

INNOVATIVE FINANCING FOR CAPITAL MAINTENANCE EXPENDITURE (CapManEx) IN SMALL TOWNS WATER SUPPLY SYSTEMS IN THREE DISTRICTS IN GHANA: AKATSI SOUTH, KINTAMPO SOUTH AND EAST GONJA

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Presentation Outline

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- Objectives of the Study
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Introduction

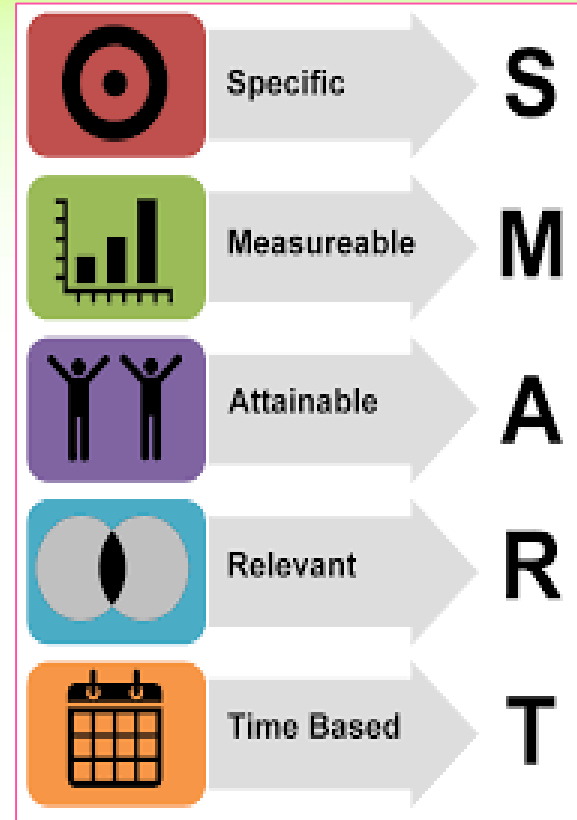
- About 30-40% of water point sources have down time of over 18 days a year (Adank et al., 2013; Moriarty, 2010).
- The actual level of service received by users in many communities is below the basic level prescribed by CWSA and is partly due to inadequate asset maintenance and repair at community level.
- In most rural communities effective fund mobilisation and management have been observed as the underlying cause to sustainable water service delivery.
- It is increasingly important for actors to think systematically about ways in which expensive water supply assets can be maintained and managed in a more cost-effective manner, whilst safeguarding continuity in service delivery (Kumasi and Burr, 2015).



Objectives of the Study

❑ The main objective of the study is to identify potential innovative financing mechanisms to address CapManEx for improved water services (affordable, reliable and sustainable) in small towns. The Specific Objectives are:

- ❖ *Identify and describe the various small towns water management models prevailing in the field*
- ❖ *Assess the existing maintenance regime for small towns*
- ❖ *Assess the effectiveness of their financial management system*
- ❖ *Examine the alternative funding mechanisms for capital maintenance in the sector within and outside Ghana*
- ❖ *Make proposals on how to improve the mechanisms for capital maintenance financing*



Research Questions (1/2)

1. What is the nature of breakdowns in the small town's water systems?
2. What are the underlying causes of the breakdown or sub-optimally functioning of the small town systems?
3. What kind of management model is in operation and their effectiveness?
4. What kind of funds mobilization strategy exists for addressing CapManEx?
5. How functional/effective is the funds mobilisation strategy?
6. What challenges exist with funds mobilisation?



