

Sustainable WASH Systems Learning Partnership

# UNDERSTANDING CHANGES IN COORDINATION IN KITUI COUNTY'S WATER SECTOR 2018–2021

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June 2021

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**SUSTAINABLE  
WASH SYSTEMS**  
A LEARNING PARTNERSHIP

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**Front cover:** Interview participant describing network interactions in Kitui County. Photo by Angeline Mulwa.

**About the Sustainable WASH Systems Learning Partnership:** The Sustainable WASH Systems Learning Partnership is a global United States Agency for International Development (USAID) cooperative agreement to identify locally driven solutions to the challenge of developing robust local systems capable of sustaining water, sanitation, and hygiene (WASH) service delivery. This report is made possible by the generous support of the American people through USAID under the terms of the Cooperative Agreement AID-OAA-A-16-00075. The contents are the responsibility of the Sustainable WASH Systems Learning Partnership and do not necessarily reflect the views of USAID or the United States Government. For more information, visit [www.globalwaters.org/SWS](http://www.globalwaters.org/SWS), or contact Elizabeth Jordan ([EJordan@usaid.gov](mailto:EJordan@usaid.gov)).



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## Acronyms

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<b>MAWLD</b>	Ministry of Agriculture, Water and Livestock Development
<b>NGO</b>	Non-governmental organization
<b>ONA</b>	Organizational Network Analysis
<b>SWS</b>	Sustainable WASH Systems Learning Partnership
<b>UNICEF</b>	United Nations Children's Fund
<b>USAID</b>	United States Agency for International Development
<b>WASH</b>	Water, sanitation, and hygiene
<b>WASREB</b>	Water Services Regulatory Board

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## Glossary

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<b>Kitui WASH Network</b>	The relationships between stakeholders involved in rural WASH service delivery in Kitui County
<b>Baseline</b>	The Organization Network Analysis study conducted on the Kitui WASH Network in 2018
<b>Endline</b>	The Organization Network Analysis study conducted on the Kitui WASH Network in 2020
<b>Node</b>	An organization or stakeholder within the Kitui WASH network
<b>Tie</b>	A relationship between network nodes
<b>Degree</b>	The number of ties that a node has
<b>Betweenness Centrality</b>	A measure of the likelihood that a node is on the shortest path between any other two nodes in the network
<b>Connected Components</b>	The number of distinct groupings of network nodes that have no ties beyond their group

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## Executive Summary

The Sustainable WASH Systems Learning Partnership (SWS) seeks to learn how systems approaches can be used to improve sustainability of water, sanitation, and hygiene (WASH) services. In Kenya, SWS is supporting the Kitui WASH forum to convene county actors including donors, non-governmental organizations, government officers, and the private sector. WASH forum meetings are held quarterly with participation ranging from 47–63 actors; the COVID-19 pandemic caused a full year of interruption. The network provides a platform for coordinating, including the joint development of sector priorities, planning of interventions, and learning to support sustainable rural water services. SWS implemented various interventions in support of the Kitui WASH forum and applied Organizational Network Analysis (ONA) at baseline in 2018, to quantitatively understand interactions between actors and identify opportunities for improving coordination. The partnership repeated an endline ONA in 2020 to understand how network relationships had changed to support the Kitui WASH forum/network.

Enumerators collected data through interviews with 29 key sector actors who were selected for their authority and the consistent involvement of their respective organizations in the sector. Interviews consisted of a network mapping exercise to quantify relationships across four tie types: information, skills, resources, and authority. Enumerators also questioned interviewees about the observed successes, challenges, and recommended solutions to achieving sustainable rural water services in Kitui. SWS asked participants to create network maps, which were imported into Gephi software and R for analysis. Audio recordings of the interviews have been transcribed, categorized, and grouped into five overarching, high-level priority factors that SWS analyzed as priority attributes.

Endline ONA results indicate a greater number of relationships between network actors driven by information and skill ties. Visually, the Kitui WASH network is one large cluster with no isolated clusters or brokers that may impede interaction. The county government dominates skills transfer relationships and wields authority and influence over other actors, a position that NGO actors previously held in Kitui. These results point to the county government progressively taking a lead role in the county WASH sector, with the support of stakeholders. Closeout of NGO programs and attrition, especially among government actors, are a key cause of instability in the network and highlight the limitations of short-term projects or programs in creating long-term and sustainable change, and donors have remained under-represented in the local network.

By endline, actors presented less of a tendency to work with like-minded actors, which may imply a greater diversity of ideas, and members less of a tendency to form sub-groups within the larger Kitui WASH network that are organized by shared priorities. Sector priorities had changed for roughly half of the actors, with fewer actors prioritizing the coordination or professionalization of how rural water supplies are managed. Actors prioritizing scheme management coordination and professionalization remained well connected from 2018 to 2020, supporting their ability to advance their agenda. More actors are prioritizing strengthening the community management model, driven by funding agendas, knowledge gaps, and political dynamics, but this sub-group is less connected than in 2018. Priorities of County Government actors at management or head office clash with those of the county's field offices or sub-counties, indicating competing and changing agendas.

To achieve sustainability in the Kitui WASH sector, this report identifies opportunities for 1) institutionalizing the WASH forum network within water policy/law to play a stronger vertical and horizontal coordination role in the sector; 2) strengthening monitoring and reporting capacities to facilitate information and skills relationships within the network; 3) streamlining sector funding to ensure clear strategies for supporting universal water access in rural Kitui; 4) aligning programming and funding to ensure consistency with identified sector priorities; 5) influencing subsidiary networks, including donors, political networks, and other government offices, for mutually

reinforcing interventions and narratives; and 6) improving access to knowledge and templates on models for professionalization of rural water services.

## Introduction

### Background

The Sustainable WASH Systems Learning Partnership (SWS) is a global, multi-country, United States Agency for International Development (USAID)–funded program working in Kenya, Uganda, and Ethiopia, which seeks to learn how systems approaches can be used to improve the sustainability of water, sanitation, and hygiene (WASH) services. Eight partners are working with USAID in these countries to test new ideas, approaches, and tools to strengthen local WASH systems and improve service sustainability. SWS's technical areas of focus include professionalized maintenance for rural water services, collective action approaches, and systems understanding.

In Kenya, SWS partners, Oxford and UNICEF Kenya, are working closely with the Kitui County Government and other stakeholders, using an existing platform (the Kitui WASH forum) to strengthen the institutional coordination necessary for effective water service delivery. They support the Kitui WASH forum to convene county actors, led by the County Ministry of Agriculture, Water and Livestock Development (MAWLD), in addition to donors, bilateral programs, non-governmental organizations, government officers, water service providers, research/academic partners, community groups, and the private sector. The forum offers a platform for jointly developing sector priorities and systematically documenting plans, interventions, and lessons learned in providing sustainable rural water services. Oxford and UNICEF are also using the forum to learn how collective action approaches work, when and why to implement them, how to monitor them, and what outcomes can be expected.

A previous analysis of the WASH forum network in 2018 identified 75 stakeholders with relevant involvement<sup>1</sup>. Beyond organic network interactions, the Kitui WASH forum intentionally brings actors together on a quarterly basis to improve coordination and planning for improving rural WASH service delivery. The result is an active network of stakeholder interactions whose collective efforts directly influence the quality of rural WASH service delivery in Kitui County. This study on the network of Kitui WASH stakeholders and how it has changed over the past two years explores the value of Organizational Network Analysis for influencing and monitoring changes in stakeholder interactions.

Of note this study commenced in August 2020 amidst the COVID-19 pandemic in Kenya. WASH forum meetings were temporarily suspended for the full year of 2020 due to the pandemic and Government of Kenya's restrictions on meetings. Over that period, WASH actors adapted alternative channels to continue to engage one-on-one, mostly through online progress meetings held bilaterally, as well as through emails, phone calls, and limited in person meetings where necessary to observe COVID-19 prevention measures. The WASH forum held one online dissemination-focused meeting in October 2020 to discuss findings of an SWS publication. Few (20) actors participated, and mostly those based in the main urban center of Kitui (Kitui town), highlighting the logistical challenges of engaging actors from rural or remote locations via online meetings. A carefully managed restart of in-person network meetings began in March 2021; 37 participants attended the first WASH forum since December 2019.

### Organizational Network Analysis

Organizational Network Analysis (ONA) is a tool for quantitatively understanding interactions between stakeholders. An extension of Social Network Analysis, ONA focuses on relationships among organizations, institutions, and key stakeholders rather than specific individuals. This allows

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<sup>1</sup> Kiamba, P. and Chintalapati, P. 2019. *Understanding Coordination in Kitui County's Water Sector: An Analysis of Stakeholder Interactions and Perspectives*. Available at: <https://www.globalwaters.org/resources/assets/sws/understanding-coordination-kitui-countys-water-sector-analysis-stakeholder>

investigation of, for example, the institutional relationship between a government service authority and a rural water service provider. Analysis can identify opportunities for strategically strengthening particular parts of a network, or to understand how network interactions have changed over time.

Following an ONA study of Kitui WASH stakeholders in 2018, this endline study seeks to understand how network relationships have changed over the past two years. Over that period, SWS implemented various interventions in support of the Kitui WASH forum, including:

1. Systems analysis activities for better understanding of status and performance of WASH services in communities, schools, and health facilities, e.g., community water infrastructure audit,<sup>2</sup> schools WASH facilities audit,<sup>3</sup> WASH forum surveys,<sup>4</sup> and household interviews, used to enrich sustainability dialogue at the WASH forum
2. Demonstration of a performance-based model for universal water service delivery, through rural water infrastructure maintenance i.e., the FundiFix Model, to address the rural water functionality challenge while documenting performance and lessons
3. Development of a first county water law (bill and policy), collaboratively with the WASH forum actors, aimed at steering Kitui County toward universal water service delivery

Quantitative network analysis can identify where the network has changed, and supplementary verbal interviews with these same stakeholders can qualify why those changes happened and why they matter. This report presents findings from the quantitative ONA and further attempts to explain observed changes following a discussion of the results with a subset of the interviewees/actors.

## Aims and Objectives

SWS repeated the approaches to data collection and analysis from the 2018 baseline study to answer three key questions:

1. How has the network changed over the past two years?
2. To what extent have different stakeholder groups become stronger or more influential?
3. To what extent are actors coordinating or interacting more?

In addition to network mapping, each interviewed stakeholder verbally responded to questions about how the network functions, challenges, and recommendations for sustainability of rural water services in Kitui County (Annex A). While the methodology included a validation of the results with stakeholders to explain the significance of the results or ultimate impact on WASH services, findings from this network analysis should also be considered together with the complementary qualitative analysis and other SWS publications to provide a more comprehensive perspective of the Kitui WASH network and its dynamics.

