



Follow up Report on Sustainability

SMARTerWASH - Mobile Monitoring for Rural Water and Sanitation Services that Last (FDW/12/GH/06)

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Abbreviations

AMs	Area Mechanics
Akvo	Akvo
CWSA	Community Water and Sanitation Agency
DA	District Assembly
DiMES	District Monitoring and Evaluation System
DPs	Development Partners
FAM	FAM
FDW	Sustainable Water Fund
GIDA	Ghana Irrigation and Development Authority
GSS	Ghana Statistical Services
ICT	Information and Communication Technology
IRC	International Reference Centre for Community Water Supply
NPDC	National Development Planning Commission
NGO	Non-governmental organization
OECD	Organisation for Economic Co-operation and Development
PPP	Public Private Partnership
ROI	Return on Investment
RVO	Netherlands Enterprise Agency
SDG	Sustainable Development Goal
TA	Traditional Authority
UNICEF	United Nations International Children's Emergency Fund
WASH	Water sanitation and hygiene
WSMT	Water and Sanitation Management Team

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Background and justification

In January of 2018, the evaluation team agreed with The Netherlands Ministry of Foreign Affairs to execute some additional research on the two Ghana FDW 12 projects¹ (Sisili Kulpawn Basin in the Northern Region of Ghana, and the SMARTerWash - Mobile Monitoring for Rural Water and Sanitation Services that Last), to assess post-completion sustainability of partner relationships and project results after formal FDW project completion. The team executed follow-up interviews with respondents from these projects in June 2019. This report focuses on the second project.

The team executed a total of 18 interviews for this follow up and did an extensive document scan. The team took a mission to Ghana to execute the interviews and to check on the status of the project. Many of the staff of Community Water and Sanitation Agency (CWSA), in particular, had changed and, during the visit, the team was required to find staff that still had an intimate knowledge of the status of the project.

As stated above, the objective of this report was to *assess post-completion sustainability of partner relationships after formal FDW project completions*. This presumed that the partners were/are still working together post-project completion, and a certain form of working relationship remains. The interviews focused on ascertaining whether the partners were still working together and if so, in what form (informally or structurally); and also, if not, what the nature of their relationship was. The information collected also focused on the (changes in) relations with the organisations external but relevant for the project, in other words, the governance of the project (this comes out in the institutional sections of the report).

The evaluation team, however, surmised that the objective was also to assess the sustainability **of the project**. To structure the interviews results and the report, this write up used the FIETS criteria as developed by RVO, but also by the partners involved in the Dutch Wash Alliance. These projects were funded under the FDW 12 funding stream, but most of the criteria found and used derived from FDW16. In effect, the definition of sustainability of a project or programme as defined by the Dutch Wash Alliance is:

A WASH development programme or project is sustainable “*when it is capable of supplying an appropriate level of benefits during an extensive time period after the withdrawal of all forms of support from the external agency*”.

Also, in short, the kinds of measures used by RVO/FDW 16 relate to the following aspects:

¹ Also the Colombia project: Intelligent Water Management Colombia. This will be a separate but coordinated report

RVO FDW 16²

Financial: Use of local resources, payment by local end users, involvement of local firms, and a good business case.

Institutional: Local public sector responsibility, stakeholder involvement, clarity on responsibilities and regulations

Environmental: integral approach, ‘do good’, climate adaptation and mitigation

Technical: sustainable O&M and monitoring, appropriate technology

Social: inclusive, gender responsive, involvement and engagement,

The team attempted to provide some quantification, but this was difficult without any means of verification. Post completion, partners no longer used the FIETS measures and indicators to evaluate their projects.

Background to the project

IRC International Water and Sanitation Centre has been working with the Community Water and Sanitation Agency (CWSA) of Ghana for some time. In 2009, IRC supported CWSA on the Triple S (Sustainable Services at Scale) project³ in the development of monitoring tools in the form of sustainability and service level indicators. The project piloted these, using Akvo’s FLOW technology in three pilot areas⁴. The partners (IRC, CWSA and Akvo) decided to work together again to scale up the project and to combine the skills of the different partners in the SMARTerWash project. SkyFox came on board as a partner to introduce a handheld (USSD/SMS) technology, to report breakdowns (on handheld phones) and to order spare parts. IRC was the lead in managing the SMARTerWash project.