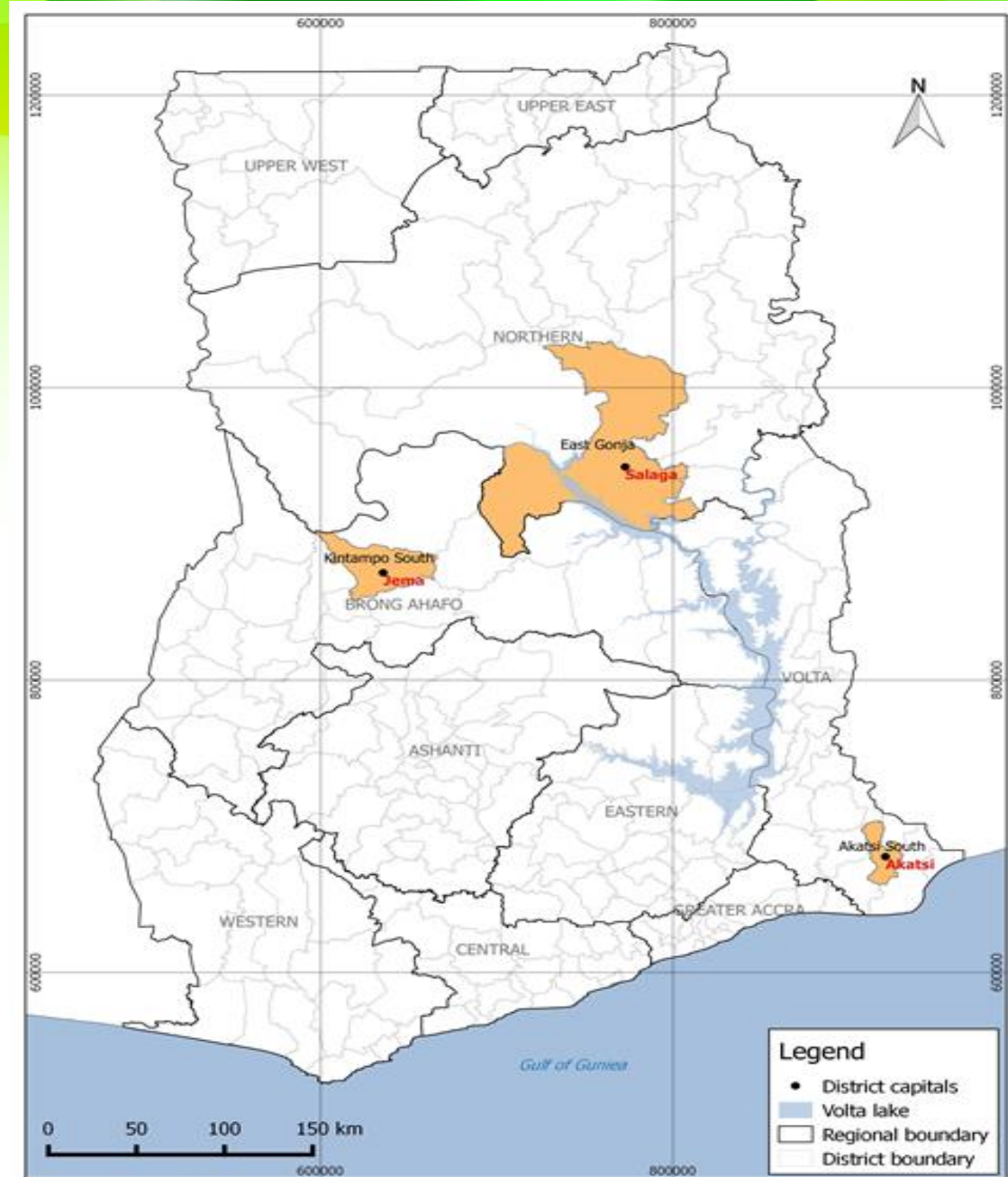
Research Questions (2/2)

7. What is the financial management system of the management teams?
8. What are the current costs of major components of the system?
9. What are the current and future capital maintenance needs of the small towns?
10. How is capital maintenance expenditure of the systems financed?
11. What is working and not working with the capital maintenance financing mechanism (s) in place?
12. What potential sustainable financial schemes exist to address CapManEx