## Scope

This network analysis involved 29 actors that had been interviewed in either the baseline or endline ONA, all members of the Kitui WASH Forum. Four of those stakeholders participated in only one

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<sup>2</sup> Nyaga, C. 2019. *A Water Infrastructure Audit of Kitui County*. Available at:

<https://www.globalwaters.org/resources/assets/sws/Infrastructure-Audit-Kitui-County>

<sup>3</sup> Hope, R., Katuva, J., Nyaga, C., Koehler, J., Charles, K., Nowicki, S., Dyer, E., Olago, D., Tanui, F., Trevett, A., Thomas, M., and Gladstone, N. 2021. *Delivering Safely Managed Water to Schools in Kenya*. REACH Working Paper 8, University of Oxford, UK. ISBN 978-1-874370-82-6. Available at:

<https://www.globalwaters.org/resources/assets/sws/delivering-safely-managed-water-schools-kenya-brief>

<sup>4</sup> Nyaga, C. 2018. *Understanding Factors and Actors to Achieve Sustainable Drinking Water Systems in Kitui County*, Kenya. Research Brief, Sustainable WASH Systems Learning Partnership. Available at:

<https://www.globalwaters.org/resources/assets/sws/understanding-factors-and-actors-achieve-sustainable-drinking-water-systems-kitui>

study, either baseline or the endline, while the rest of the actors participated in both studies. Actors available for only one of the studies included:

- **Excluded stakeholder in the baseline analysis only:** Deputy Director of the Water Department (MAWLD).
- **Excluded stakeholders in the endline analysis only:** Three NGO programs—ActionAid, Red Cross, and USAID Kenya Integrated Water, Sanitation, and Hygiene (KIWASH).<sup>5</sup>

Table I below summarizes the types of stakeholders included in the network analysis; a complete roster is presented in Annex C.

*Table I. Distribution of Interviewees by Organization Type*

Organization Type	Number of Network Actors
County Government	14
NGO	8
Formal Water Service Provider	2
Private Sector	1
Academic Institution	1
Social Enterprise	1
National Government	1
Development Partner	1
	<b>29</b>

## Methods

SWS applied the methodology used in the 2018 baseline study to collect data for analysis in this report. The team conducted interviews for this endline study in August 2020 (Annex B). During each interview, enumerators asked an individual representing each stakeholder or organization to draw a network map using markers, Post-It Notes, and flip chart paper to indicate which stakeholders they interact with and how frequently. Enumerators presented interviewees with a list of all known WASH stakeholders in the Kitui network to guide identification of whom they had relationships with over the past year. Interviewees considered four frequencies of interaction: annually, quarterly, monthly, and weekly. Interviewees represented relationships with four tie types — information, skills, resources, and authority — with marker colors used to define the tie type and arrows used to indicate direction and weight.

Upon completion of the network drawing, enumerators asked participants to describe how the network functions in practice and identifying successes, challenges, and possible solutions to challenges. Annex A provides further details on the research methods.

Upon completion of the analysis, SWS convened a validation workshop with a subset (15) of the interviewees to discuss and explain the preliminary findings. SWS incorporated feedback from participants into the final report. Annex D provides a summary of the validation workshop notes.

<sup>5</sup> Inactive at the time of the study.



Figure 1: A network mapping interview in Kitui County during the 2020 endline survey.

## Results

SWS collated the participants' network maps drawn during interviews and imported them into Gephi network analysis software for analysis. The team then analyzed network data from the endline (2020) and network data from the baseline (2018) to identify changes in network properties. Comparative analysis between baseline and endline considers the nodes and ties of the stakeholders interviewed in the baseline and endline studies. Although the baseline identified a wider set of stakeholders in the Kitui WASH Network, scoping analysis to the specific subset of interviewed network actors enables a more robust analysis and comparison of network changes.

### Whole Network Analysis

Counting the number of tie types (Table 2) suggests that the overall number of network ties has increased nearly fourfold since the baseline study. Information ties remain the most common type of network tie, and the increase in skills ties is the largest proportional change. This suggests a greater number of relationships between network actors include the development of new skill-sharing relationships.

Table 2. Change in number of network tie types from 2018 to 2020

Tie Type	Baseline (2018)	Endline (2020)
Information	117	345
Authority	58	218
Skills	37	212
Resources	11	50
<b>Total</b>	<b>223</b>	<b>825</b>

The increase in the number of network ties is visually apparent when comparing the baseline network to the endline for all tie types and frequencies of interaction (Figure 2).

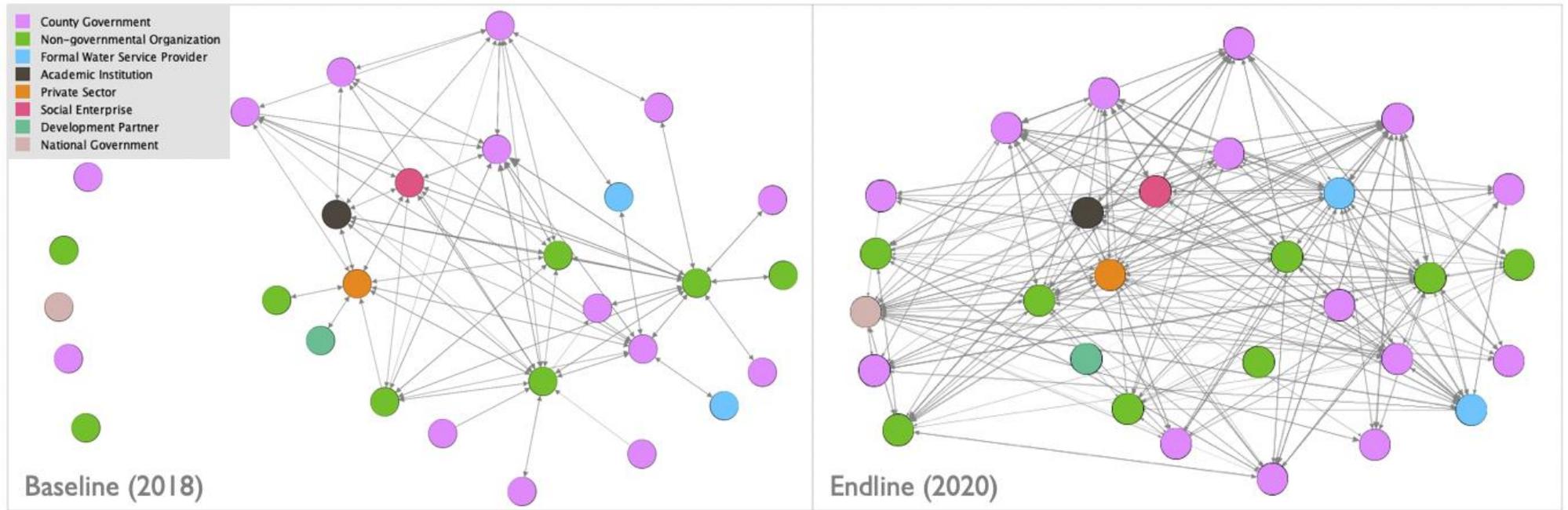


Figure 2: Visualizations for all ties and frequencies between interviewed organizations in 2018 (left) and 2020 (right)

In 2018, five network actors reportedly had no ties at any frequency of interaction within the network. This lack of interaction appeared to exist despite the presence of the Kitui WASH forum, initiated with the support of UNICEF Kenya in 2016. While some relationships may have existed but not been reported, all interviewed stakeholders in the network subset had been prompted with a list of all stakeholders in the Kitui WASH network. The absence of a tie means that neither stakeholder in a pair reported having a relationship with the other.

The same network in 2020 is both visually and quantitatively different. With the exception of the two programs that have closed out, ActionAid and KIWASH, all other network actors are engaged in multiple relationships with others.

In addition to total number of ties (Table 2), two quantitative properties illustrate the magnitude of this change:

1. **Connected components** – The number of connected components quantifies the number of distinct groupings of network nodes that have no ties beyond their group. A connected component value of one indicates that a pathway exists between any node and any other in the network. A higher number of connected components, observed at baseline, means the network is more fragmented. In 2020, the network indicates less fragmentation and all stakeholders reportedly interacted on at least a monthly frequency with the exception of the KIWASH program, which had suspended activity at the time of the study<sup>6</sup> (Table 3).

Table 3. Connected components, the number of isolated network segments, by frequency of interaction for all ties

Frequency of Interaction	Connected Components	
	Baseline	Endline
Yearly	6	1
Quarterly	9	1
Monthly	16	2
Weekly	19	8

2. **Average degree** – The average degree is the average number of connections per person in the network. In addition to the nearly fourfold increase in average degree for yearly interactions, the average number of weekly ties in the endline network now exceeds the average number of yearly ties in the baseline.

Table 4. Average degree by frequency of interaction for all tie types

Frequency of Interaction	Average Degree	
	Baseline	Endline
Yearly	7.7	28.5
Quarterly	6.6	26.4
Monthly	3.6	17.1
Weekly	1.9	8.0

The increased interaction among this stakeholder group suggests a significant increase in network interaction since the baseline. The next questions concern the significance of this change and its

<sup>6</sup> KIWASH received a one-year extension after conclusion of the study.

implications for improving rural service delivery in Kitui County. A reflection on this shift with actors interviewed at endline suggests quarterly meetings of the WASH forum are playing a central role in increasing relationships, in addition to emergence of lower-level (sub-county) WASH forums. Stakeholders flagged the collective approach to planning, monitoring, and reporting on activities and performance taken at these quarterly forums as an important driver. Actors anticipate the impact of a strong Kitui WASH network on water service delivery will be improved sustainability of water/WASH services, manifested in the form of well-coordinated and informed WASH activities, increased private sector participation or investment, improved operation and maintenance of community managed schemes, and better access or improved water service coverage in the county.

### Information Network Analysis

Information ties are the most common type of network interaction since it is uncommon for stakeholders to have a relationship without also sharing information. The only network actors with only one or no information ties are KIWASH and ActionAid, both of which have phased out their programming in Kitui County as of endline. Analysis here considers information ties for all frequencies: yearly, quarterly, monthly, and weekly.

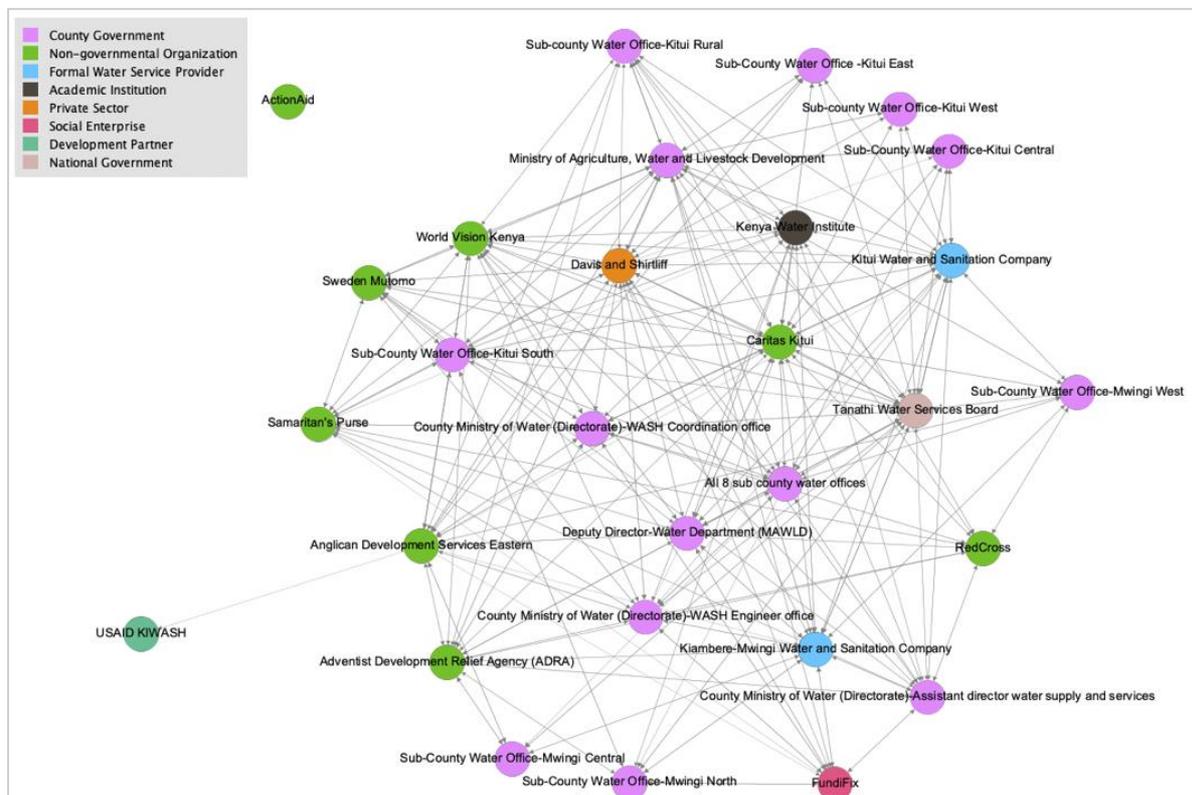


Figure 3: Endline network of information ties for all frequencies of interaction

### Betweenness Centrality

Analysis of “betweenness centrality” considers which stakeholders might be playing bridging or brokering roles within the networks. Betweenness centrality measures the number of times a node lies on the shortest path between other nodes in the network. Depending on the nature of the network, betweenness centrality analysis can identify nodes that may be information brokers or bottlenecks. Betweenness centrality analysis is repeated for both baseline and endline networks to identify changes.

