



GROWS Key Findings and Overview

Key Findings

GROWS Overview

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Key Findings

Through a *landscape review*, GROWS identified 24 tools and approaches that could be used by private operators, government, communities, oversight agencies and other user groups in the water sector. Each of the identified tools and approaches were categorized as a **framework**, **practice** or **technology**.

GROWS Framework Descriptors

Framework

Refers to a way of structuring relationships among actors and interactions. This category is focused on structural factors that shape how rural water provision is achieved, including the nature of relationships between actors and the sources and distribution of resources.

Practice

Is a tactic, a process, or a way of doing things. This category includes rules or best practices for how to do something, specific content and materials for training or assessment, guidelines to transform an aspect of the system or ways of structuring decision-making.

Technology

Is a tangible product or tool designed to improve some aspect of the overall system.



PHOTO CREDIT: RAIN, Ghana, 2017.

MORE HERE on
GROWS Landscape Review

Table I. GROWS Tools and Approaches

	Framework	Practice	Technology
Institutional Structure, Funding & Planning	<ul style="list-style-type: none"> • Umbrella Organizations • Rural Utilities • Funding Pools • Franchising • Microfinancing 	<ul style="list-style-type: none"> • Participatory Planning • Contingent Funding • Legal Registration • Formal Contracting 	
Sourcing, Treatment & Distribution		<ul style="list-style-type: none"> • Water Treatment 	<ul style="list-style-type: none"> • Retrospective • Monitoring
Tariff Collection		<ul style="list-style-type: none"> • Collective Payment • Social Costing 	<ul style="list-style-type: none"> • Electronic Taps & Smart Meters • Electronic Payment
Operations & Revenue Management		<ul style="list-style-type: none"> • Training and Capacity Building Operations & Maintenance (O&M) • Audits 	<ul style="list-style-type: none"> • Information Dashboards
Monitoring & Maintenance		<ul style="list-style-type: none"> • System-Wide Assessment Tools • Subscription • Maintenance • Technical Associations • Training & Capacity Building (Technical) 	<ul style="list-style-type: none"> • Remote Monitoring
Communication		<ul style="list-style-type: none"> • Community Meetings • Publication of Performance Information 	<ul style="list-style-type: none"> • Communication Platforms

Desk and field studies demonstrated that each of these tools and approaches was found to have implications for the four characteristics of governance: transparency, accountability, trust and equity. Improved governance was generally found when the following elements were present:

- ① Technical and administrative support for service providers
- ② Access to financing for rural water providers, especially in areas without economies of scale
- ③ Regular maintenance checks and repairs by a qualified or professional technician
- ④ Formal documentation of ownership, roles and responsibilities for water services, including performance standards
- ⑤ Well-defined, agreed-upon and well-known tariff structures
- ⑥ Community involvement throughout the entire water service delivery process including planning, decision-making, and oversight
- ⑦ Equitable access to water, regardless of ability to pay
- ⑧ Incentives (financial or regulatory) to provide water to marginalized groups
- ⑨ Effective process(es) for recourse / consequences if obligations are not met
- ⑩ Mass communication (public meetings, SMS, WhatsApp, etc.) with accurate information around water system technical and financial performance that is accessible, understandable, and user-friendly for all

Each of the above elements can be introduced or strengthened through different private sector-derived mechanisms, with the specific mechanism chosen according to contextual considerations. For example, it is possible to achieve (element ④) and (element ⑤) around documentation and tariff setting through the mechanisms of legal registration, contingent funding, franchising operations, subscription maintenance services, and microfinancing mechanisms. Similarly, effective communication about water system services (element ⑩) could be provided via community meetings, participatory planning practices, electronic taps and smart meter technologies, publicly available audits, dashboards, remote monitoring, or even umbrella organizations.

As previously noted, GROWS focused on the governance aspects of water systems, and not on the technical aspects including reliable water system operation and professional maintenance. That said, a key finding was that water system functionality and reliability are foundational indicators of

governance outcomes, especially around establishing and maintaining trust.

Systems which provide consistent rural water services often have many of the elements of good governance present. For these systems, there are still opportunities to improve on governance, per the list of identified elements. For systems that are not functioning as intended due to technical issues, such as limited supply or poor quality, the technical challenges must be addressed with a combined focus on both technical and governance elements.

For additional guidance on rural water services see [*USAID's Water and Development Technical Series on Rural Water Services*](#).

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LANDSCAPE SNAPSHOTS FOCUSED ON TATE IMPACTS

These snapshots provide brief overviews on the technologies, practices and frameworks that support rural water governance as identified in the GROWS Landscape Review.

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Transparency

Transparency was found to be critically important across the numerous rural water service management models and case studies. Transparency can positively influence other key governance factors such as accountability and trust, and effective communication greatly increases user satisfaction. The research found that the ability to have robust two-way communication (not just one-way feedback) is critical for building transparency. When users have a good understanding of how their money is being spent, their willingness to pay for the water service increases and so does their trust in the provider.

It is important to note that while the use of technology (e.g. smart meters, information dashboards, social media or WhatsApp messaging) can be helpful in increasing the amount of accurate information available to users, its efficacy depends on that technology being understandable, accessible and user-friendly for everyone in the community.

Use of technology may be limited by mobile and/or internet service, access to phones, cost of data, etc. Regardless if technology use is widespread, in-person engagement through community meetings and/or in-person water service transactions may be the most effective means of ensuring transparency and associated trust.