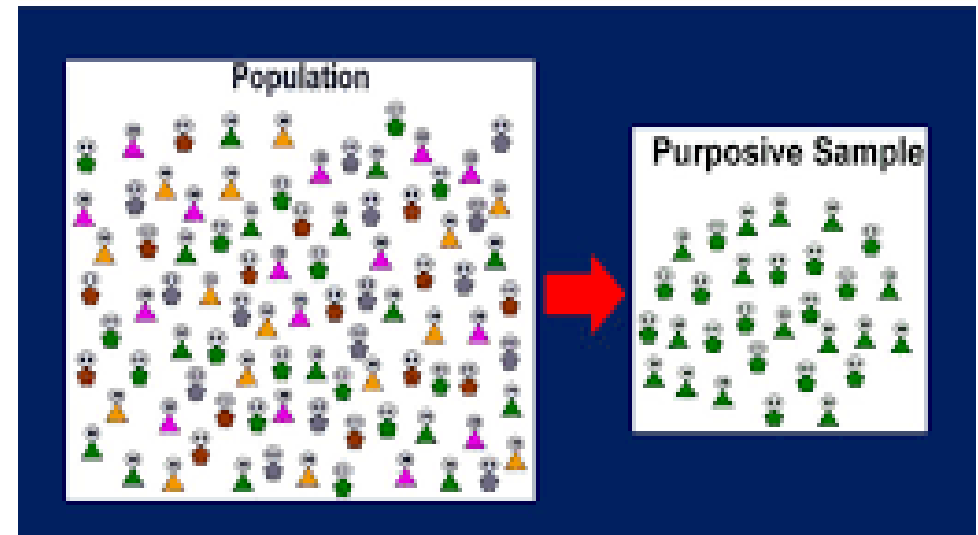
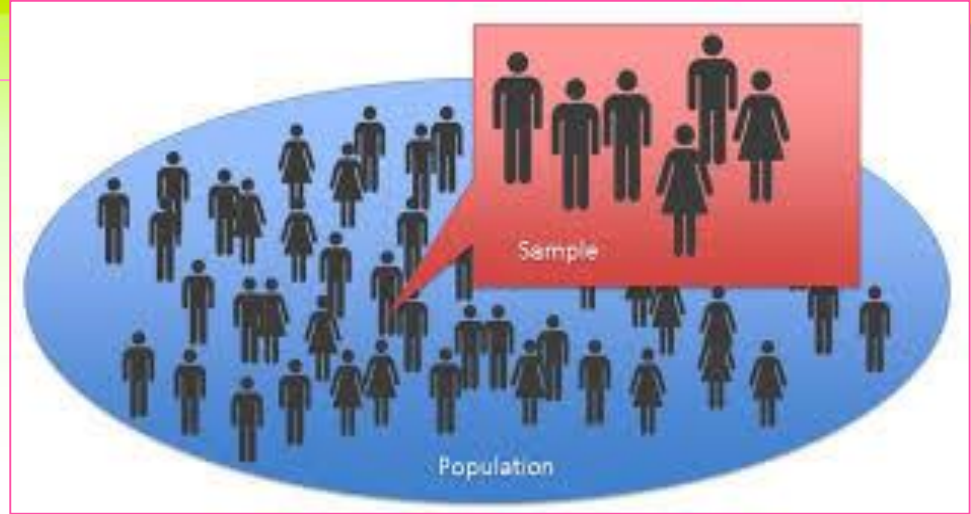
Scope of the Study

- The study focused on **all** the small town systems in East Gonja, Kintampo South and Akatsi South.
- Kintampo South has new water systems provided by World Vision Ghana.



Sampling Technique

- ❖ Purposive sampling technique was used to select sample for data collection.
- ❖ Data was collected on all Small Towns' WSMTs managing pipe systems serving more than 2000 population
- ❖ Key informant interviews were also conducted with financial institutions in the target district and region as well as the District Assembly.



What is Purposive Sampling

- A purposive sample is a non-probability sample selected based on characteristics of a population and the objective of the study.
- Purposive sampling is also known as judgmental, selective, or subjective sampling.
- This type of sampling can be very useful in situations when you need to reach a targeted sample quickly, and where sampling for proportionality is not the main concern. (Ashley Crossman, 2017)



Data Collection (1/1)

- Both quantitative and qualitative data was collected from the piped schemes.
- Quantitative data was obtained from operational records on system components and capacities, expenditure disaggregated into operations, maintenance, water revenue, tariff structures and service levels for the small towns in the study districts.
- Quantitative data was collected with the use of android phones.
- Qualitative data was collected through focused-group discussions and key informant interviews.

Data collection (1/2)

- Primary data was collected between April and June 2016.
- The questionnaires used for the data collection were pre-tested earlier in March 2016, at the Unity Bank in Ho and Hlefi, a community in Ho West District of the Volta Region.