SWS calculated betweenness centrality<sup>7</sup> for each node using Gephi network software for all information ties at all frequencies (Figure 4). The baseline network structure found a relatively small number of stakeholders with relatively high betweenness centrality. By contrast, the endline network appears to be less characterized by a relatively small number of nodes playing bridging or brokering roles. As of the endline, 23 different nodes are now on at least one of the shortest information pathways. As a result, information may now be able to flow more quickly through a larger number of possible pathways in the network.

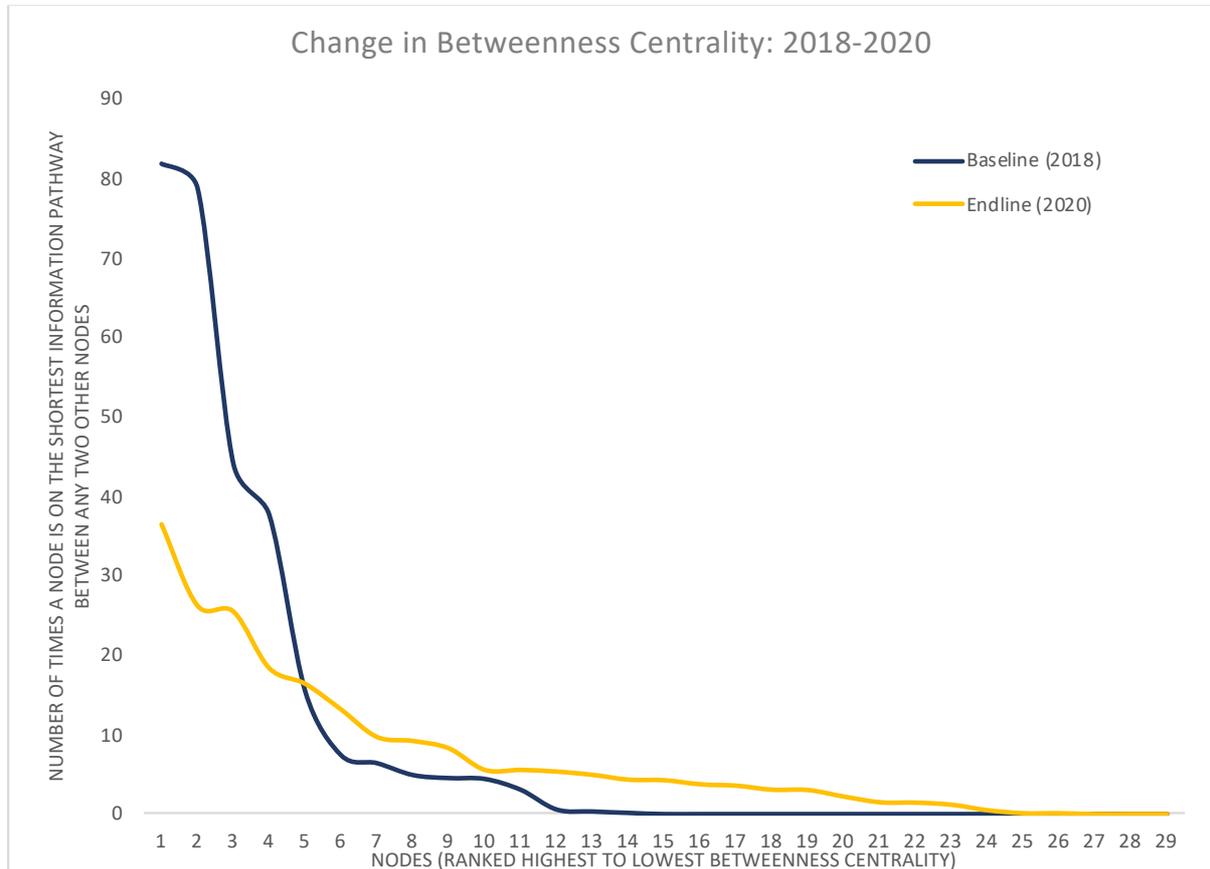


Figure 4: Change in information tie betweenness centrality from baseline to endline

This shift in the network might be particularly timely for continued collaboration among this group. ActionAid had previously been the organization with the highest betweenness centrality. It has now phased out its program and has no information ties. The fact that the information network remains well connected despite departure of ActionAid, who previously played a key bridging role, may indicate significance of a well-connected network with as many bridges or core actors as possible. In other terms, presence of fewer peripheral actors means information may still flow efficiently through multiple alternative pathways within the network and enhance resilience against risks such as obstructive/uncooperative actors, attrition, or exit of short-term programs.

#### Organizational Clusters

SWS identified clusters of stakeholder information interaction using Gephi network software to calculate “modularity” for all information tie types. Increase in the total number of information ties makes discrete clusters of interaction less obvious (Figure 5). Previously ActionAid, Caritas, and Davis and Shirtliff each performed a bridging role that linked to stakeholders without other information ties. This is no longer the case. With the exception of the now inactive ActionAid and KIWASH programs, the whole network identified in the endline study can be considered one large cluster.

<sup>7</sup> Undirected, not normalized.

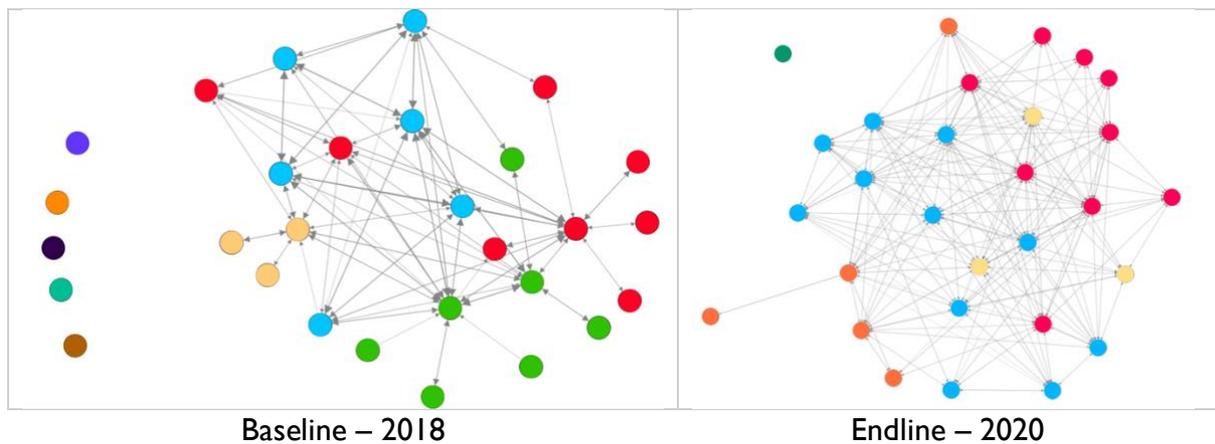


Figure 5: Groupings of network interaction for information ties at all frequencies. Each color is a cluster of interaction.

A review of these results with actors at the validation workshop revealed that the WASH forum is the main avenue for information exchange. A description of information types traded included new technologies for water service delivery, new tools and methodologies for monitoring services, and Kitui WASH sector actors' strategic plans and work plans.

### Skill Network Analysis

Analysis of skills relationships examines interactions where stakeholders support each other through consultation, training, coaching, or co-developing solutions. Figure 6 visualizes the network of skill ties for all frequencies of interaction. The closed USAID KIWASH program is the only node without any skill ties.

Similar to the analysis conducted during the baseline, degree analysis explores which stakeholders have the largest number of skill relationships. Ranking of the network actors with the most skill ties at baseline and endline is presented for both outgoing (provider) skill ties (Table 5) and incoming (recipient) skill ties (Table 6). Changes in ranking of skill providers and recipients perhaps eclipses the apparent step change in number of total skill ties.

Most stakeholders are now engaged in multiple skill-sharing relationships as compared to during the baseline (Figure 7).

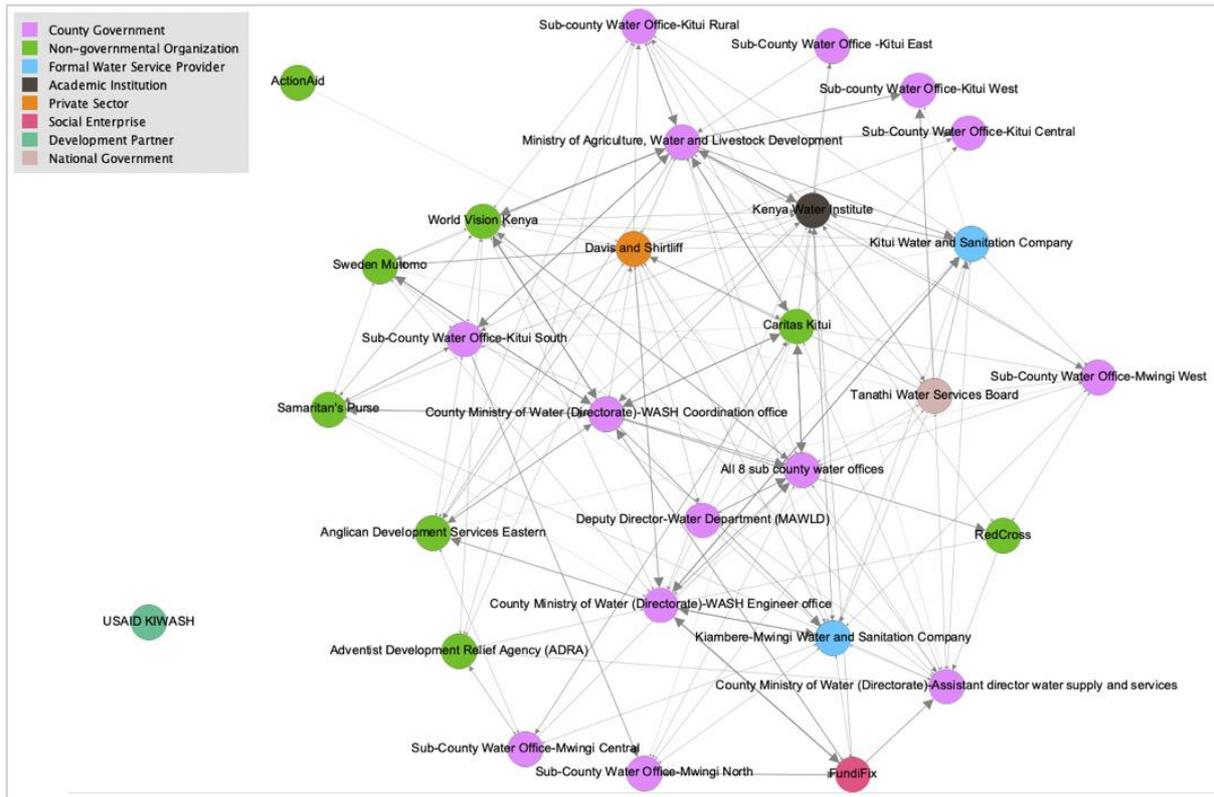


Figure 6: Endline network of skill ties for all frequencies of interaction

Of note, a comparison of the baseline and endline networks indicates an increase of the county government actors ranked among the top-five skill providers (Table 5) and recipients (Table 6). Three county government offices feature among the top-five skill recipients, perhaps an indicator of actors' growing investment in strengthening county government capacities as a core part of the network.