PHOTO CREDIT: Water and Development Alliance (WADA), Tanzania, 2020.

LEARN MORE**DATA FOR IMPROVED RURAL WATER GOVERNANCE**

Collecting, sharing, and utilizing data at the water system level can improve transparency, accountability, and trust for both water users and providers.

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Accountability

Accountability was found to be strongly linked with building trust among user communities. A critical component for enhancing accountability was a community's sense of ownership and involvement in the water system. When community members are engaged with water service delivery, they know what to expect from the provider and can make demands for maintenance, system expansion or other needs, having agency in holding the provider accountable.

This engagement is also linked to transparency and effective communication. Regular communication can increase a user's belief that their feedback is heard and their concerns are being addressed. As noted above, the method of communication is critical, and in-person interactions may result in greater community accountability.

Another effective method for ensuring accountability was the use of sanctions, which enhanced a sense of payment equity among water users and reduced fraud and misuse. In cases where smart meters and electronic taps were implemented, users felt that the technologies helped improve accountability among both the providers (who couldn't overcharge) and users (who couldn't evade payment or pay a different tariff).

LEARN MORE**BARRIERS TO PRIVATE SECTOR ENGAGEMENT**

Numerous contextual details – project-level, cultural, demographic, geographic, institutional, economic, and political – influence rural water provision, private sector engagement and rural water governance.

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Trust

Trust is a key governance factor in rural water service delivery in the two-way relationships between all actors. Trust can be improved by technical and relationship-building approaches.

Three key areas found to improve trust include, but are not limited to, 1) technologies that help increase transparency (i.e. water payment,

system performance communication, remote monitoring) and ensure fairness in water collection and payment; 2) proven record of responding quickly and appropriately to system issues; and, 3) frequent and meaningful community engagement (e.g. feedback sessions and inclusive decision-making).

Effective and regular communication is strongly linked to increased trust between users and providers, in particular when users know that their feedback is being heard. Critically, in order for trust to be maintained, providers must demonstrate that user feedback is being acted upon. Requesting feedback when it is unlikely that changes can be made may cause resentment amongst users. Sometimes, users may not understand the reasons why suggestions cannot be implemented, so a two-way communication flow is key to improving user satisfaction. Trust also arose as an issue between providers and governments, with providers requiring assurance that any contracts and operating agreements would be honored and enforced.

Equity

Equity is described in terms of ensuring accessible water for all people and securing equity in decision-making, mainly through women's participation on community water boards. However, the inclusion of women did not necessarily equate to equitable decision-making. Women were noted as not speaking up in meetings or engaging in leadership. While the inclusion of women is a necessary first step, true engagement must go beyond simply meeting quotas.

Nearly all respondents mentioned the importance of ensuring the most vulnerable in their communities (e.g. the elderly and disabled) had access to clean, safe water. However, older users and users from low-income households reported decreased satisfaction with service providers related to inadequate responses to feedback and the costs of service.

Tying in the concepts of transparency, trust, and accountability, users felt it was important to make sure no one in the community was benefiting from the

system more than others. Having transparency in how decisions are made, accountability and trust with system managers can help ensure equitable water access in the community.

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WOMEN & WATER GOVERNANCE

Women nearly always bear responsibility for water collection, and experience extremely high maternal mortality due to water-related disease and infection.

[Read more here](#)



PHOTO CREDIT: Photo by Luis Tosta on [Unsplash](#)

GROWS Overview

Motivation

The *U.S. Global Water Strategy* (GWS) notes that without sustainable supplies of water, many countries will suffer from increased poverty and disease, food and energy insecurity, economic dislocations, and cross-border and regional tensions (U.S. Government, 2017).

These challenges have the potential to undermine economic development, exacerbate migration pressures, increase civil unrest, aid terrorist recruitment, reduce trade and export opportunities, and prevent countries from advancing policies and programs important to the United States.

Water insecurity can also exacerbate social and gender inequities. Women are disproportionately burdened by a lack of reliable, safe water (Geere and Cortobius, 2017) because women nearly always bear responsibility for its collection and experience extremely high maternal mortality due to water-related disease and infection (Pouramin et al. 2020). Women are most often responsible for caring for family members afflicted with water-related illness. Due to lack of menstrual hygiene facilities, girls are often pulled out of school once they reach puberty, and women and girls often face sexual assault and other forms of violence when fetching water, particularly over long distances.



PHOTO CREDIT: WADA, Zambia, 2017.

Opportunity

The GWS notes that water problems are difficult to solve due to challenges with low local capacity, limited financial resources, weak policy and regulatory environments, including lack of prioritization from local and national governments. However, the GWS also recognizes water as an opportunity:

“Water is an entry point to advance core democratic values around equality, transparency, accountability, women’s empowerment, and community organization. Governments that deliver basic water and sanitation services are often seen as working on behalf of the people – creating a more