The project comprised the following partners.

Table 1: SMARTERWASH - Mobile Monitoring for Rural Water and Sanitation Services that Last

Partner	Sector	Description applicant
IRC International Water and Sanitation Centre, the Netherlands and Ghana	Private	A non-profit foundation knowledge centre on water and sanitation
Community Water and Sanitation Agency (CWSA), Ghana	Public	A national government agency with the delegated responsibility to facilitate the provision of safe drinking water and sanitation services to rural communities and small towns in Ghana.
Akvo, the Netherlands	Private	A non-profit foundation that builds open source tools for the web and mobile generations emerging rapidly in every community.
SkyFox, Ghana	Private	Ghanaian private company specialised in internet and mobile phone based payments, transaction portals and database systems. SkyFox has expertise in web-based and mobile based systems design and development, and in translating its systems to solve WASH problems.

² See Annex 1 for more information on the types of the focus of the FIETS framework.

³ Triple S: http://www.waterservicesthatlast.org/countries/ghana_triple_s_initiative

⁴ Take from SWF project plan: Appendix I, 2012: 4

Rationale for and aims of the project

In the provision of water supply and sanitation, infrastructure breakdowns are common. These have for a long time not been sufficiently addressed in the water and sanitation management practices in the rural areas of Ghana. The malfunctioning of water facilities relates to limited access to spare parts and lack of (funds for) maintenance on the part of communities when breakdowns occur.

This project sought “to scale up and consolidate WASH sector monitoring in rural and small towns of Ghana”⁵. The project planned to focus on “upgrading and developing systems and tools for nationwide, long-term monitoring of services in rural communities. Using smart phones and other new technology, the programme aim(ed) to reduce down time and increase the functionality of WASH services.”⁶The project set as priority the continuous tracking of the state of facilities and actions to ensure that service levels improved. The project developed and applied the latest IT and aimed to strengthen private sector investment to do so.

Sustainability of the Partnership: what remains of the relationships?

The project was completed at the end of 2017. Since then there has been a change in government and a change in the CEO of CWSA. This has led to different priorities and less attention to the activities of SMARTerWash (SW). The SW project has effectively come to an end and there is not, at this point, any follow up. The partners are no longer working together as a group to roll out the project, but continue to work with each other bilaterally. This situation provides challenges in assessing the sustainability of the partnership.

At the time of this assessment, the interviews still revealed a very positive perspective on the partnership and the governance of the relationship, and a feeling that ‘given the chance’, the relationship would have remained strong and sustainable. Given the change in context, the continuation of the relationship in its original form was not possible, and this change was a huge disappointment for all of the partners.

The perception was that this was a tightly knit and effective PPP: partners worked closely together as a ‘team’, with CWSA was in the driver’s seat to ensure ownership. The interaction was positive and productive, the style professional. There was a common perception that the partners are there for a common purpose, that the project was of importance and of value, and that each partner had a clear and important role in the process⁷. Partners shared risks and resources. There was clear interdependence in this PPP. This is also in line with the criteria of a developmental Public-Private Partnership (PPP) established by the Ministry of Foreign Affairs⁸.

There was a general ‘pride’ amongst partners in what was achieved. In addition, there was a consensus that what was achieved could not have been without the partnership. If one of the key questions is related to the extent to which the partnerships contributed to outcomes, this consensus on the value added of the PPP is an important one. As PPPs go, the manner in which the partnership

⁵ SWF project plan: Appendix I, 2012:2

⁶ IRC contracts

⁷ Note: many of these points are from interviews, and were also observed. These points were mentioned consistently.

⁸ The Ministry of Foreign Affairs defines a developmental PPP as follows: “A form of cooperation between government and business (in many cases also involving NGOs, trade unions and/or knowledge institutions) in which they agree to work together to reach a common goal or carry out a specific task, jointly assuming the risks and responsibility and sharing their resources and competences” (see IOB 2013, p. 17).

was conceptualised and the nature of the interaction can be characterised as a ‘best (learning) practice’.