A reflection on this shift with actors at the results validation workshop identified factors that may have contributed to increasing the number of skill-sharing relationships. Actors report that adoption of online platforms like organizational WhatsApp groups for knowledge and information exchange and increased internet usage among the county government and WASH stakeholders are some of the enablers. In addition, actors note that information flow within the county government structures (headquarters versus field offices) is improving, with regular meetings and workshops held at a monthly and quarterly frequency. The actors also note increasing investment, from both the county government and WASH stakeholders, in trainings especially for sub-county Water Offices (field officers of the county government) and water committees at community-managed schemes. Since the baseline, various trainings have been completed in the sector, which covered topics such as smart reporting at the WASH forum, resource mapping, data analysis and management, life cycle costing approach, and climate-proofing water supply infrastructure.

Table 5. Ranking of stakeholders with the most outbound skill ties

Out-Degree: Skill Providers			
Baseline (2018)		Endline (2020)	
Ties	Organization	Ties	Organization
8	Caritas Kitui	14	Ministry of Agriculture, Water and Livestock Development
4	Kenya Water Institute	14	Caritas Kitui

4	Davis and Shirtliff	13	Davis and Shirtliff
3	ActionAid	12	County Ministry of Water (Directorate) – WASH Engineer office
3	FundiFix	12	World Vision Kenya
3	Deputy Director – Water Department (MAWLD)	11	Kenya Water Institute

Table 6. Ranking of stakeholders with the most inbound skill ties

In-Degree: Skill Recipients			
Baseline (2018)		Endline (2020)	
Ties	Organization	Ties	Organization
9	Caritas Kitui	13	County Ministry of Water (Directorate) – Assistant director water supply and services
9	County Ministry of Water (Directorate) – Assistant director water supply and services	13	County Ministry of Water (Directorate) – WASH Engineer office
3	ActionAid	13	Kiambere-Mwingi Water and Sanitation Company
3	All 8 sub-county Water Offices	13	World Vision Kenya
2	Kenya Water Institute	12	All 8 sub-county Water Offices

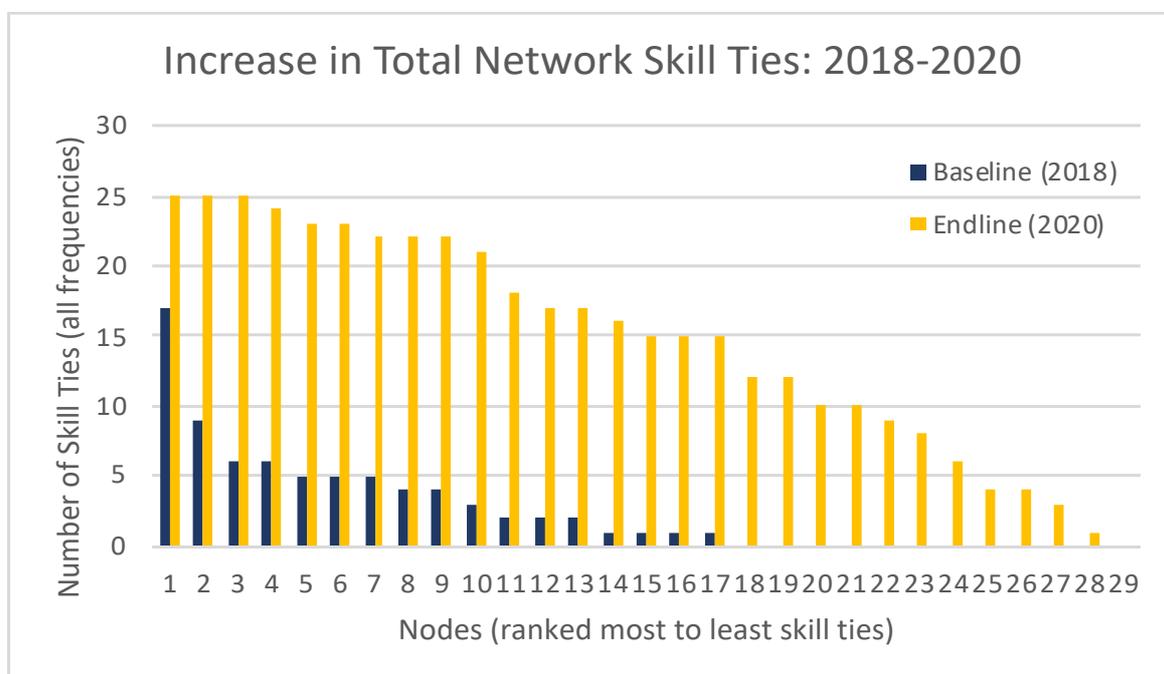


Figure 7: Change in total number of skill ties by node from baseline to endline

### Authority Network Analysis

The network of authority ties consists of relationships where stakeholders exert influence or control over one another. Outgoing ties indicate influence or control over another. SWS considered

two tie strengths: a weaker tie meant influence while a stronger tie meant direct authority. Due to possible sensitivities with identifying specific stakeholders, this analysis considers groups of stakeholder types rather than individual actors.

The analysis also considers both the change in outgoing influence ties and the change in outgoing authority ties from baseline to endline. Overall, county government stakeholders substantially increased the number of outgoing influence and authority ties.

### Change in Influence Ties

All categories of actor types increased their number of outgoing influence ties (Figure 8). The largest change in number of outgoing influence ties is observed with county government stakeholders. Previously, NGOs had a greater number of outgoing influence relationships.

This reinforces the presumption that the county government is getting stronger and progressively taking a lead role in the county WASH sector with the support of stakeholders. The change may also imply increasing institutional awareness of roles and responsibilities among stakeholders in the Kitui WASH sector. Figure 8 also points to a gradually increasing influence of the private sector, with third highest number of outgoing influence ties as of endline.

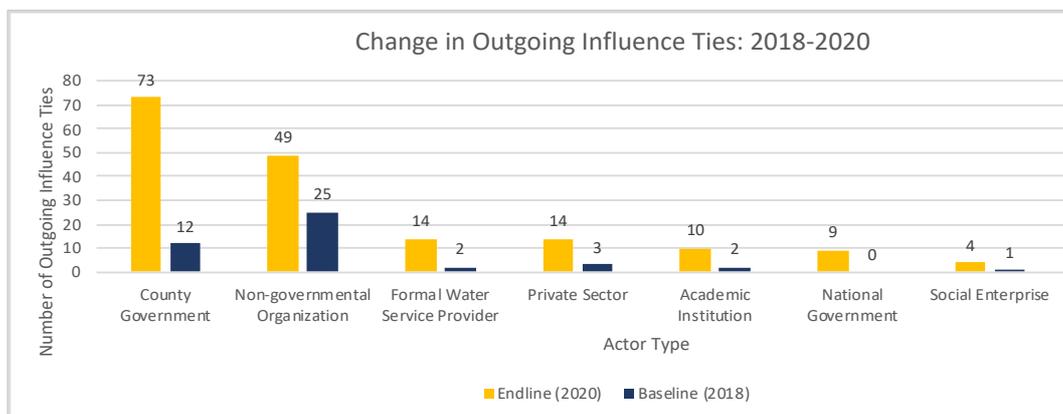


Figure 8: Change in number of outgoing influence ties by stakeholder type

### Change in Authority Ties

As with change in the number of observed influence ties, a relatively large increase occurred in the number of outgoing authority relationships held by county government stakeholders (Figure 9). In an apparent change since the 2018 baseline study, county government actors now hold the largest number of authority ties in the network.

In another change since 2018, the presence of national government has also begun to exert authority within the network. Despite having comparatively few outgoing authority ties, national government actors now have the next highest number of authority relationships after county government stakeholders.

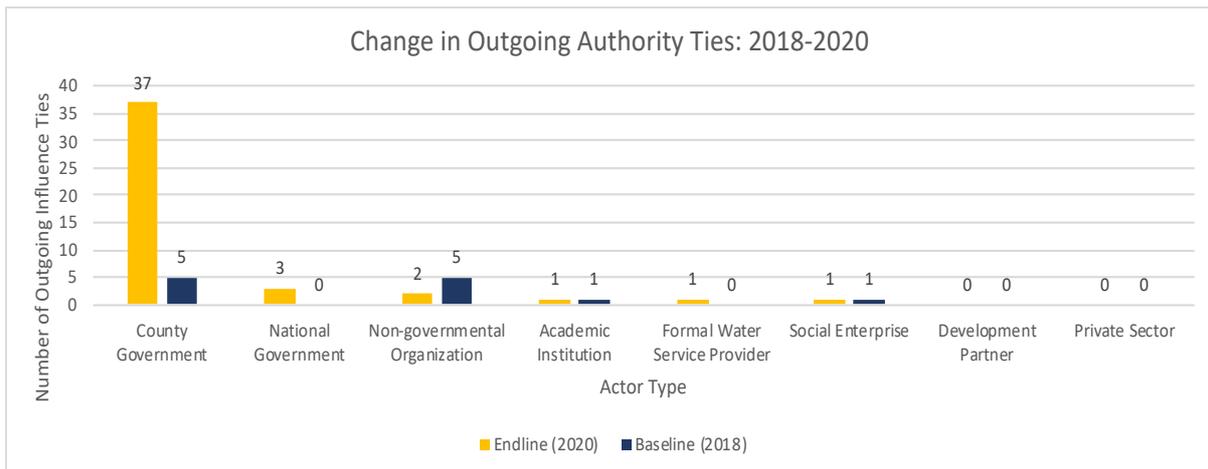


Figure 9: Change in number of outgoing authority ties by stakeholder type

### Resource Network Analysis

The fourth tie type, resources, identifies where either money or equipment is transferred between organizations. Figure 10 visualizes the endline network of all resource ties. As with all tie types, the total number of resource ties between these network actors has increased since the 2018 baseline study (see Table 2).