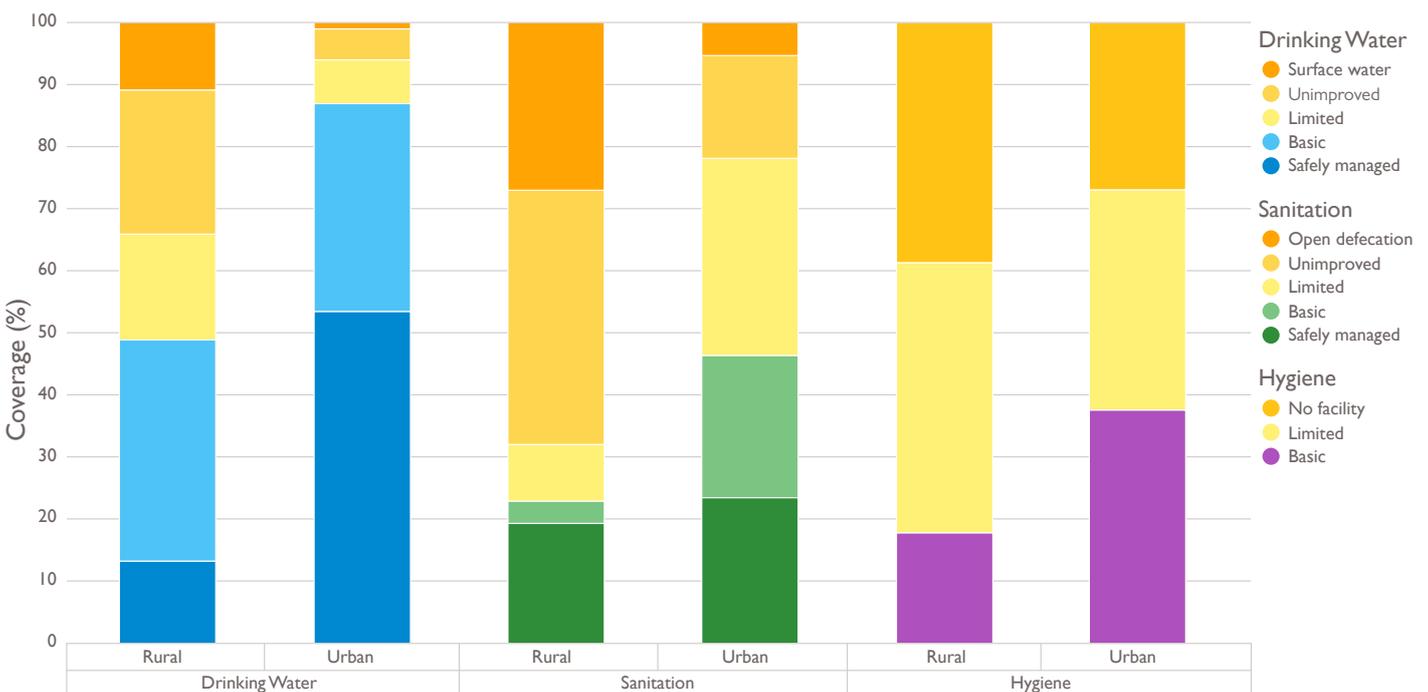
stable environment. Countries that cooperate on water are less likely to go to war and networks established for water and sanitation service delivery have been used to strengthen community responses to challenges such as Ebola and other infectious disease outbreaks. In other words, water can be a means of strengthening governance, civil society engagement, and resilience at all levels.”

Reality

The rates of clean water access have not improved in recent years at the pace required to meet the UN Sustainable Development Goals (SDGs) (Dickinson et al., 2017). This trend can be attributed to investments that

do not match the demand due to population growth, and a rate of infrastructure failure that has hovered at 30-40 percent for the past 20 years (Foster et al., 2019) especially in rural, economically-marginalized communities in sub-Saharan Africa. According to the WHO/UNICEF Joint Monitoring Programme (JMP) (2021), 1.2 billion people globally still lack access to basic water services and 2 billion lack access to a safely managed water source. Water access in rural areas lags urban locations due to the challenges associated with serving low-income, dispersed populations. Figure 1 shows that in rural sub-Saharan Africa only 49 percent of the population has at least basic access to drinking water services, 17 percent has limited access and 34 percent use unimproved or surface water sources (JMP, 2021).

Figure 1. Summary of Household WASH Service Levels for the Sub-Saharan African Region



CREDIT: JMP, 2020. <https://washdata.org/data>

GROWS Goals and Scope

GROWS' goal is to identify and disseminate innovative governance and private sector-derived models and tools to improve water services that will help accelerate eliminating extreme poverty in sub-Saharan Africa. GROWS aims to support USAID Democracy, Human Rights and Governance Officers at Missions across Africa in enhancing the delivery of rural water services.

The work focuses on the role of private sector operations because of USAID's broad interests in:

- New perspectives and solutions to improve governance and overcome challenges to private sector engagement in sub-Saharan Africa
- New tools and approaches that can improve transparency and accountability both in government and private sector engagement
- Opportunities to promote good governance through private sector engagement, and ways to integrate democracy, human rights, and governance principles and practices across USAID's development portfolio

GROWS focuses on rural water services as a lens through which to explore these interconnections between good governance and private sector engagement because of the critical role that water plays in community health and economic development. Access to potable water is a fundamental human need that is still lacking in many rural communities in sub-Saharan Africa despite decades of investment.

In recent years, the water sector has begun to look at private sector operations to overcome historic sustainability challenges in water services. Yet the emphasis thus far has largely been on the financial and technical implications of private sector services. Analysis of the ways in which this relatively new development in rural water services impacts local governance has received less attention, even though it has the potential to impact not only water provision but also other facets of rural economic development and local relationships that exist beyond water. Water as an entry point for learning about governance and private sector engagement therefore crosses multiple USAID programming objectives and provides opportunities to improve the overall enabling environment for eradicating extreme poverty.

