rates of functionality.

Campaign to build the capacity of District Water Officers. DWOs play a key role in determining the direction of, and supervising water developments in their districts. Often not well facilitated, their capacity should be supported (the TSUs being a good start).

Campaign for a reform of the Public Procurement Disposal of Public Assets Authority. The PPDA does not currently include criteria for the quality of a company – that is, its resources and experience. If not reformed, District Offices will continue to contract out work at the lowest price, at the expense of sustainability.

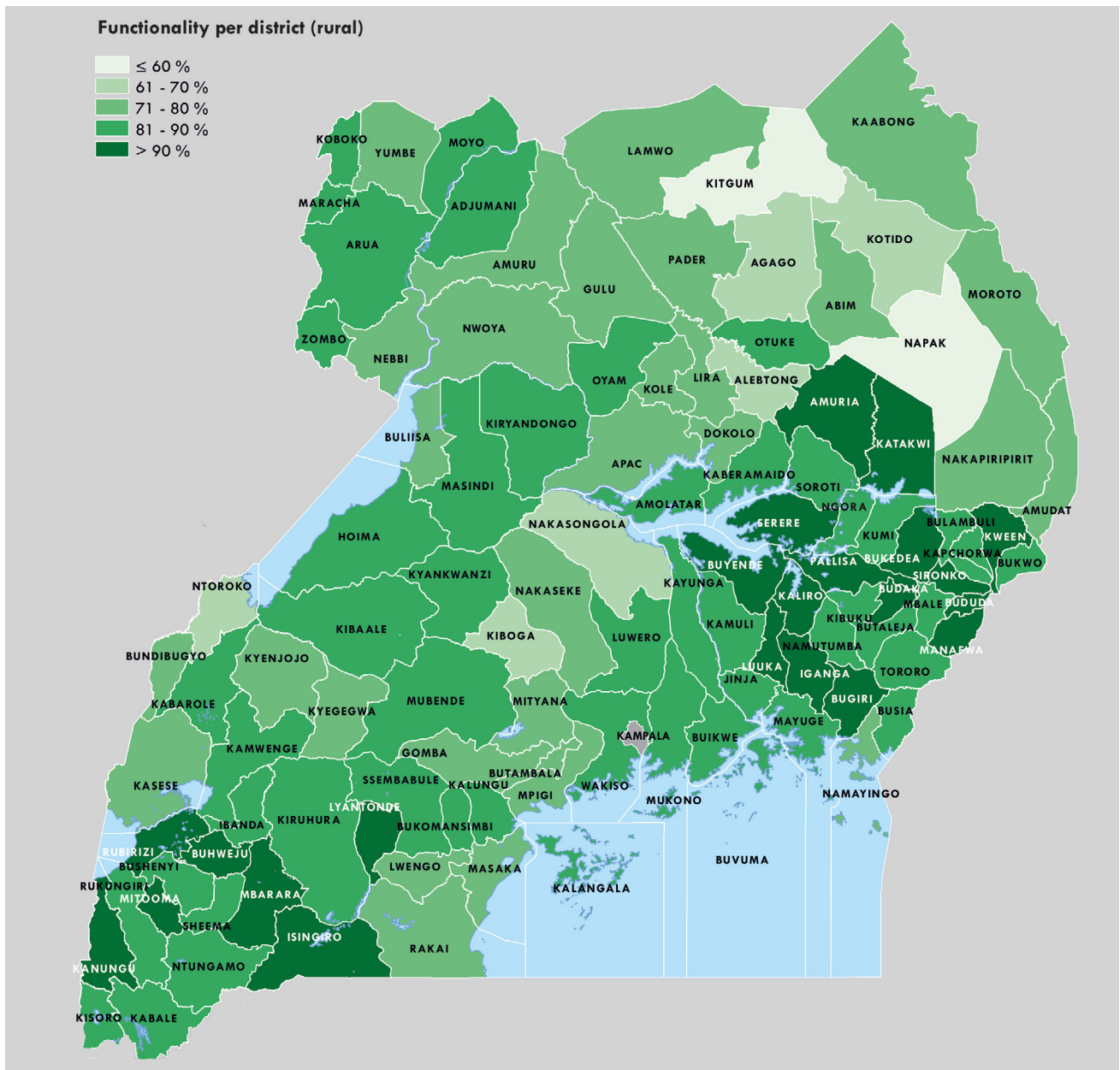
Support the relevant work of other INGOs and good governance initiatives. A wealth of INGOs and government-led initiatives are active in the sector. UPGro Hidden Crisis should aim to forge partnerships with those relevant to its own aims – such as the IRC and SNV Netherlands Development Organisation (SNV) HPMA programme – to avoid duplicated efforts and to maximise results.