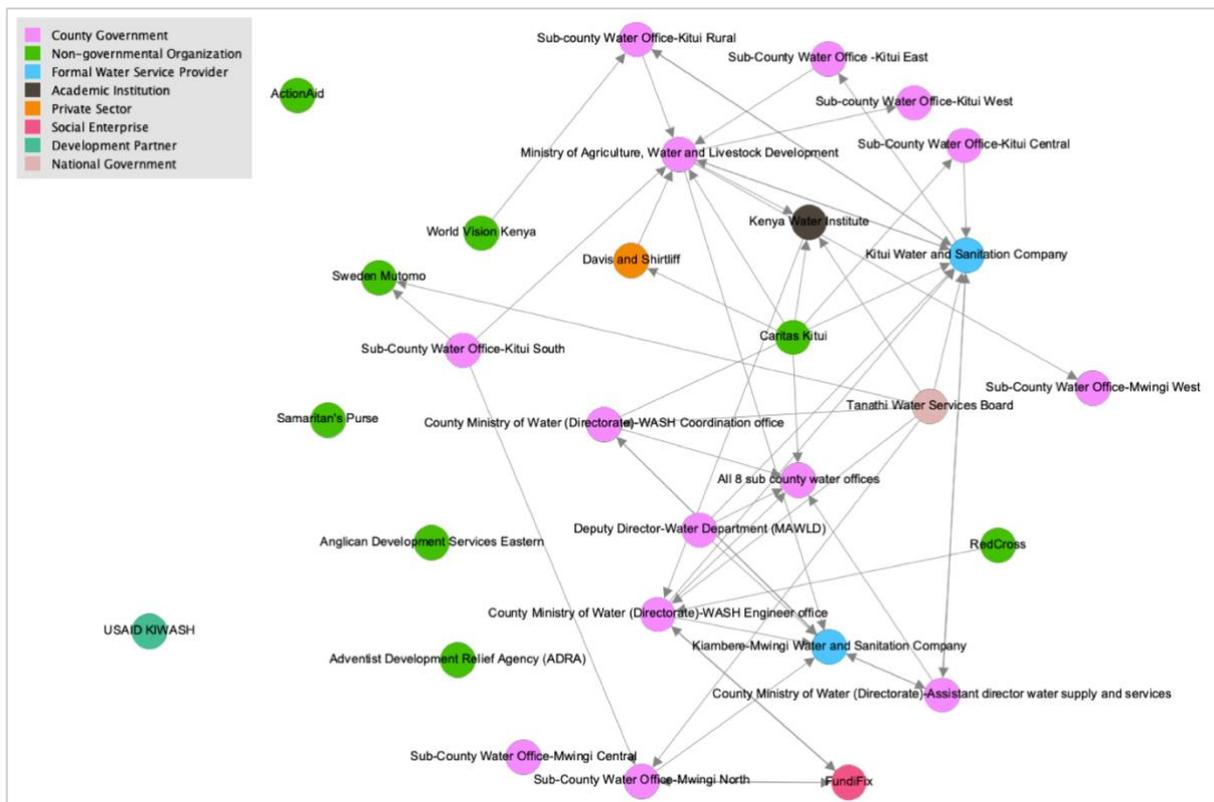


Figure 10: Endline network of resource ties for all frequencies of interaction

Ranking network actors with the most incoming and outgoing resource ties highlights specific changes since the baseline study.

## Changes in Resource Providers

The most obvious change since the baseline is the absence of ActionAid (Table 7). This program has closed out and no longer plays a role in providing resources, despite having previously had the most resource ties. This highlights limitations of short-term projects or programs in creating long-term and sustainable change, while making a case for WASH programming to strengthen capacities of local institutions.

Tanathi Water Services Board, a national government actor, now has the largest number of resource ties. Tanathi is a national government agency with mandate for cross-county water infrastructure development. The fact that they are a leading investor in the Kitui WASH sector for an otherwise decentralized function is concerning and highlights the essence of coordination, including vertically between different levels of government. This is to mitigate the risk of their activities duplicating county-level plans and interventions, or promoting water service delivery models that undermine what the WASH network has identified as the priority.

*Table 7. Ranking of stakeholders with the most outbound resource ties*

Out-Degree: Resource Providers			
Baseline (2018)		Endline (2020)	
Ties	Organization	Ties	Organization
4	ActionAid	6	Tanathi Water Services Board
2	Anglican Development Services Eastern	5	Ministry of Agriculture, Water and Livestock Development
1	Adventist Development Relief Agency (ADRA)	5	Caritas Kitui
1	All 8 sub-county Water Offices	4	Kitui Water and Sanitation Company
1	Caritas Kitui	4	County Ministry of Water (Directorate) – WASH Engineer office
1	County Ministry of Water (Directorate) – WASH Coordination office	3	County Ministry of Water (Directorate) – Assistant director water supply and services
1	County Ministry of Water (Directorate) – WASH Engineer office	3	County Ministry of Water (Directorate) – WASH Coordination office
		3	Sub-county Water Office – Kitui South
		3	Deputy Director – Water Department (MAWLD)

Several actors within the County Ministry of Water are also now managing a larger number of resource relationships as compared to the 2018 baseline. This change suggests a shift from a larger presence of NGOs providing resources (i.e., ActionAid, ADRA, Anglican Development Services) toward a larger presence of Kenyan government institutions and service providers in resource provision relationships. This shift might help mitigate the risk of resource flows declining, e.g., ADRA and ADS, or ceasing when NGO programs end, as had been the case with ActionAid.

## Changes in Resource Recipients

Since the baseline, there appears to be a larger number of actors that are receiving resources, including two urban water service providers in the county and all eight sub-county Water Offices (Table 8). This may be a welcome improvement that would logically enable better service delivery; however, it also raises wider questions on equity and funding as Kitui County's two formal urban water service providers constitute the top resource recipients. In line with the Sustainable Development Goal of leaving no one behind, questions emerge on strategies for supporting the

more informal rural water sub-sector, which accounts for roughly 70 percent of the county’s water users who rely on rural water points.

SWS conducted a wider assessment of the context around these specific resource flows with actors at the validation workshop for the endline study to understand the specific nature of resource disbursements and their significance for WASH services in Kitui County.

Actors report that resources exchange in the Kitui WASH sector mainly include provision of materials/equipment for rehabilitation and maintenance of community/rural schemes, direct funding for training of communities on operation and maintenance, and direct funding for development of new water supply infrastructure. While non-governmental stakeholders continue to resource the sector, albeit unsteadily, the county and national government stakeholders appear to be re-allocating their resources to these thematic areas.

*Table 8. Ranking of stakeholders with the most inbound resource ties*

<b>In-Degree: Resource Recipients</b>			
<b>Baseline (2018)</b>		<b>Endline (2020)</b>	
Ties	Organization	Ties	Organization
7	County Ministry of Water (Directorate) – Assistant director water supply and services	8	Kitui Water and Sanitation Company
2	Kenya Water Institute	6	Ministry of Agriculture, Water and Livestock Development
1	FundiFix	6	Kiambere-Mwingi Water and Sanitation Company
1	Deputy Director – Water Department (MAWLD)	5	All 8 sub-county Water Offices
		4	County Ministry of Water (Directorate) – WASH Engineer office
		3	Sub-County Water Office – Mwingi North
		3	Kenya Water Institute

### Stakeholder Priorities for Achieving Rural Water Sustainability

In the second part of ONA data collection methodology, SWS examined qualitative interviews with actors to identify: the challenges to service sustainability and recommended solutions; what solutions actors prioritized to achieve rural water sustainability in Kitui County; actors’ interventions in Kitui and their influences; and role of the WASH forum in influencing those interventions. This section explores the question on what factors the actors considered most important for rural water sustainability. Additional analysis of the qualitative interviews will be published separately in SWS reports, conference posters, and journal papers focused on stakeholder understanding.

In both 2018 and 2020, SWS asked 22 actors in Kitui to prioritize their solutions to solving water issues in the county. SWS transcribed audio recordings of responses from both baseline and the endline interviews, categorized actor responses into common priorities they had identified emergently, and then grouped the priorities into five overarching, high-level priority factors (Table 9 below). SWS ranked the frequency of mentioned factors in the interviews to identify the top priority factors. They then mapped actor priorities to each actor via attributes. SWS used R software to calculate the network metric of homophily, which represents the tendency to share a tie with actors of the same priority. They used homophily scores alongside visualizations to compare network shifts

from 2018 to 2020 by actor and factor type (Figures **Error! Reference source not found.**, 12, 13). They selected the skills relationship for visualization as it showed the greatest shifts in tendency to connect to other actors based on priorities from 2018 (baseline) to 2020 (endline).

Table 9. Categorization of priority factors from the interview transcriptions

Priority	Definition	2018	2020
<b>Coordination of actors to standardize how schemes are managed</b>	Coordination of actors to standardize how schemes are managed and monitored, including establishing the water bill and water policy. Prefers management of schemes in a professional, coordinated way — shifting away from community management of schemes.	9	6
<b>Strengthen community management of schemes</b>	Capacity building of community management of schemes, strengthening their connection to the sub-counties so they are more accountable, and strengthening ownership of schemes by communities.	8	10
<b>Infrastructure development</b>	Constructing new schemes in undeveloped areas or upgrading schemes to solar power.	3	2
<b>Qualified sub-county technicians for maintenance</b>	The sub-counties have skilled technicians, funds, staff, and capacity to maintain schemes.	1	3
<b>Adequate budget</b>	County and sub-county governments having access to funding and enough budget to carry out their activities.	1	1
Total number of actors across the five priority areas		22	22

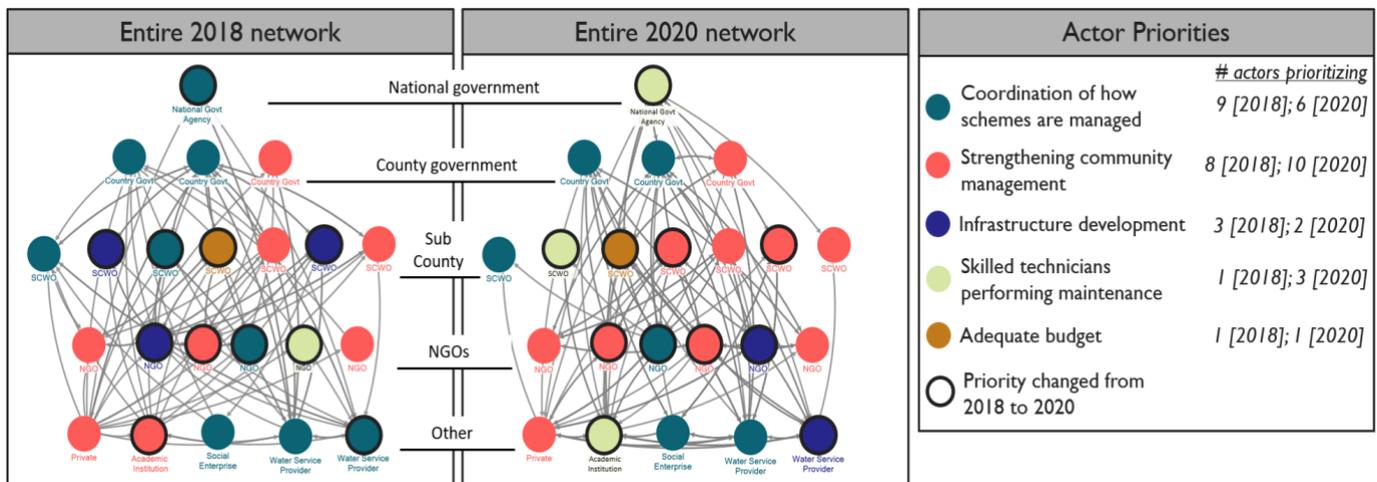


Figure 11: Shifts in actor priorities from 2018 to 2020. Network shows skills ties and is arranged by actor type and colored by actor priority

actors prioritized the coordination of how schemes are managed (6), with more actors prioritizing strengthening community management (10). These two priorities may conflict with one another as strengthening community management may counteract efforts to professionalize rural service delivery, which may include introduction of management models that promote a private-sector role.