GROWS is funded by the USAID Africa Bureau Office of Sustainable Development, Center for Conflict, Peacebuilding and Governance Division (CPG). GROWS was implemented through a consortium of partners including Global Environment & Technology Foundation (GETF), The Ohio State University, Global Partners for Development (GPFd) and U.S. Water Partnership (USWP).

Key Research Focus

This research activity focused on rural water service delivery and did not include analysis of sanitation and hygiene, which the authors recognize is related, but has a unique set of factors and deserves a deeper analysis that was beyond the scope for this research. For GROWS, we focused on the reasons why private operator models may be well-positioned or not to address water governance challenges. Therefore, our main focus was not on performance in terms of water quality or coverage specifically, although these might influence some views on governance or impact it directly.

We consider that governance outcomes are important in and of themselves, with the ability to spill over into or influence other sectors or areas of social and political life.

GROWS was guided by the following key research questions:

- How can rural communities and local government authorities contribute to improved governance to encourage private sector engagement and hold water service providers accountable?
- How can private sector service providers contribute to improved governance and hold rural communities and local governments accountable for reliable payments and stable markets?
- What are the contextual elements (i.e., community organizations, governance structures, business models, or market-derived tools) that enable private sector actors to be successful in providing sustainable rural water services?

GROWS completed quantitative and qualitative field research as well as a desktop landscape review to address the above key research questions. The field research included interviews, focus group discussions, and surveys with key water sector stakeholders, including local and national government authorities, NGOs, civil society organizations, funders/donors, private sector actors, and water users from rural communities. The desktop review considered the whole of sub-Saharan Africa, but the field

research had particular focus on rural locations in Kenya, Uganda, and Tanzania. More information on the research methodology is available in the [Annex chapter of the Toolkit](#).

The findings from GROWS aim to help advance USAID's overarching objective of addressing governance challenges that hinder sustainable and equitable economic growth in the following ways:

- Building better governance relationships and trust between communities, institutions, local government authorities, and private sector water service providers;
- Improving fiscal transparency around water services and reducing local corruption; and,
- Improving the accountability of local institutions (local government authorities, water user committees, and service providers) to community members and other water consumers.

Rural Water Sector Background

GROWS recognizes that understanding the trends in rural water service delivery can shed important insights into the factors that contribute to current successful approaches.

Evolution of Community-based Management for Rural Water Service Delivery

What is Community-based Management (CBM)?

The community-based management model (CBM) was introduced to fill water service coverage gaps left by governments that had been unsuccessful in providing water services to rural areas.

The CBM model consists of community participation in the development of the water system, eventual community ownership of the scheme, and sustained operation and maintenance (O&M) by community actors (Moriarty et al., 2013). CBM became the

dominant mode for water service delivery in rural settings across sub-Saharan Africa, with both donors and implementing agencies interested in generating sustainability through community management (Harvey and Reed, 2007). Under the CBM model, international NGOs, governments or other donors usually provide initial investment, mainly in the form of infrastructure (such as installing hand pumps), but in some cases they also provide training on maintenance or management. Eventually the project is handed over to communities, which then have responsibility and authority over financial and operational aspects.

Issues with CBM Models

Volunteerism: CBM models rely on community involvement through volunteering. Members must willingly give their time and labor to manage and operate water systems, and such an assumption is not guaranteed (Harvey and Reed, 2007). This expectation of a “demand responsive approach” had the intention of ensuring an adequate level of water supply based on the community’s demand (World Bank, 1998), and it has been somewhat successful but not sufficient to address issues of sustained community involvement (Moriarty et al., 2013). Ultimately, labor requirements may lead to the necessity of leaders having to pay themselves to operate the system, potentially reducing the accountability and trust benefits that were theorized with giving the community the authority to manage their own systems (Moriarty et al., 2013).

Ability and Willingness To Pay: It is not uncommon that users may simply not be willing to pay. The challenge of generating enough revenue for keeping systems afloat are significant even if the entire community contributed, given that communities tend to have low income compared to the costs of installing and operating water schemes, but it is even greater when many users systematically do not pay their share. In some cases, people simply refuse to pay for water because it is viewed as a free resource that belongs to all (Gilbert, 2007). Other concerns from citizens include political manipulation by candidates promising free water (Gilbert, 2007) and the skepticism generated by past and present breakdowns. It has been shown that people are willing to pay when and if access to water is reliable and quality is assured, with acceptance higher for drinking water (Bey et al., 2013), but such reliability is not always guaranteed.

Capacity and Resources: There are specific governance challenges for CBM models related to a potential lack of local capacities. Communities may not have the technical, financial or management capacities required to provide water services.

A Failure of Trust

Communities may trust CBM systems regarding financial management more than outsiders due to existing relationships. However, trust in financial management by CBM systems depends on how information about the system is delivered or retained; while it is easier for a CBM model to communicate with local users, maintaining and sharing the relevant

information can be more difficult due to a lack of specific capabilities within a CBM system, such as book-keeping. In addition, water user committees may not be trusted by the community due to their perceived lack of technical capacity (Olaerts et al., 2019; Harvey and Reed, 2007).