The following box provide some information on the activities being undertaken by partners. What remains of the relationships?

Box 1: where are the partners now?

CWSA (public sector) and IRC (NGO): no longer a focus on SMARTerWash⁹

The CWSA and IRC continue to interact on a frequent basis. After the changes in the government and support for the continuation of the project, IRC continued to act as a facilitator and has been providing support to CWSA with the development of a cabinet memo and performing an organisational assessment of CWSA. The objective was to stimulate discussion with the new CEO at CWSA and other sector stakeholders. The assessment showed that the District Assemblies (DAs) found the SW system cumbersome, in particular working with the communities and the Water and Sanitation Management Teams (WSMTs) as institutional bodies. As part of this process CWSA has convened a reference group to look at alternative approaches to the work the organisation is doing.

Skyfox and Akvo

Of the partners, SkyFox is the only one that is still using (a portion of) the SMARTerWash system, recording breakdowns using the handheld technology and continuing to sell spare parts. Skyfox still has frequent interaction with CWSA, and is still dependent on CWSA to facilitate relations at the Regional and DA levels, when necessary. The two organisations continue to discuss possible cooperation on various initiatives.

Akvo, unfortunately is no longer being paid for its services has therefore no longer provides services to CWSA. Akvo and Skyfox maintain contact on various initiatives and Akvo is in discussion with other development partners, such as UNICEF.

It unlikely that the partnership will pick up again in its original form, though partners continue to interact with each other and other development partners. Respondents felt strongly that the project and the relationships built as part of the project provided a good basis for current interaction and the creation of spinoffs.

Sustainability of the Project

The following sections use the FIETS framework to report on the sustainability of the project. Of note is the interrelationship between different criteria. For instance financial sustainability has substantial influence on other types of sustainability. The report makes note of this in the different sections.

Financial sustainability

At the end of the project, there was an agreement that CWSA would ensure that continuous monitoring would take place. It was clearly laid out in the project strategy and the people were assigned to do it; it was expected that that would be financial commitments from CWSA budgets. In

⁹ Note: the decision was to place this information here, and not in the institutional section on the sustainability of the project. The information responds to the question on what remains of the relationships, and the interaction between partners?

fact, IRC and CWSA were initially pushing for the second round of data collection. However, as stated before when there was a change in government and the funding died out, the strategy fell apart. CWSA asked its CEO and Board for a budget to execute continuous monitoring, but when the Board saw the costs, they became discouraged.

In fact the need for funding was substantial. CWSA needed to upgrade DiMES to a web based system to make the 3 platforms completely interoperable. Distance between partners in coordinating the platforms required funding, as did visiting the DAs to provide support on rolling out the system. Doing baselines in the districts that have not been treated required funding, as did performing continuous monitoring. From the CWSA perspective, with no further donor funding coming in on the same scale as before and no revenues from the end user, the business model was no longer sustainable.

Though not a reflection on the financial sustainability of the entire SW business model, it is interesting to look at the spinoff from the model, namely the work of SkyFox.

Box 2: the continued efforts of SkyFox

As stated before, SkyFox is still using the SW system, and continues to sell spare parts. Its objective is to develop the business model further (no matter whether CWSA is still working with it). The institution is currently working with 3000 communities (project target was 4000), and 6000 water points on the handheld technology. The goal is to maintain a 3 day reaction time, 2 days to order and deliver the part and 1 day for the area mechanics (AMs) to install the part. SkyFox has managed to get money from World Vision and Plan International to continue to use of the handheld technology.

Return on investment is still a challenge. As mentioned before, the communities cannot pay for the parts and the installation of the parts. SkyFox is still looking at ways to diversify: one way is to use the platform to order food, in this case grilled fish (Food Co, USAID). The projection in 2015 was that break-even would come in 2022, but this will require expanding the use of the platform. DAs are also buying parts through SkyFox and the volume of sales is increasing.