In 2018 (Figure 12), actors had a slight (6 percent) tendency to work with like-minded actors [12a]. Actors who prioritized coordination of how schemes are managed [12b] appeared to be relatively well-connected, as were actors who prioritized strengthening community management [12c].

Overall, in 2020 (Figure 13), actors had a slight (1 percent) tendency to work with actors with different priorities [13a]. Fewer actors prioritized the coordination of how schemes are managed, but these actors that remained stayed well-connected [13b]. More actors prioritized strengthening community management; however, the sub-group was less connected than in 2018 [13c].

Lesser tendency to work with like-minded actors may have some positive implications, including there being a great diversity of ideas and less tendency for group think. It could also mean reduced likelihood of formation of sub-networks or clusters within the larger Kitui WASH network that are organized by shared priorities.

On the other hand, being well-connected for a given priority area could mean actors are more able to advance their agenda and influence actors with other priorities. The sub-group who prioritizes coordination or professionalization of scheme management remained well-connected from 2018 to 2020, indicating that they were better equipped to progress their agenda, as progress on the water policy/bill showed. But the other sub-groups, including those prioritizing community management, are less well-connected and have made less headway on their agendas.

By actor type, the sub-county Water Offices and NGOs reported the largest shift of priorities, with a bias toward strengthening community management (**Error! Reference source not found.**). Notably, priorities for county government actors at the management/head office level remained unchanged: the coordination of how schemes are managed and professionalization of scheme management. This is in contrast with the county government's field offices (sub-county Water Offices) and may imply a misalignment and potential clash of priorities at these two levels of government.

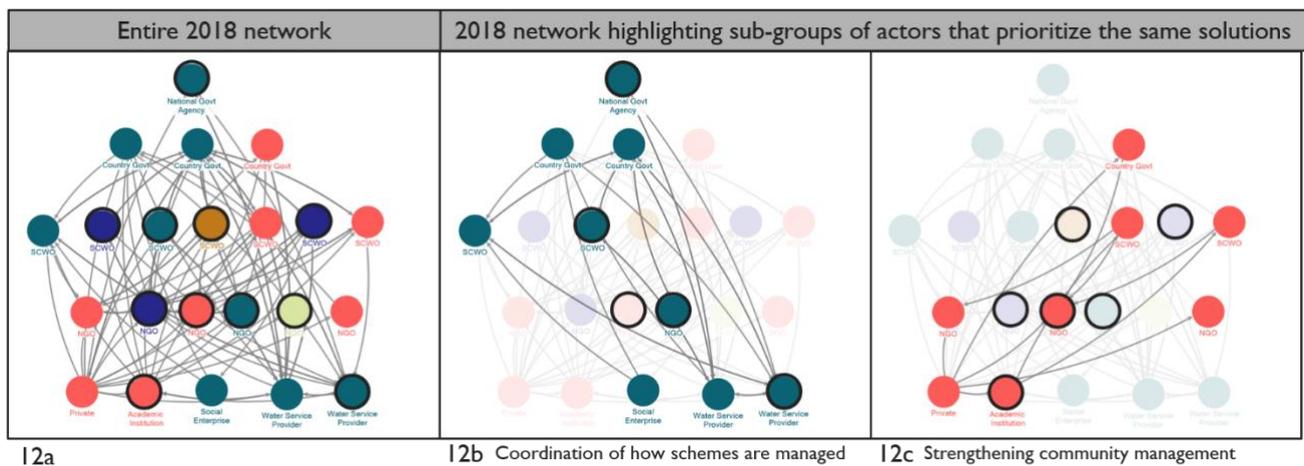


Figure 12: 2018 network showing skill relationships for the *t* two priority factors, arranged by actor type and colored by actor priority. See Figure 11 for legend.

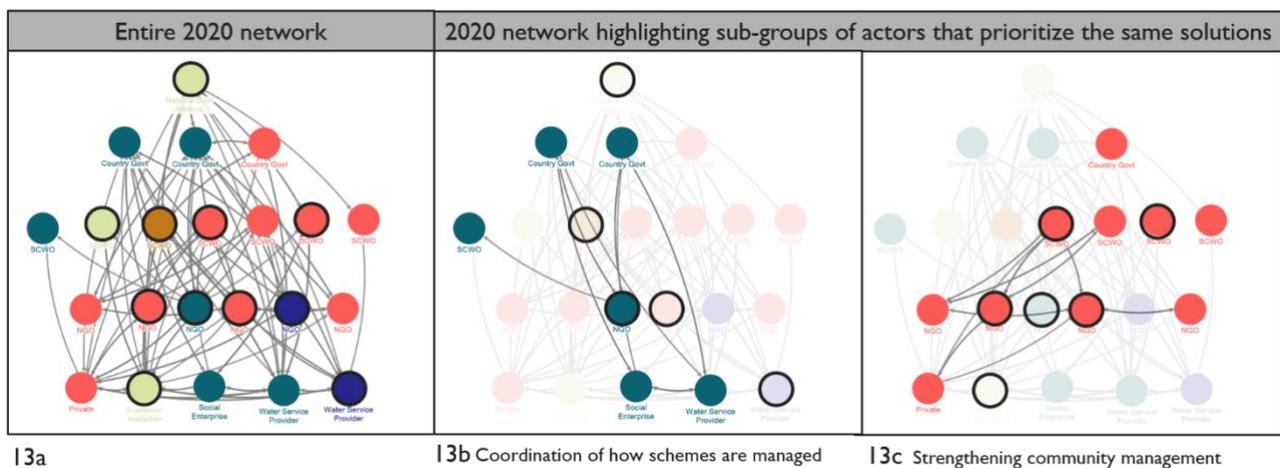


Figure 13: 2020 network showing skill relationships for the *t* two priority factors, arranged by actor type and colored by actor priority. See Figure 11 for legend.

Insights have been provided about what may have contributed to the observed shift of priorities through discussions with actors at the validation workshop. Actors pointed out that, first, different WASH partners or programs have different narratives of what should be a priority for Kitui to achieve sustainability, contributing to indecision as to what the sector priority is. Second, a lack of clarity on roles and responsibilities, especially among government actors, has resulted in county government staff being inducted according to old concepts (strengthening community management) during recruitment and training in practice. A response plan that updates job descriptions, roles, and responsibilities is required. Third, despite improving communication and information flows within the network, the levels of access to information vary and may be contributing to conflicting messages as to what the sector’s priorities are. Fourth, previously discussions have occurred about prioritizing the factor of “coordination of how schemes are managed”; however, some actors may have flipped over to “strengthening community management” because of a better understanding, and thus comfort with, the methodology, tools, and process of community-managed schemes. Alternative models to professionalize community management (coordination of how schemes are managed) have been discussed among Kitui WASH actors, but no tools have been disseminated to guide stakeholders in actualizing roll out of these models. Fifth, actors observe that there is still a lot of financial support for strengthening community management (e.g., internally through trainings to/by county government and externally from partners), which may be swaying priorities or causing uncertainty among actors. Lastly, political challenges remain, making strengthening community

management still a feasible model for some communities. Community members that benefit from the status quo approach i.e., water fees collection with limited transparency and accountability for quality of service, have tended to object to professionalization of service delivery. Such communities have often mobilized local politicians (e.g., members of the county parliament) to politicize and dismiss new models of service delivery.

## Conclusion

Analysis of the Kitui WASH network, applying ONA at baseline and the endline, has provided a useful complement to wider interventions on analysis of infrastructure performance and strengthening of institutional processes in the county, and enabled a more nuanced and complete understanding of the rural water system. While ONA methodology reflects practices and preferences of the participating 29 actors and their organizations, the degree to which results reflect the whole network of up 77 actors, identified at both baseline and endline and that have at one time worked in Kitui on WASH-related programs, is unknown. Equally, donors often have a powerful voice and control critical resources in the sector, however, donors are not directly represented within the local WASH network and were not adequately covered in this analysis, which is a limitation.

The endline ONA results indicate significant growth of relationships and interactions among Kitui WASH network actors, which the WASH forum largely moderates. The forum has evolved over the last four years from a pilot UNICEF-supported initiative in 2016 to an increasingly influential platform that is supporting the Kitui County Government to more assertively lead the Kitui WASH sector. However, when the COVID-19 pandemic interrupted meetings for the full year of 2020, actors shifted to alternative communication channels for one-to-one business, with observed logistical challenges of assembling most field-based actors for online meetings.

SWS identified an opportunity for further institutionalizing and embedding functions of the WASH forum in the day-to-day processes and decisions of the county government in order to play a stronger role in the Kitui WASH sustainability agenda and ambition for universal water access. Institutionalizing the WASH forum would provide a stable structure to coordinate actors, drive a common agenda with goals, and support implementation of the county water law/policy. Moreover, it would mitigate some of the risks observed during the endline, including a high turnover of government and non-government actors in the network linked to project closeouts, retirements, transfers, and re-assignments, among others. The county water bill, under legislation at the county cabinet and assembly, has addressed this gap, and the endline ONA findings reinforce the need to fast track its enactment into law.

By relationship type, information exchange is currently the most common connection between actors, while skills exchange has noted the biggest growth. Actors highlighted the role of regular, well-resourced, and more effective information flows and communication within the county government structures and externally with its partners as having a strong influence on observed changes since baseline. This points to a need for strengthening information management and reporting systems for the county WASH sector to further support meaningful interactions within the network. The findings also point to an important role of the WASH forum in the future as a knowledge and skills transfer platform for the WASH sector.

The government, at both national and county levels, is now playing a more dominant role as a resource provider and recipient within the Kitui WASH sector. The shift from a predominantly NGO-funded to government- or public-funded WASH sector may translate to greater stability of resource flows. However, it also calls for coordination between the national and county government actors to avoid duplication. While resources need to drive equity in water service access, the two formal urban water utilities in Kitui now rank among the top resource recipients while funding support for rural water supplies is mostly unsystematic. This calls for the county government to

develop a sector-wide funding strategy for universal water delivery. Besides urban areas, the strategy would provide mechanisms for inclusive water access in rural areas to also cater for poor and marginalized communities. This may require deliberate targeting of resources to rural water points, which mostly rely on informal community-managed service schemes.

The endline ONA also illustrates how unstable the current system may be with competing and changing agendas. While the top two priorities for sector sustainability remained unchanged from baseline to endline, the top-most priority switched from professionalizing community management (coordination of how schemes are managed) at baseline to strengthening community management at endline. Continued political support and funding for community management models on the part of a few stakeholders within Kitui County conflicts with the goal to professionalize the rural water service delivery. Therefore, resources also need to align with identified sector priorities to avoid advancing conflicting narratives.