Changes to CBMs: Shifting the Rural Water Management Landscape and Private Sector Engagement

Due to significant challenges related to CBM models, there have been shifts to different forms of management for rural water services, particularly towards a “service delivery approach”. This approach emphasizes sustainability of water service and system management, shifting the focus from infrastructure provision towards expansion of sustained water access.

This new focus emphasizes three main conditions:

- 1 Professionalization of service providers for communities, including ways to make providers accountable and to evaluate them based on performance
- 2 Community willingness to deviate from the CBM model, expanding it to either self-supply at the household level (Sutton, 2004) or to hybrid forms of a delegated management model
- 3 Provision of financing for the water system’s entire cycle, including ongoing operations and maintenance, rather than solely providing initial infrastructure investments

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TANZANIA REPORT

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Private sector engagement in the provision of basic services such as telecommunications, electricity, and water has been promoted by the international community since the late 1980s with the belief that private sector engagement would improve services through increased investment (Prasad, 2006).

In many types of service provision, private actors participate in building, managing, and operating the systems regulating and providing public goods. Critics pointed to this trend as a “financialization”

of water in the form of increased commercialization, privatization, and commodification, meaning that water provision became subject to global private capital and its interests (Bayliss, 2014). However, there are many ways to incorporate the private sector into public services provision, and also variation in what it means to be a private actor depending on the setting. It is no different in water service provision, which has seen the growing participation of private actors in a variety of forms around the world, including East Africa.

Introduction to Private Sector Service Provision

What is Private Sector Service Provision?

GROWS defines private sector service provision as “those non-governmental entities overseeing water system operations daily as a business, providing safe and reliable water supplies, and being at least partially financed by fees charged to the consumers.”

Types of Private Actors: Operating like a business does not necessarily lead to the assumption of profit-making as the goal under the GROWS definition, as some private actors could monetize solely to cover operation costs and investment. Private actors here could be companies, individual entrepreneurs, NGOs, social enterprises, or other actors, if they are clearly separate from national and/or local governments, as well as from community leadership.

Responsibilities of Private Actors: The private actor’s responsibilities could include many elements, from infrastructural needs – especially for initial installation of a given system – to water distribution and storage, along with other forms of technical support, such as ongoing maintenance. The array of responsibilities allows for further divisions within the concept of private actors to differentiate between those focusing on operating water systems and those solely providing support and/ or capital, although a private actor could engage in all of these. Additionally, the private sector could play a role in improving governance without direct engagement in system operations or support (e.g., manufacturers of technology used by water systems, communication and logistics services such as WhatsApp or other electronic means, etc.). Finally, the private sector as defined above should operate within a legal framework, circumscribed by national and local governments when applicable. Evaluations of their participation and impact for water provision governance are possible under such a framework but could be impaired in its absence.



PHOTO CREDIT: WADA, Tanzania, 2021.

Advantages of Private Sector Service Provision

Incentivized Services: The main argument for private operation in services provision relates to the incentives that private actors have compared to public ones; private actors should outperform government-owned enterprises due to their comparative efficiency given by financial incentives to reduce losses and waste, by clearly defining interested parties within each setting, and by improving the ability to advocate or lobby for some reforms that might increase the service quality either directly or indirectly and thus inefficient (Bayliss, 2014).

Effective Private Service Provision:

Public ownership is often regarded as inherently flawed due to political pressures that lead to the operations becoming “bloated”. There are expectations that private actors would overcome other obstacles. For instance, their profit incentives would result in installing and operating under a more financially sustainable framework compared to approaches based on donations (World Bank, 2006; Foster, 2012), despite concerns that users may only contribute a small fraction of the costs (McNicholl et al., 2019).

Improved Oversight & Increased

Accountability: Monitoring would be undertaken more regularly and locally, instead of relying on large and inefficient national agencies. Private investment would allow for improvements in technology and access to financing not typically available to more traditional sources of donor funding (WSP, 2010), and customer satisfaction could be improved while costs would be reduced due to expected efficiency increases (World Bank, 2006). Finally, private operation should improve governance through increased efforts toward accountability and transparency, while trust between actors should also increase given the better predictability associated with legal arrangements binding both governments and private operators (World Bank, 2006).

Challenges of the Private Sector Provision:

Despite all these arguments, private water service provision faces some unique challenges. Private sector engagement does not guarantee that sufficient revenues will be collected to sustain operations or cover the cost of repairs (Carter et al., 2010). The profit margin may be very low or even non-existent in rural settings, reducing the likelihood of market formation and the introduction of interested actors. In some cases, political pressure might add to this problem, as water is a universal necessity; keeping prices lower than costs becomes socially advisable, even more as water provision is a natural monopoly and thus subject to even more pressure (World Bank, 2006). Requirements for investment also tend to be much larger in rural communities, as many lack

even the most basic infrastructure or capabilities for maintenance; these communities tend to be underfunded due to poverty and may be unable to pay the costs of implementation and/or operation (McNicholl et al., 2019). Other financial challenges include the comparative disadvantage that for-profit companies have when there are grantmaking or not-for-profit NGOs in the business of water provision also participating in a region, as they “crowd out” profit-incentivized initiatives (Oxfam, 2018); and the risks associated with making investments in settings with lower levels of institutional stability, such as expropriation, political interference, or corruption (Carlitz, 2017).