Do communities use SkyFox's platform exclusively? Around 80%, as the time to provide spare parts is short, and the price is competitive. AMs can go to other suppliers, but have to pick up the parts themselves. AMs have tried in the past to jack up the price and add a big margin, but the SkyFox system has made all of this transparent, and communities are now more aware of the price. Now the AMs are paid a standard commission fee (SkyFox now calls them 'entrepreneurs').

SkyFox is also looking to beef up the SMS market. NGOs are also asking to take part in the platform and for this will have to pay a membership fee. SkyFox is thinking of asking a service fee for real time data. SkyFox continues to think of innovative ways to take advantage of the system developed under SMARTerWash. Of note, is that its initiative are still highly dependent on donor funding. (see also the section on technology for additional initiatives).

Institutional sustainability

As stated in the previous section on the sustainability of the partnership, the partners are no longer part of a formal partnership, but continue to interact. In addition, the partners have continued to develop relationships with other external development partners, relationships that were largely

developed during the SW project. IRC for instance is working with UNICEF, Water Aid, World Vision, and Safe Water Network on smaller scale initiatives in the WASH sector. SkyFox is working with the Ghana Water Co. Ltd, through the Dutch Innovation Fund of the Ministry of Foreign Affairs of the Netherlands, and using the handheld system and SMS to report water consumption to the company, prior to paying bills. Consumers check consumption on their own meters, send it on to the water company and are sent a bill all by SMS. Akvo has expanded its work to other countries and continues to sell its system.

Beyond the contractual partners, looking at the institutional context, it is interesting to look at the changing role of the CWSA and IRC in this context. The opinion is that SW has influenced the current political dialogue, and that learning from the model has raised real questions on the sustainability of the sector as a whole (beyond the level of the project). IRC has positioned itself as a stimulator of ongoing discussions, CWSA is also taking strong role. SMARTerWash has triggered thinking on reforms.

Please note that as the situation is a state of flux, it hard to reflect on the sustainability of institutional relations.

Box 3: The role of CWSA and IRC is a changing perspective on the water sector

The CWSA has decided to review its policy on the Water sector (Annex 1 provides some information on the nature of the current policy discussion on the sector). IRC has been providing support in this. As a result of the ongoing discussions internally and externally with development partners, the CWSA has decided to pilot a new model and let the lessons learned inform and redefine their mandate. The proposal is to move to investments in piped systems in small towns, where they are now still using water points. This has been given priority as there has been substantial industrial expansion as well as residential, and the current community systems no longer meet demand.

CWSA is now moving away from the community management to professionalization of the service. It is replacing the community managers with staff employed by CWSA, working at the local level (regional) on the management of the piped systems. CWSA has hired in 800-900 new staff, using its own funds to support the DAs with water system managers and engineers. At the time of the interviews, CWSA needed still to discuss this pilot with the DAs and the Chiefs to get feedback on the idea and tweak the model.

CWSA will be signing performance contracts with the regional level, and CWSA at the regional level will employ a water systems manager. The DAs will still be responsible for flagging breakdowns, etc. under the management of the CWSA. CWSA will do an assessment at the end of each year to see if things have improved.

From the DA perspective, it is difficult to 'resist' the CWSA's pilot, because there have been so many complaints from people without water. There have been discussions at the DA management level on whether to support the pilot. They have agreed to support the pilot, as 'anything that helps in the provision of water is good'.

With the changes being brought about by CWSA to the community-based schemes, the important institutions remain as follows (please refer to Annex 2 for some information on key institutions):

- National actors are the same: however, the Ministry Water Resources, Works and Housing now resides in the Ministry of Sanitation, Works and Housing. Others include the Ministry of Finance, Ministry of Local Government and Office of the Head of Local Government Services.
- Regional Coordinating Councils (RCC) and Non-Governmental Organisations at the regional level.
- The Private Sector that will continue to be contracted to do work.
- The District Assembly, whose role it will be to enable and coordinate.
- IRC is on the board of CWSA and on the technical committee, trying to trigger change, challenge sectoral thinking, and help with the discourse.
- Ghana Water Company may start to play a larger role if the trend is to piped water.
- Other donors and development partners.