Akatsi South Data Collection in Pictures



Data Analysis and Limitation of Study

- Primary and secondary quantitative data was analyzed using Microsoft Excel.
 - Qualitative data analysis involved identification, examination and interpretation of patterns and themes in the textual data from the focused group discussion.
 - The qualitative data was used to triangulate the quantitative data.
- ❖ Non-availability of financial data, system information and water quantity data from the WSMTs.
 - ❖ For the very old systems, there was unavailability of system historical records on the systems such as design capacity, age, type and pump capacity.
 - ❖ Poor record keeping on the dates of repairs and cost of repairs by WSMTs:
 - ❖ Lack of capital maintenance expenditure data from new-piped systems.
 - ❖ Most of the WSMTs interviewed were without the required number of members as per the CWSA Guidelines.
 - ❖ None of the financial institutions interviewed had ever granted loans to WMSTs
 - ❖ The data collection exercise coincided with the major farming season and this affected the availability of some WSMTs.



FINDINGS OF THE STUDY

Management structures/models for piped schemes

District	Piped Scheme	Management model	Relationship between the WSMTs & District Assembly
Akatsi South	Akasti	Partial management model	Cordial
	Lume Avete	Direct management model	Cordial
	Avenorpedo	Direct management model	Cordial
	Dabgamete	Direct management model	Cordial
East Gonja	Salaga	Partial management model	Cordial
	Dashie	Direct management model	Cordial but non-responsive
	Kpalbe	Direct management model	Mixed (Cordial but non-responsive)
	Talkpa-Abromasi	Direct management model	Bad
	Daboashie	Direct management model	Not cordial and DA non-responsive
	Kpembe	Private operator	No relationship
	Makango	Private operator	No relationship
Kintampo South	Jema	Partial management model	Cordial
	Anyima	Partial management model	Cordial
	Amoma	Direct management model	Cordial but non-responsive
	Nante	Direct management model	No relationship

Overview and functionality of the piped systems

Piped system	Year of construction	Status	Water Source	Design Plant capacity m ³ /h	Type of storage facility
Akatsi	2004	functional	Borehole (4)	71.95	Elevated Concrete Tank (380m3)
Avenorpedo	1996	functional	Boreholes (1)	Not Available	Elevated Concrete Tank (80m3)
Dabgamete	1998	functional	Borehole (1)	Not Available	Elevated Concrete Tank (60m3)
Lume Avete	1998	functional	Borehole (1)	Not Available	Elevated Concrete Tank (60m3)
Salaga	1965	functional	Daka river	Not Available	Steel tanks
Kpembe	2011	functional	Dam	Not Available	Polytanks
Makango	2011	Partially functional	White Volta	Not Available	Polytanks
Kpalbe	2006	Non functional	Dam	Not Available	Polytanks
Daboashie	2011	functional	GWCL(Dalun)	Not Available	Polytanks
Dashei	2011	functional	GWCL(Dalun)	Not Available	Polytanks
Talkpa	2012	functional	Borehole	Not Available	Polytank
Jema	2015	functional	Borehole	Not Available	2Concrete tanks
Anyima	2015	functional	Borehole	Not Available	1Concrete tank
Krabonso	2014	functional	Borehole	Not Available	4 polytanks
Amoma	2014	functional	Borehole	Not Available	4 polytanks
Nante	1999	functional	Surface water	Not Available	1Concrete tank

Funds mobilization & Management for Capital Maintenance of piped systems by the Management Structures

- Akatsi South district practices pay-as-you-fetch. However, with the exception of Akatsi WSMT, which charge a tariff of 10 pesewas per 18-litre bucket, WSMTs charge a lower tariff, which is 2.5 pesewas per 18-litre bucket.
- All the WSMTs indicated their awareness of the existence of a guideline for setting water tariffs. Only Akatsi WSMT fixed their tariff strictly in accordance with the guidelines.
- Institutions are highly indebted to the Akatsi WSMT
- All the WSMTs rely on revenue generated from the sale of water for carrying out major repairs.
- DA confirmed that all the WSMTs operate bank accounts. Akatsi WSMT operates all the three required accounts while Avenorpedo WSMT operates only the Operational and Capital.