The Relationship Between Governance and Rural Drinking Water Services

Democracy, human rights, governance (DRG) and water are critical components for sustainable development. GROWS looked to the data to evaluate if there were quantifiable relationships between governance and rural water services. At the regional level, we found that the sub-Saharan African region has consistent positive correlations between governance metrics and rural drinking water services. These results show that improved governance can be demonstrably linked with improved drinking water services.

A series of correlation analyses were conducted between the leading metrics for governance, as measured by the [Worldwide Governance Indicators \(WGIs\)](#), and rural water services, as measured by the [JMP](#).

The WGIs include six composite indicators of broad dimensions of governance covering over 200 countries since 1996: Voice and Accountability, Political Stability and Absence of

Violence/Terrorism, Government Effectiveness, Regulatory Quality, Rule of Law, and Control of Corruption. Indicator scores are standardized to range from -2.5 to 2.5 and are based on several hundred variables obtained from 31 different data sources, capturing governance perceptions as reported by survey respondents, non-governmental organizations, commercial business information providers, and public sector organizations worldwide.



PHOTO CREDIT: WADA, Tanzania, 2020.

Table 2. Worldwide Governance Indicators

(a) The process by which governments are selected, monitored, and replaced:	
1. Voice and Accountability (VA)	Capturing perceptions of the extent to which a country's citizens are able to participate in selecting their government, as well as freedom of expression, freedom of association, and a free media.
2. Political Stability and Absence of Violence Terrorism (PV)	Capturing perceptions of the likelihood that the government will be destabilized or overthrown by unconstitutional or violent means, including politically-motivated violence and terrorism.
(b) The capacity of the government to effectively formulate and implement sound policies:	
3. Government Effectiveness (GE)	Capturing perceptions of the quality of public services, the quality of the civil service and the degree of its independence from political pressures, the quality of policy formulation and implementation, and the credibility of the government's commitment to such policies.
4. Regulatory Quality (RQ)	Capturing perceptions of the ability of the government to formulate and implement sound policies and regulations that permit and promote private sector development.
(c) The respect of citizens and the state for the institutions that govern economic and social interactions among them:	
5. Rule of Law (RL)	Capturing perceptions of the extent to which agents have confidence in and abide by the rules of society, and in particular the quality of contract enforcement, property rights, the police, and the courts, as well as the likelihood of crime and violence.
6. Control of Corruption (CC)	Capturing perceptions of the extent to which public power is exercised for private gain, including both petty and grand forms of corruption, as well as "capture" of the state by elites and private interests.

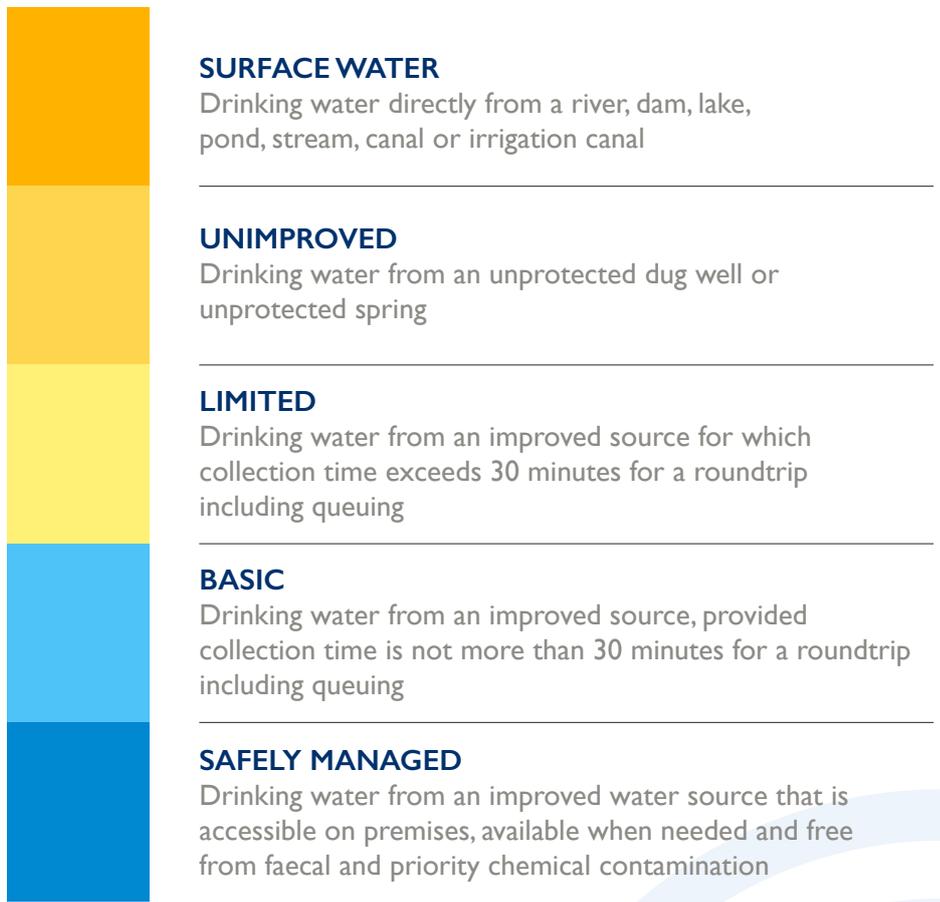
CREDIT: Kaufman et al., 2010.