Interviews with different respondents continued to highlight constraints faced by the institutions involved in the water sector in Ghana. Respondents underlined key weaknesses of the institutions involved (capacities, numbers and types of staff) and problems with where the powers lie. Institutional aspects relate to the lack of clarity on the levels of government that have the responsibilities to deal with the WASH sector and the power they have to generate and manage resources. The local levels are also short in staff and in capacity and this exacerbates the problem. The current political discussion has also gone so far as to focus on the nature and extent of decentralisation in the sector in Ghana.

In short, the water sector in Ghana is seeing a paradigm shift. CWSA has been working for 25 years with the community ownership model, with communities as beneficiaries, supervised by the DAs. The water community feels a need to deal with or shift away from the community ownerships model.

In addition, as the experience with the change in government and the end to the project has raised some questions on sustainability, respondents indicated a change in attitudes: many institutions CWSA in particular, are no longer interested in being dependent on donor funding and have decided to take steps to do something to change this dependency.

Environmental sustainability

In this case, it was difficult to ascertain the environmental sustainability of the project. Respondents indicated that most significant and lasting effect of the project is a level of awareness. A national level respondent, as well as respondent at from the DA using the SW system indicated that the project and the SW model continue to highlight:

- The scale of the hygiene and health issues that come from lack of water
- Access to ground sources, acceptable rate of extraction, monitoring this
- Ground water pollution
- The potential for recycling of water at the local level
- Water use efficiencies: using less for more
- Subsidence – Ground collapse.
- Challenge: Monitoring the main abstraction
- The need to be able to measure and project demand in line with urban and population growth

Another respondent from a DA criticised the system, saying that it was faulty from a 'security' perspective, it did not define: Who would check if there was contamination of the water? Who

would check the quality of the water if the private sector was selling water? These issues were perhaps beyond the scope of the project, but food for thought in the policy dialogue.

Technical sustainability

This project, in its design, was all about technology that was simple and worked. SMARTerWash systems were usable, operable and inter-operability generated cooperation between institutions. However, in the long run, the structures and a personnel were not in place and not financially sustainable. The technology used in the entire SW system was therefore not sustainable; this due to underlying financial and institutional factors.

However, an indication of the fact that the technology continues to be appropriate is that SkyFox can use the platform as a stand-alone system.

Box 4: Developing the technology

SkyFox is also working with expanding the technology. SkyFox has had some difficulties with reporting of breakdowns: communities forget to use the handheld technology, and call at the last minute. Trying to bypass the problems with reporting, SkyFox is working with a new system that places sensors on the water points and hand pumps to measure functionality, flow rate and change in flow rate all in real time. The sensors also indicate when the pumps break down and the area mechanic then orders the part via the SkyFox system. This will be financed by Charity Water USA. One of the criteria for getting funding is working with a government institution. SkyFox is in discussion with CWSA and has signed a MoU with the CEO of the CWSA. The project will include the installation of 1000 sensors they are now starting with 20 as a pilot, starting in the greater Accra metro region. They are planning to work in all 10 regions, the same areas as before. The sensors have a 10 year battery life, and cost 50\$ per sensor.

The project has resulted in spinoffs that underline the acceptance of the technology locally.

Social sustainability

Respondents saw the positive influence of SW on social aspects. For one, the project recognised that breakdowns affect women the most. The model and SMS platform reduced the downtime and the time it takes for women to search for another source of water when a pump breaks down. Having the water available also helps in cooking and reducing diseases. Smallholder farmers also rely on the water for the irrigation of their crops. In the areas that are access spare parts through the platforms, these improvements still exist.

In addition, the AMs are more aware of the value chain and business model, though the rate of adoption is slow, it has having some impact on the understanding of the economic options.

There was also some criticism. One year after completion of the project, respondents made some comparisons between the SW project and other donor projects. Comparisons were made to other projects that involved hard investment in infrastructure, involved substantial capital investment and impacts on coverage, speed of access, quality, etc. Respondents mentioned that what SW lacked was 'social visibility', namely visibility at the community level that hard investment was being made. SW had an impact on the data availability, and on maintenance but not 'visibly' on access to water. These comments also reflected the changing expectations at the community level of the services

being provided and the realisation on the part of government officials that community systems are no longer keeping up with demand.