Furthermore, the WASH network may need to expand its sphere of influence to connect with subsidiary networks in the county, including political networks, donors (who lack representation in the network), and other county government ministries whose decisions appear to compromise prioritization, so as to chart a common sustainability agenda. For this to happen, actors have suggested the need to bring all Kitui WASH sector stakeholders, both old and new, to same level of understanding of the issues, starting with the sector history and factors that have hindered sustainability of WASH services, to advance shared priorities. The WASH forum provides an appropriate avenue for the county government to lead this objective and coordinate every other actor. In addition, knowledge on professionalized models for water service delivery needs to be disseminated more widely and actors' roles or interventions reviewed to reflect local priorities. To support this, actors propose development of a comprehensive toolkit with templates, guidelines, step-by-step processes, and a basket of options for models and contexts/scenarios where professionalizing rural water service delivery is relevant. More urgently, enactment and implementation of the Kitui Water Bill that seeks to address most of the gaps observed at endline is key to accelerate progress toward a sustainable Kitui WASH sector.

## Annex A: Methodology

### KITUI COUNTY WASH ORGANIZATIONAL NETWORK INTERVIEW METHODOLOGY

#### Part I: Introduction

The USAID Sustainable WASH Systems (SWS) Learning Partnership is seeking to develop, demonstrate, learn, and share findings related to systems-based approaches to improving sustainability of WASH Services delivery. In Kenya, SWS work is conducted in Kitui County and focuses on understanding the WASH system; the actors and factors that influence WASH service sustainability. USAID SWS in partnership with the University of Oxford, UNICEF, Rural Focus Limited, and the University of Colorado Boulder are conducting a study to understand the network of stakeholders and their interconnectedness.

We are asking you to participate in a brief interview to draw the network of your organization/stakeholder, and to identify both benefits and challenges with this network. The interview should take approximately 30 to 40 minutes.

In the first step, we will draw a network to understand whom you interact with and how. The completed network will look like this:

*[The enumerator shows an example of a complete network (Figure 1), then produces the flip chart paper to be used for the interview. The enumerator then writes the name of the stakeholder being interviewed on a Post-it note and places this in the center of the flip chart.]*

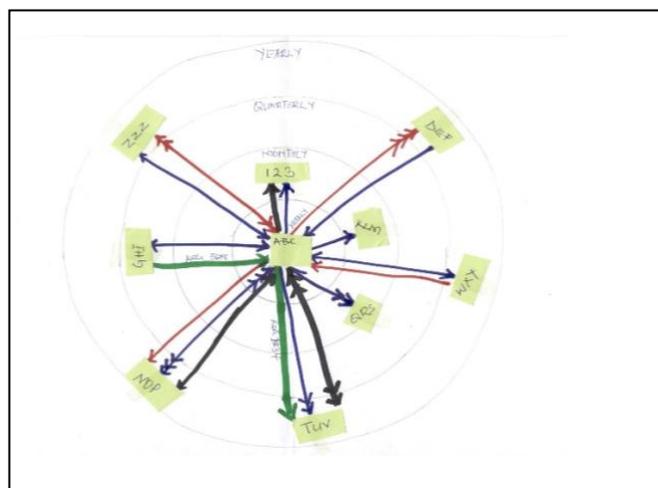


Figure 14: Example of Completed Network

First, let us begin with your contact information for any necessary follow up. We will not share your contact details outside of the analysis team.

The enumerator should then record, on the back of the flip chart, the respondent's:

- First name:

- Last name:
- Organization:
- Position:
- Mobile phone number:
- Personal email address:

Now, please select the term that best describes your organization/stakeholder type, and the scope of your work.

*[Answers are to be selected from the list of stakeholder types and scope presented previously and written on the Post-it note with the name of the stakeholder being interviewed.]*

## Part 2: Network Mapping

*[The enumerator then presents the list of stakeholders involved in the study and asks the participant to identify whom they have had information, skill, resource, or authority relationships with over the past year. These can be either incoming or outgoing ties.]*

From this list of stakeholders, please identify whom you have had a relationship with in the past year. This can be anyone you **share information with, give or receive support from, pay or are paid by, or who you influence or control** in the Kitui County WASH sector. Please also identify if any important stakeholders are missing from this list.

*[As the participant identifies each stakeholder, the enumerator writes the name on a Post-it note and places it on the flip chart paper. Responses are expected to include both stakeholders already identified in the network, and any other stakeholders that are perceived as important.]*

*[The flip chart paper presented to the respondent has concentric circles with different time scales labelled Weekly, Monthly, Quarterly, and Yearly, as in Figure 15 below]*

Please now move the stakeholders on the flip chart to indicate how often you interact. Is it weekly, monthly, quarterly, or only once within the past year?

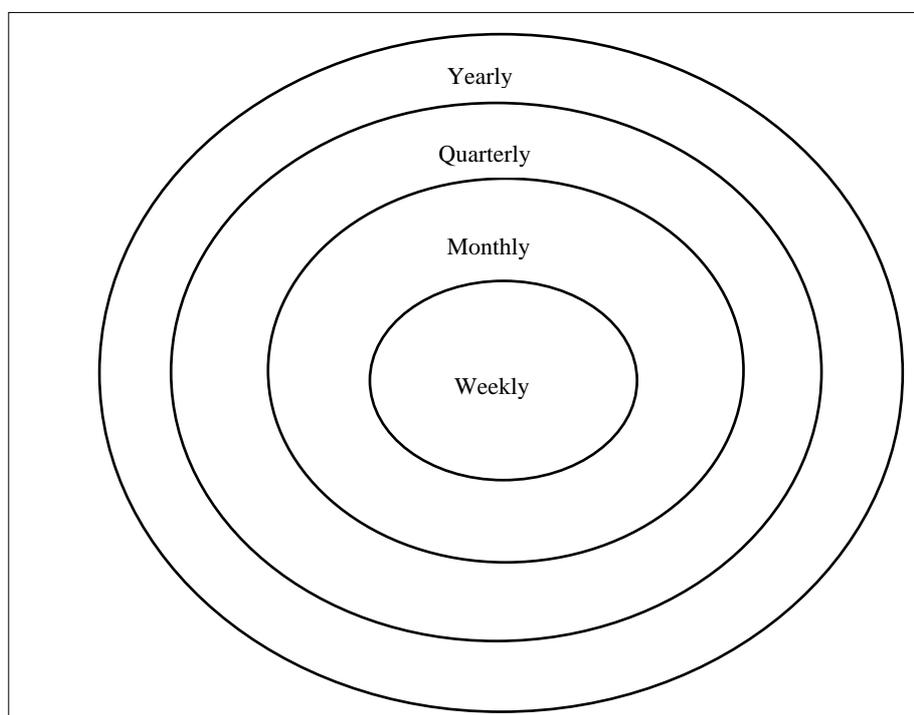


Figure 15: Flip chart paper for network mapping

[The participant should then move the Post-it notes that label stakeholders identified to the appropriate ring on the flip chart paper. It is ideal if the participant does this directly instead of the enumerator doing it on the respondent's behalf.]

[The enumerator then presents the tie categories, starting with information. For each tie category, the participant is handed the appropriate colored marker and instructed to draw their ties. The legend showing the categories (Figure 16) is presented to the respondent and the enumerator describes the tie categories and clarifies that the number of arrows corresponds to the strength of the tie/relationship. Any questions from the respondent are clarified as appropriate.]

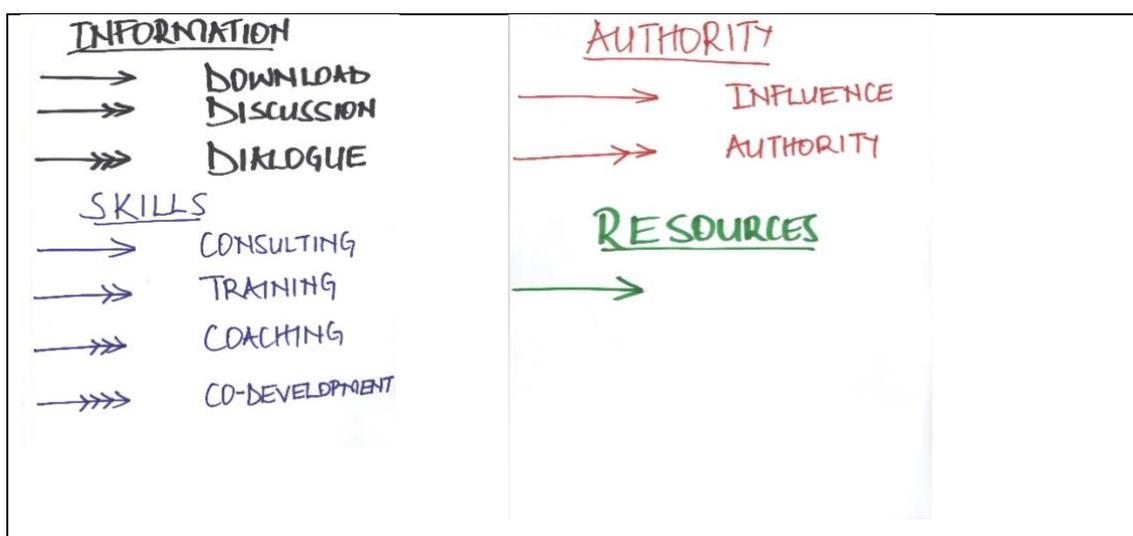


Figure 16: Legend showing the tie categories

We will now draw the relationships between you and the stakeholders you identified. We will start with information, followed by skills, resources, and then authority. We will use colors to indicate the relationship type, arrowheads to indicate direction, and the number of arrowheads to indicate the strength of the relationship. Let's start with this stakeholder. What is your relationship here?

[The process continues until relationships for each tie type for each stakeholder have been discussed. For resource ties, the enumerator should also write down the estimated annual size of the resource flow in Kenya shillings.]

Please check the network you have drawn and feel free to make any changes. Does anything need to be added or changed? Is anyone missing?

[The enumerator can proceed to the final part of the interview when the participant is satisfied that the network is complete.]

### Part 3: Qualitative Interpretation of Factors

This final part of the interview captures participant perspectives of factors affecting rural water services, and qualifies the importance of particular network relationships. The interview

format is a semi-structured interview consisting of four questions. Responses to these are audio recorded, and enumerators are expected to make summarizing notes of key points simultaneously.

Importantly, for all questions, enumerators should encourage participants to elaborate on their responses through prompts including “tell me more,” “and,” and simply pausing to encourage further detail. Other than necessary clarifications, enumerators should minimize specific follow-up questions that could influence responses, and instead allow participants to direct the conversation toward what they perceive as most important. If a response becomes too lengthy or redundant, enumerators can interrupt to summarize the point to ensure it is understood correctly, and encourage respondents to move on to new points with the prompt of “what else?” Responses are anticipated to not require more than 15–20 minutes. Training on these interview techniques will be included for all enumerators.