The JMP reports country, regional and global estimates on WASH access since 1990. Country data are compiled from multiple sources including the UNICEF Multiple Indicator Cluster Surveys (MICS), Demographic Health Surveys (DHS), Living Standard Measurement Study (LSMS), and national census data.

The JMP drinking water service ladder (Figure 2) defines the various levels of drinking water services and allows for comparison across countries. The UN Sustainable Development Goals (SDGs) include global targets to achieve universal access to basic WASH services and to progressively improve the standard of WASH services by 2030.

GROWS looked at the historical trends for WGI and JMP data from 2000-2020 as well as a focused analysis on the most recent data available, for 2020 only. The analyses found moderate but significant linear correlations between individual WGIs and different drinking water service metrics, including national, urban and rural “at least basic” estimates for five SDG regions: sub-Saharan Africa, Western Asia and North Africa, Central and Southern Asia, Eastern and South-Eastern Asia, and Latin America and the Caribbean. At least basic includes both basic and safely managed services as described in Figure 2.

Figure 2. JMP drinking water service ladder



CREDIT: JMP, 2020. <https://washdata.org/monitoring/drinking-water>



PHOTO CREDIT: Photo by Annie Spratt on Unsplash.

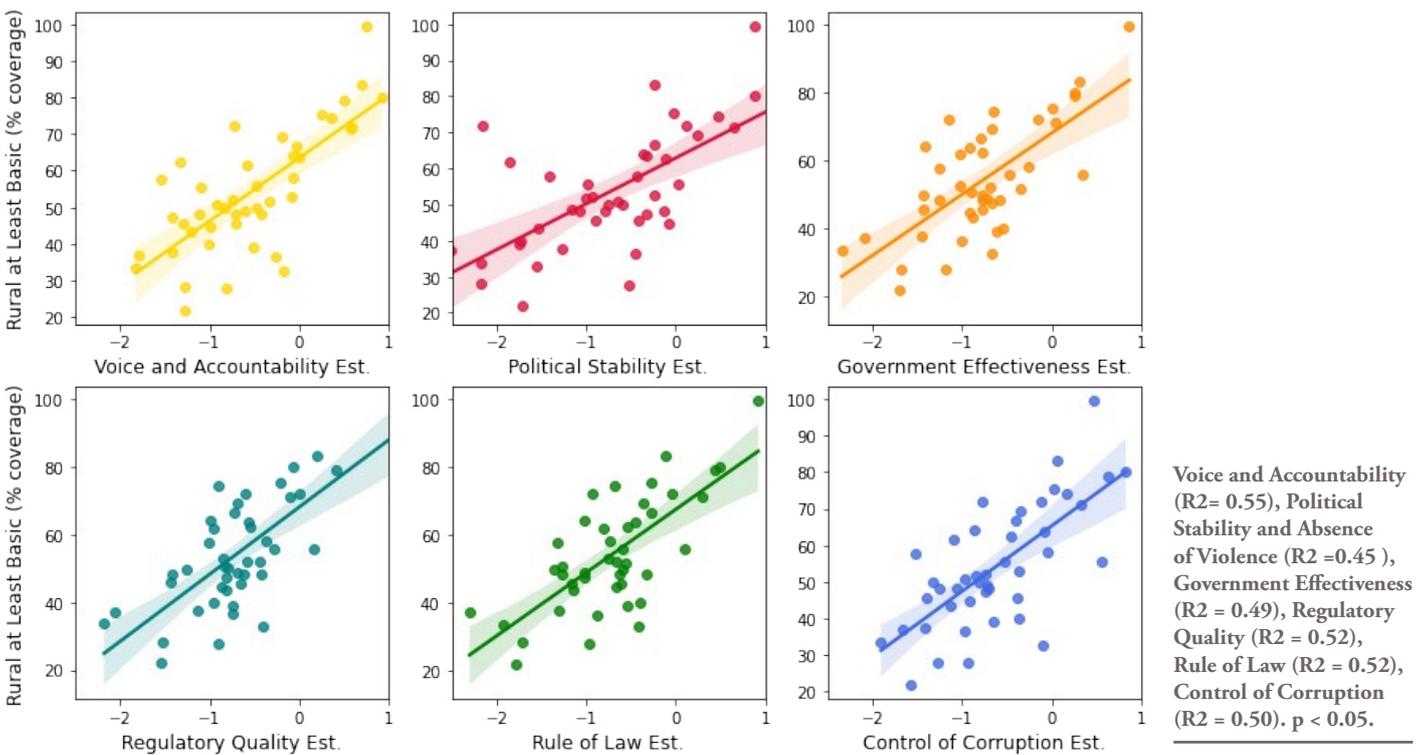
Sub-Saharan Africa - Rural - 2020

Focusing on rural at least basic water services, the sub-Saharan African (SSA) region showed the strongest correlations (as measured by the coefficient of determination, R²) for five of the six WGI (Voice and Accountability, Political Stability and

and Absence of Violence (tie with Latin America), Regulatory Quality, Rule of Law and Control of Corruption) compared to other SDG regions (Latin America has a stronger correlation for Government Effectiveness).

Looking at only the most recent data, from 2020, the strength of the correlations improve substantially, with a clear positive trend between governance and rural basic drinking water services in SSA, as seen in Figure 3.

Figure 3. Linear regressions between WGI and rural at least basic drinking water services in sub-Saharan Africa in 2020.