Conclusions

With the changes in government and the lack of interest to continue with the project and allocations from the budget, the project has come to an end in its current form. This put in question the sustainability of the project, financially and institutionally. Clearly, there is ineffective demand for the project, the project could not generate enough resources from the end user to stay afloat. And the institutional support and understanding of the benefits were also not present.

The experience with the project and its challenges after completion has stimulated thinking on the sector and a political dialogue with CWSA and IRC at the centre of the discussion. It has brought about thinking on how to meet increasing demand, with increases in population, extensive growth and more demanding clients. It has brought about a discussion on the need to go to piped water and strategies to break the vicious cycle of weak financial sustainability. It has created a discussion on the roles of the different levels of government, institutional relations, and, in particular, the role of the DAs. It has also brought about a complete change in the activities that CWSA is undertaking.

Finally, the private sector continues to use the model, its software and handheld technology (developed in partnership by CWSA, Akvo and SkyFox). SkyFox continues to explore markets, locally (DAs and NGOs) and a relationship with Ghana Water. It is admirable how SkyFox is pursuing opportunities and leveraging the project, reputation and relationships to do this. However, the dependency on donors still remains.

In effect, the project is not sustainable in FIETS terms, but has resulted in clear spinoffs. Relationships built between partners continue to be important, with certain dependencies remaining. CWSA and IRC still interact frequently, with IRC playing a key supportive role as advocate and boundary spanner. SkyFox is still dependant on CWSA to facilitate its presence in the communities. This is possible due to the relationships built during the project.

Looking at and comparing sustainability across criteria, the most important challenges were clearly financial and institutional, namely the political environment and the political risk that came with it. One wonders if the government had not changed, whether the project and partnership would have continued with national government budget allocations dedicated to rolling out the system. Was the financial sustainability due to insufficient funds or more to other political priorities?

The model was well thought out and achieved excellent but short lived results, but having the project and PPP dependent on the public partner brings with it political risk that at project completion may negatively affect the continuity of the project and the PPP. This is something to consider when setting up a partnership project.

Annex 1: Reflection from the interviews on the need for change in the water sector

The current policy discussion is putting in question the fundamentals of the entire sector.

First of all, point sources do not provide enough water to meet demand, as they do not service the growing population. In the past 4 years things have changed a great deal, with greater development, and people are more demanding. Sometime people do not have water for 3 weeks and the complaints are increasing.

Second, the infrastructure is not being maintained. A current study commissioned by USAID over 8 years confirms a 58% breakdown rate. The leakages in the network are up to 50%. In addition, the tariffs are too low to cover maintenance, let alone capital investment. This creates a vicious cycle, which respondents concur needs to be broken. The discussion on approaches to this focus on rehabilitation first to deal with water losses, then setting up a fool proof payment scheme and finally looking more closely at piped water schemes.

The SW baseline study of 119 communities and 6 regions confirms the results above and revealed that 50% of the water systems were not functioning. Only 10% of the 50% are in fact achieving the quality or quantity criteria.

Third, looking closely at the model, the ability to pay is a real issue. The water systems are breaking down and the communities still cannot afford to pay for repairs. Payment by the communities is intermittent. Communities and businesses spend a lot on generators for the pumps. If there is a fluctuation in electricity, the pumps do not work. The model of working with the Water and Sanitation Management Teams (WSMTs, community based teams) and the Area Mechanics (AMs) is questionable if the community is unable to pay for parts.

The general opinion of the respondents is that it is necessary to get the sector working, with investments in the system and revenues coming in. The widely held hope is that, at that point, the SW model might be more feasible (implying continuous monitoring).

Annex 2: Institutional Framework for Water in Ghana in more detail

The following are the institutions involved in the WASH sector. Current policy discussions revolve around a changing role for these institutions and the extent of decentralisation of responsibility for water.