Funds mobilization and management for capital maintenance of piped systems by management structures

- The Akatsi South DA has sufficient knowledge of a budget-based tariff, which is derived from all the cost elements of operating and maintaining a water system.
- According to the DA, it was only Akatsi WSMT that uses the guidelines for tariff setting.
- The other WSMTs in the District have not submitted their proposed tariff for approval even though they were aware of the procedures.
- The DA revealed that the prevailing tariff of 2.5 pesewas per 18-litre bucket at Lume-Avete, Avenorpedo and Dagbamete was not realistic.
- This is because most of the WSMTs could not generate sufficient funds to meet their operational cost.
- It was revealed that Avenorpedo was indebted to Electricity Company of Ghana to the tune of GH¢ 4,000.00 as at February 2016

Funds mobilization and management for capital maintenance of piped systems by management structures

- **In Kpalbe**, 5 pesewas per 36-40 litres of water was agreed by the WSMT and implemented as the tariff. WSMT admit the tariff was not realistic to sustain the system.
- **In Talkpa-Abromasi** no tariff was set. Every woman was levied 50 pesewas on Fridays irrespective of the quantity of water consumed. The WSMT proposal of 20 pesewas per basin tariff was rejected.
- **The Daboashie WSMT** did not set tariff based on the guidelines and charged a 10 pesewas per basin of water and currently reviewed to 20 pesewas per basin.
- There are no connections to institutions.
- At the time of collecting data and writing the report two of their poly tanks had burst and the third one was leaking. The WSMT is not able to account to the people because whenever meetings are called the people do not attend. Majority of the people have returned to fetching water from the dam.
- **The Dashie WSMT** did not set any tariff and had no knowledge of the CWSA tariff guidelines.
- They allow the community members to fetch the water free but levy each household to raise money any time GWCL brings their bill.
- The system has no institutional connection. The WSMT apparently has no plan in place for addressing major maintenance should the system suffer one.
- The WSMT calls for community meetings to disseminate information on the running of the system.

Funds mobilization and management for capital maintenance of piped systems by management structures

- **The Kpembe and Makango** system are privately owned so the private owner determines the tariff, which is not in line with the tariff guideline.
- Tariff rates ranges between 10 pesewas, 15 pesewas and 20 pesewas depending on the size of the container.
- **The Kpembe system** supplies water to the Nursing Training College. Payment for water appears not to be a problem with the system.
- **The Makango system** is connected to the house of a private person who deals in sachet water. There were also plans to connect the water to the Health Centre before the system broke down.
- The private operator would not disclose whether there were challenges with payment from the sachet water dealer.
- Funds mobilization for addressing major repairs was not disclosed. The private owner does not account to the people or the DA.

Funds mobilization and management for capital maintenance of piped systems by management structures

- The Salaga system operates both tariff and levy system but the tariff is arbitrary, and does not take into consideration the guidelines.
- Households that are connected to the system pay GHC 5.00 per day for the number of hours that water is rationed whereas those who fetch from the public standpipes pay 20 pesewas for 54-60 litres and 20 pesewas for 3 basins.
- The WSMT asserts that realistically, a bucket (18 litres) of water should cost 60 pesewas.
- East District Assembly is aware of the guidelines for setting tariffs. However when probed on the content of the guidelines, there was a gross deviation.
- The District has not approved any tariff and that no WSMT is practicing realistic tariff - setting in the district.
- The WSMTs operate operational account as against the three recommended.
- The WSMTs do not prepare annual budget and financial statements because of the low educational level of its members in most cases.

Funds mobilization and management for capital maintenance of piped systems by management structures

- All the WSMTs adopted pay-as-you-fetch as the principal means of funds mobilization. A tariff regime of 10 pesewas per 18 litres was charged in almost all the piped scheme communities except at Amoma where the WSMT charged 10 pesewas per 36 litres.
- Four out of the five WSMTs surveyed were not aware of the existence of a guideline for setting water tariffs, and did not use it in determining the rates being charged for water sold.
- The WSMTs, which did not use the tariff guidelines, indicated that, they pegged their rates at the prevailing tariffs of nearby communities, which also operated piped systems, and considered people's willingness and ability to pay in agreeing to the 10 pesewas per 18 litres bucket.
- *'We considered the fact that some community members were depending on private wells while others fetched water from nearby rivers/streams. Therefore, if we set the tariff too high, there would be resistance from the community and most people would not pay.'*
[Krabonso WSMT member].