Individual SSA country trends vary, though the majority of countries consistently show significant correlations between WGI and rural at least basic drinking water services. While GROWS focused on rural water services, correlations between

WGI and other services were also explored, including rural sanitation (data taken from JMP) and electricity, as measured by the [World Bank Rural Electrification](#) dataset. In all cases, the correlation coefficients were substantially higher for rural water access compared with other services.

While this analysis does not provide insights into the driving factors behind this correlation, it does indicate a unique relationship between governance and rural water services and strongly suggests that collaboration between the governance and WASH sectors would likely have beneficial development outcomes.

GROWS Research Framework

GROWS sought to understand the governance challenges for rural drinking water services and explore examples of successful responses to them. We consider four components of effective water system governance: transparency, accountability, trust, and equity (together, TATE).



Transparency

USAID describes proper transparency as creating “an environment where governments and public officials engage in the clear disclosure of rules, plans, processes, and actions in a form that is readily accessible to all. Transparency promotes accountability by providing the public with information about what the government is doing” (USAID, 2013). With respect to water service provision, transparency requires that information be available to the public on all financial, political, and managerial transactions related to water systems.



Accountability

USAID defines accountability as “the systems, procedures and mechanisms that ensure that public officials and institutions perform their stated duties and uphold their responsibilities to the public while imposing restraints on their power and authority and providing for redress or sanction when these duties and responsibilities are not met” (USAID, 2013). The GROWS project operationalized accountability as structures and behaviors that ensure accountability between providers and users. GROWS was particularly interested in the degree to which users perceive water system providers as responsive to their needs, and the degree to which providers anticipate reliable payment from users.



Trust

The Organization for Economic Co-operation and Development (OECD) explains that “trust is important for the success of a wide range of public policies that depend on behavioral responses from the public. Trust is necessary to increase the confidence of investors and consumers. Trust is essential for key economic activities, most notably finance. Trust in institutions is important for the success of many government policies, programs, and regulations that depend on cooperation and compliance of citizens” (OECD, 2018). Within the context of rural water provision, trust manifests as confidence that providers will act in the best interest of users, maintain a reliable service, and secure technologies.



Equity

With equity, our focus is on both equality of opportunity and equality of outcomes associated with not only use of the water system but also level of participation in the governance of that system. In the context of water provision in rural East Africa, GROWS focused on inclusion along gender, ethnic, and economic lines.

Comparison Between TATE and PITA

In 2014, USAID (and other donors) established the centrality of Participation, Inclusion, Transparency, and Accountability (PITA) for the achievement of development, human rights, and democratic governance objectives (Carothers and Brechenmacher, 2014). This terminology has been adopted across various USAID policy and guidance documents and across multiple sectors.

The decision to adopt this TATE framework rather than the more familiar USAID PITA framework emerged from a series of conversations among the GROWS project team that sought to define, independent of any existing structures, the elements of governance that were most appropriate for the goals of this project. The TATE lens shares similarities with the PITA framework, although two of the terms are different.



PHOTO CREDIT: WADA, Tanzania, 2021.

While transparency and accountability were obvious crossover elements between TATE and PITA, GROWS introduced trust as a separate element, worthy of exploration on its own merits, and decided to emphasize equity as a pillar of governance rather than the traditional participation (which emphasizes citizen involvement in governance) and inclusion (which focuses on the interventions that promote equity of opportunity) elements of PITA, which would seem at first glance to be similar and/or interchangeable concepts.

While trust is often not evaluated as an independent element of good governance in the context of rural water service delivery, the GROWS project team decided to make it a pillar of this research because of how important trust is to the success of public engagement

and long-term sustainability of public services. As discussed by OECD, where a service or policy outcome depends upon full public participation and desired behavior, citizens are likely to support that service or policy only if they trust the institution requiring their participation. The results of distrust include failure to fully engage, failure to engage at all, early withdrawal of participation, and failure to comply with expected behavior. Trust is therefore critical to the success of interventions. At the same time, public trust may be built upon the demonstration of good governance rather than preceding it. Therefore, while trust may not be a target for governance interventions, it is intertwined in such a way to be worthy of examination.

We view equity as a more suitable mode of investigation for this work than participation and inclusion for the following reasons:

- Equity, as we define it for this project, encompasses equitable opportunity, participation, and outcomes, i.e., a more comprehensive assessment of equity in how citizens participate in governance, their access to opportunities for receiving services, and, importantly, whether that participation and inclusive access to opportunities actually result in equitable outcomes.
- The more traditional definition and use of participation does not explicitly call out whether citizens' ability to influence governance elements is equitable for all citizens, nor does it establish whether the outcomes of that influence are equitable.
- The traditional use of inclusion focuses on equity of opportunity and access, but not equity in outcomes. As more recent social conceptions of equity have shifted in the general public, there is greater recognition that what is needed is not equal provision of goods and services but rather goods and services that result in equitable outcomes, which may not be the same.
- Commonly, equal access to opportunity and engagement focuses on whether a marginalized or vulnerable population has equal representation. However, that definition does not examine whether that representation results in equitable governance processes. For example, there may be a quota set for involving women in water committees, but their presence alone may not result in their equal participation in discussion or the decision-making process. A focus on equity rather than inclusion allows for exploration of the outcome and not just the access. This focus was of particular interest to GROWS because of USAID's cross programming objectives related to gender equity.

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