Finally, I would like to ask you a few questions about how this network works, and about water services sustainability in Kitui County. To make sure we do not miss any points that you make, we would like to audio record this part of the interview. Is it okay to record you?  
[Begin audio recording]

- 1) In your opinion what do you think are the main challenges to water service sustainability in Kitui County? Could you explain in detail how these challenges influence water service sustainability?
- 2) What ideas or recommendations do you have about solutions to these problems?
- 3) Of the solutions you listed, which is the most important? Can you walk me through what next steps will happen if the solution occurs?
- 4) What kind of interventions are you implementing in Kitui and what influenced/informed the selection of these interventions?
- 5) How has participating in the WASH forum influenced your organization’s interventions?

On completion of the interview, the enumerator should thank participants for their time, and capture any further feedback, comments, or reflections from the interview. Enumerators should also photograph the drawn network and be sure that the audio recording is properly saved.

## Annex B: Endline ONA Survey Program

### SWS ENDLINE ONA SURVEY PROGRAM – KITUI COUNTY

August 10 to August 28, 2020

DAY	DATE	MORNING	AFTERNOON
<b>WEEK 1</b>			
MONDAY	AUGUST 10, 2020	PURCHASE OF SUPPLIES REQUIRED DURING THE SURVEY	
TUESDAY	AUGUST 11, 2020	MINISTRY OF AGRICULTURE WATER AND LIVESTOCK DEVELOPMENT 1	MINISTRY OF AGRICULTURE WATER AND LIVESTOCK DEVELOPMENT 2
WEDNESDAY	AUGUST 12, 2020	KENYA WATER INSTITUTE	KITUI WATER AND SANITATION COMPANY
THURSDAY	AUGUST 13, 2020	KITUI RURAL SUB-COUNTY WATER OFFICE	WORLD VISION
FRIDAY	AUGUST 14, 2020	CARITAS KITUI	ANGLICAN DEVELOPMENT SERVICES EASTERN
<b>WEEK 2</b>			
MONDAY	AUGUST 17, 2020	WATER RESOURCES AUTHORITY	TANATHI WATER SERVICES BOARD
TUESDAY	AUGUST 18, 2020	RED CROSS	MWINGI CENTRAL SUB-COUNTY WATER OFFICE
WEDNESDAY	AUGUST 19, 2020	KITUI EAST SUB-COUNTY WATER OFFICE	KITUI SOUTH SUB-COUNTY WATER OFFICE
THURSDAY	AUGUST 20, 2020	KITUI WEST SUB-COUNTY WATER OFFICE	ADVENTIST DEVELOPMENT RELIEF AGENCY
FRIDAY	AUGUST 21, 2020	MWINGI NORTH SUB-COUNTY WATER OFFICE	FUNDIFIX
<b>WEEK 3</b>			
MONDAY	AUGUST 24, 2020	SWEDEN MUTOMO	SAMARITAN'S PURSE
TUESDAY	AUGUST 25, 2020	KIAMBERE-MWINGI WATER AND SANITATION COMPANY	MWINGI WEST SUB-COUNTY WATER OFFICE
WEDNESDAY	AUGUST 26, 2020	DAVIS AND SHIRTLIFF	KITUI CENTRAL SUB-COUNTY WATER OFFICE
THURSDAY	AUGUST 27, 2020	MINISTRY OF AGRICULTURE WATER AND LIVESTOCK DEVELOPMENT 3	MINISTRY OF AGRICULTURE WATER AND LIVESTOCK DEVELOPMENT 4
FRIDAY	AUGUST 28, 2020	ACTIONAID	

## Annex C: Roster of Network Stakeholders

ID	LABEL	TYPE	LEVEL
3	Adventist Development Relief Agency (ADRA)	Non-governmental Organization	Sub-County
6	All 8 sub-county Water Offices	County Government	Sub-County
7	Anglican Development Services Eastern	Non-governmental Organization	County
10	Caritas Kitui	Non-governmental Organization	Sub-County
16	County Ministry of Water (Directorate) – Assistant director water supply and services	County Government	County
17	County Ministry of Water (Directorate) – WASH Coordination office	County Government	County
18	County Ministry of Water (Directorate) – WASH Engineer office	County Government	County
19	Davis and Shirliff	Private Sector	County
23	FundiFix	Social Enterprise	Sub-County
27	Kenya Water Institute	Academic Institution	County
29	Kiambere-Mwingi Water and Sanitation Company	Formal Water Service Provider	County
31	Kitui Water and Sanitation Company	Formal Water Service Provider	County
35	Ministry of Agriculture, Water and Livestock Development	County Government	County
48	Samaritan's Purse	Non-governmental Organization	Sub-County
50	Sub-County Water Office – Kitui East	County Government	Sub-County
51	Sub-County Water Office – Kitui Central	County Government	Sub-County
52	Sub-County Water Office – Kitui Rural	County Government	Sub-County
53	Sub-County Water Office – Kitui South	County Government	Sub-County
54	Sub-County Water Office – Kitui West	County Government	Sub-County
55	Sub-County Water Office – Mwingi Central	County Government	Sub-County
56	Sub-County Water Office – Mwingi North	County Government	Sub-County
57	Sub-County Water Office – Mwingi West	County Government	Sub-County
58	Sweden Mutomo	Non-governmental Organization	Sub-County
59	Tanathi Water Services Board	National Government	National
67	World Vision Kenya	Non-governmental Organization	Sub-County
20	Deputy Director – Water Department (MAWLD)	County Government	County
2	ActionAid	Non-governmental Organization	Sub-County
45	Red Cross	Non-governmental Organization	County
62	USAID KIWASH	Development Partner	Sub-County

## Annex D: Notes of the Endline ONA Results Validation Workshop

### NOTES OF THE ORGANIZATIONAL NETWORK ANALYSIS (ONA) RESULTS DISSEMINATION AND DISCUSSION WORKSHOP HELD ON 23 MARCH 2021 AT PARKSIDE VILLA HOTEL, KITUI, 10.30 – 13.30 HRS.

#### **PARTICIPANTS**

Fifteen actors, excluding C4 members and invited observers, participated in the validation workshop and are listed below:

#### **Agenda**

1. Preliminaries
2. Presentation of Endline ONA results
3. Highlight of the unexplained changes in the Kitui network
4. Group discussions and plenary presentations by group chairs
5. Final report next steps and timelines
6. AoB and Closing remarks.

#### **Agenda Item #1-3**

- The WASH forum Coordinator Augustus M Nding'o officially opened the meeting at 10:28 a.m.
- Cliff Nyaga made a presentation of the Endline ONA results, in which he also highlighted observed changes from baseline to endline, and the key outstanding questions.
- Mr. Nyaga also went through the list of questions requiring detailed discussion to expound on the unexplained changes in the Kitui network.
- Thereafter, participants split into two breakout groups to discuss seven key questions on the Kitui network.
- The group discussions took about an hour and each group appointed a chair to document discussions and report to plenary.

#### **Agenda Item #4**

From the group discussions, both groups reported the following insights back to the plenary (combined feedback):

#### **Q1. What factors contributed to an overall increase of ties/relationships observed within the Kitui network?**

- Frequent/quarterly WASH forum meetings, including the emergence of sub-county-level WASH forums.
- Joint planning of WASH interventions activities by both actors/partners and government agencies as well as joint monitoring (reporting) on activities, enabled by the WASH forum.

#### **Q2. Linked to 1 above, what contributed to the big (X6) change of 'skills' relationship?**

- Increased adoption of social platforms e.g., WASH forum WhatsApp group, for exchange and acquisition of skills. This includes increased internet usage among the county government and WASH partners.
- Willingness within the group to adopt and learn new skills.
- More frequent updates within the county government (between county HQ and field water officers) through meetings and workshops held monthly and quarterly.
- Increased resources from the county and development partners for supporting trainings for both water officers and community managed schemes.

#### **Q3. What is the nature of skills, resources, and information exchange happening within the Kitui network?**

- Skills: There are a number of trainings that have taken place since the baseline on smart reporting at the WASH forum, resource mapping, data analysis and management, life cycle costing approach, and climate-proofing water supply infrastructure.

- Resources: This has been largely the exchange of material/equipment for rehabilitation and maintenance of community/rural schemes, direct funding for training of communities on operations and maintenance, and direct funding for installation of new infrastructure. Budgets/resources are being allocated both by the county and development partners
- Information: Actors of the strategic plans and planned interventions shared that there is increased exchange of information at the WASH forum, for instance on new technologies for water service delivery, and new tools and methodology for monitoring services.

**Q4. What is the impact (experienced or expected) of a strong WASH network on water service delivery in Kitui county?**

- Sustainability of water/WASH services, or sustainable water projects across the county/well-managed schemes.
- Well-coordinated & informed WASH activities.
- Increased private sector participation/investment.
- Improved operation and maintenance of community management schemes.
- Efficient access to water by the communities.
- Improved coverage in terms of supply and demand.

**Q5. Roughly half of WASH actors changed priorities over the two years. What may have led to the shifts in priorities?**

- Different actors/partners/programs have different narratives of what should be a priority for Kitui to achieve sustainability, leading to confusion on what the priorities are.
- There is a deemed lack of clarity on roles and responsibilities especially among government actors, as county staff are inducted to old concepts (strengthening community management) during recruitment and training. This calls for an update to their job descriptions or roles and responsibilities.
- Different levels of access to information for various actors in the county may be contributing to conflicting/changes in what actors consider a priority.

Further deliberation on this question:

- The sector actors need to be at the same level of understanding of the issues, starting with the history/issues that have hindered sustainability in the rural water sector, for a common understanding and so there can be shared priorities.
- The county government needs to steer the priorities agenda, by providing direction to every other actor, through the WASH forum.
- While previously there have been discussions and prioritization of the factor “coordination of how schemes are managed,” many actors may have flipped over their priorities to “strengthening community management” since there is a better understanding of tools/approaches for this (comfort zone). Alternative models to community management (coordination of how schemes are managed) have been discussed among the WASH forum actors but no tools have been shared to guide actors in actualizing them. A full toolkit with templates, guidelines, step-by-step guide on process, a basket of options for models, and contexts where each model is relevant are needed. Knowledge on service delivery models needs to be disseminated more widely among actors.
- There is still a lot of financial support e.g., internally through trainings to/by county government and externally from partners for “strengthening community management,” which may be swaying priorities or causing confusion among actors.
- Political challenges remain, making “strengthening community management” still a feasible option for some communities. This is in reference to communities that prefer the status quo as they benefit from cash collection and may not want professionalization (accountability) of service delivery. Such communities therefore tend to use local politicians e.g., the Members of County Assembly, to politicize and object new models of service delivery or coordination of how schemes are managed.

**Q6. Do WASH actors in Kitui know the priorities of other actors?**

- Yes, in the quarterly WASH forums information on each actor’s work plan on WASH activities is shared and priorities reconciled.

- Yes, as there is ongoing sharing of information between the county and development partners.

**Q7. Do WASH actors in Kitui choose to work with other actors based on priorities?**

- Yes, to avoid duplication of activities, to enhance equity in distribution of resources.
- Yes, for efficient investment of resources by the county government and development partners to address needs and priorities of the local communities.

**Agenda Item #5-6**

- Feedback received from participants to be integrated in the draft report and a final report published in 1-2 months' time.
- Endline ONA results to be presented at the next WASH forum for wider feedback/uptake by WASH actors.
- The Kitui County Government's WASH Coordinator and the Deputy Director gave closing remarks.
- Meeting was adjourned with a word of prayer by Phinehas Nkanatha at 13.30 HRS.