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Annex 1 Rural safe water point functionality across Uganda



Source: MWE (2017)

Annex 2 Notes on the districts used in this study

Luweero

Luweero District is one of the central Uganda districts, located 75 km by road, north of Kampala. The total area of the district is approximately 5,773.35 km², with a dry belt running through its three counties – Nakaseke, Bamunanika and Katikamu. Each county is divided into five or six sub-counties, making a total of 17 sub counties and 134 parishes. There are also three town councils: Luweero, Wobulenzi and Bombo Town.

The population in Luweero is currently around 485,860 and has grown rapidly in the last two decades, from 255,400 in 1991 (City Population, 2016). According to the district chairman:

The district is one of the fastest growing districts in Uganda because it's near Kampala and Kampala is extending. The new factories here are attracting very many people and people from Southern Sudan and northern Uganda and Zirare this is their main road.¹ When they come to Kampala, they want to stay here.

In the early to mid-1980s, Luweero was the site of the 'Bush War' between the National Resistance Army and the government of Milton Obote that left thousands of civilians dead. Since then, post-conflict reconstruction and investment has helped to ensure peace in the area. This included investment in water infrastructure, as outlined by the local chair:

Luweero was an area of priority because after the war there was heavy water stress and UNICEF built a lot of wells – into the hundreds, there were many.

Mityana

Another central district, Mityana was created in 2005 by taking the Mityana and Busujju counties from Mubende District. With an area of 1,579 km², it is located 77 km, by road, west of Kampala. It has two counties – Busujju and Ssinga and 10 sub-counties. The population of Mityana is around 360,000, with a growth rate of 3% per annum. The district's growth has been stimulated by the Kampala–Fort Portal highway, doubling trade in the town (Muzaale, 2014). The plateau landscape in Mityana Town, the district's main municipal, administrative and commercial centre, is advantageous to real estate developers who can avoid costs for the clearance of building sites (NWSC, 2014).

Safe water coverage in the district stands at 72% and access rates vary between sub-counties, from 34% in Bulera, to 95% in Butayunja, Kakindu and Busimbi. Around 33% of the served population is reached by piped schemes and 67% by point water sources. In total, there are 1,410 domestic water points, of which 97 have been non-functional for five years (Muzale, 2014).

1 The district has a well-developed road network and the tarmac 'Bombo Road' connects it to the northern region.

Annex 3 Main challenges to CBMS operation and maintenance systems and their causes

S/N Main Challenge	Cause
1. More and more water users lose trust in WSC	Embezzlement of water fees by WSC members. Illegal intervention by politicians
2. Water users come to expect that water is free	Water users whose distrust has grown, refuse to pay water fees and WSC cannot collect water fees on a regular basis
3. Care taker retires, and no one is left to take over	WSC, which cannot collect water fees on a regular basis refuse to enumerate caretakers
4. Hand pump parts gradually suffer wear and tear and pump discharge begins to decrease	The absence of caretakers means that the hand pump cannot be managed and preventive maintenance cannot be done.
5. Hand pumps breaks and cannot be fixed promptly because WSC have not saved for repairs	Hand pumps cannot be promptly repaired when they are broken because WSC with no regular collection of water fees have not saved for maintenance expenses. WSC lack sufficient funds for maintenance because hand pumps break frequently.
6. Hand pumps remain out of use for long periods of time and water users trust in WSCs plummets dramatically	Water user's trust in water supply projects deteriorates due to hand pumps breaking frequently or being out of use frequently or for long periods.
7. Governments have little financial power and cannot respond to all requests for repairs from WSC	Repairs become expensive because there is no choice but to use private entities to perform them. Very few conditional subsidies (DWSSCG) are granted.
8. Hand pumps cannot be managed and preventive maintenance cannot be done because water fees are not being collected regularly	Caretakers to manage hand pumps cannot be hired because WSC is unable to collect water fees on a regular basis. WSC do not understand the importance of preventive maintenance because broken hand pumps can be used again if they are repaired with government support.



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