NO	INSTITUTION	ROLE	COLLABORATION	ASSUMPTIONS
1	MSWR	Sponsor and lead institution in water and sanitation, policy function, monitoring	MLGRD+MMDAs & Development Partners	The Ministry is committed to supporting effective service delivery through a decentralized approach
2	MLGRD	Policy formulation, monitoring and evaluation	MSWR + MMDAs & Development Partners	That the Ministry continues to collaborate effectively with MSWR and partners more effectively and functions are seen as integral and matching funds
3	OHLGS	Service standards, performance monitoring and evaluation	MSWR+MLGRD, Development Partners, communities	Committed and provides space and relevant monitoring of the sector functions at the MMDAs and feeds into overall policy
4	NDPC	Overall national development guidance and provision of advice to the office of the President of Ghana. Set national development agenda indicators and provide monitoring and evaluation framework. Conducts Annual Performance Review and overall development reports	MSWR, MLGRD, OHLGS, MMDAs and Development Partners	Continues to perform its functions and focuses on the SDGs
5	CWSA	Delivery Institution, Standardizations, supervision, monitoring and evaluation	MSWR+MLGRD, Development Partners, communities	Reforms effectively to provide leadership
6	MMDA	Implementing Institution at the local level, supervision of community facilities, monitoring and evaluation	Traditional authorities,	Strengthened to offer effective implementation structures
7	PRIVATE SECTOR	Supply of services	All partners	Adequate commitment and continuous involvement in the sector Incentives are provided by government to enable active private sector involvement
8	TRADITIONAL AUTHORITIES	Mobilization of Community		Traditional authorities show more commitment to support effective service delivery

Ministry of Local Government and Rural Development/Ministry of Sanitation and Water Resources (MLGRD)

1. This Ministry is charged with responsibility to oversee the decentralization processes in Ghana. It is also the policy promoter and anchor for rural development and local government. This

function therefore places an onerous responsibility on it to ensure that, service delivery is undertaken within the confines of decentralization (devolution).

2. Thus, for community water and sanitation purposes, it is a major responsibility for the MLGRD and requires that, going forward, it must set up a desk function for coordination and collaboration and information sharing purposes.
3. The Ministry therefore should be critically responsible alongside the key Ministry.

Ministry of Sanitation and Water Resources (MSWR)

1. This Ministry is the key Ministry for Water and Sanitation. Although it is a new Ministry within the public administration, it has been set up with the key duty of ensuring that, the country achieves the SDG goal 6.
2. Ensure that, Ghana becomes clean and offer potable water to all segments of the country. Through the design of relevant strategies, programs and plans for implementation at all levels
3. It has policy, technical and standard functions as well as oversight of the Community Water and Sanitation Agency.
4. The current government has a flagship programme to make Water and Sanitation a major priority

Office of The Head of Local Government Service (OHLGS)

1. The OHLGS has been set up with a constitutional responsibility for the establishment of standards and setting up of performance targets for each of the MMDAs in the pursuance of their functions. Such an institution is a key stakeholder in the sector and must be adequately engaged and involved in water service delivery at the MMDA and community level.

District Assemblies

This institution has been set out to serve as the anchor for all development activities, planning and programme within their specified jurisdiction.

1. All Assemblies have been established by Legislative Instrument as prescribed by the constitution of Ghana and by Act 936, 2016 and the law clearly describes the functions of the District Assemblies to include being responsible for the overall development of their jurisdiction.
2. The District Assembly is also responsible for the general planning and execution of development programs.
3. Institutionally, they are the key to effective implementation of all the water and sanitation programs and their capacity and ability to appreciate all the nuances involved in the water service delivery need not be over-emphasized.
4. From the interviews conducted, it is very clear that, this institution is seen as weak and uncoordinated to manage the sector within their jurisdiction. Thus, the recommendation and program to professionalize the sector including the transfer of staff from the regional CWSA.
5. The District Assemblies by law have Works Departments which coordinate water service delivery. However, in the Metropolitan Assemblies, there are Waste Management Departments which manage the sector. However, the critical issue relates to strengthening of their capacity to handle the sector.