Funds mobilization and management for capital maintenance of piped systems by management structures

- None of the WSMTs had referred their tariffs to the District Assembly for review and approval in consultation with CWSA Regional Office, as required by water sector guidelines
- The piped systems at Amoma and Krabonso did not have meters at the public standpipes, making it difficult to track the quantity of water vended and the total revenue that ought to be generated from the sale of water.
- Controlling of private connections was reported as a major problem at Nante. Only 12 out of the 41 private connections in the community were done with the involvement of the WSMT, and most of these private connections were not paying their monthly bills.
- All the WSMTs noted that revenues from the sale of water were being saved with banks/financial institutions in the District, and they had opened only the Operational Account.

Financial Institutions –Akatsi South

- Data was collected from three financial institutions namely, the Avenor Rural Bank, Akatsi Branch; GCB, Akatsi Branch; and Unity Rural Bank Ave-Dakpa in Akatsi North District.
- Avenor Rural Bank confirmed holding the accounts of more than twenty (20) WSMTs in the Akatsi District.
- All the four WSMTs covered by this study operate their accounts with the Avenor Rural Bank.
- Three banks admitted that they had not granted loan to any WSMT simply because they never received loan application from any of them.
- They however showed their readiness to grant loan facilities to the WSMT provided loan application requirements are met.
- The conditions for accessing credit facility from the three banks vary. The requirements ranged from operating accounts with the bank, active funds flow among others.

Financial institutions – Akatsi South

- ❑ The Appraisal requirements for accessing loan from the Avenor Rural Bank and the Unity Rural Bank are as follows:
 - ✓ The WSMT must be a customer of the bank for at least one year
 - ✓ The WSMT must submit a loan application form to the banks. When the application is evaluated and it meets the standards the bank will then ask for a collateral in the form of landed property, which is properly valued and documented.
 - ✓ The interest rate was 33% on commercial loans. Payment is by calculated monthly instalment.
- ❑ With the Ghana Commercial Bank the requirements for loan application are:
 - ✓ One must be a customer of the bank for at least two years
 - ✓ The WSMT must make a loan request to the bank
 - Application will be evaluated
 - Audited financial Statement of the WSMT
 - Bank official(s) will make an enquiry visit to the WSMTs to evaluate their loan request

Financial institutions –East Gonja

- Bonzali Rural Bank and Agricultural Dev't Bank Ltd were surveyed in the region, GN Bank and GCB were surveyed at the district level.
- None of the financial institutions surveyed in the study had granted loans to any water and sanitation management team or private operator.
- The appraisal and loan application requirements were almost the same across all these institutions except for GN Bank, which had an extra requirement in the applicants having a guarantor who is a customer of the bank.
- The requirements ranged from operating an active account with the bank for a minimum of six months, must have a constitution guiding the operations and activities of the team, and must have kept sound financial records per the bank's standard and a good debit and credit turnover.
- All the banks confirmed the use of the active account and the inflows and outflows as well as the collateral should such a loan be granted.
- The interest rates given by these banks was 33%.

Financial institutions – Kintampo South

- All the four Banks/Financial institutions indicated the possibility of providing financial assistance to the piped systems/WSMTs on demand. The banks added that, demands for financial assistance would be evaluated on the following criteria:
 - ✓ The income generation capacity of the various piped systems to determine the amount of loan to grant and the WSMTs ability to pay back the loans;
 - ✓ Guarantee letters from Municipal/District Assemblies;
 - ✓ WSMTs must have Accounts with the banks.
- The financial institutions indicated that, loans to WSMTs would be treated as commercial, with varying interest rates per annum: 19.5% for BACSSOD, 32-37% for ADB, 32% for Kintampo Rural Bank and 35% for Sahel Sahara Bank.

Existing Mechanisms for Financing Major Repairs

- Three out of the four-piped schemes in Akatsi South district experienced major breakdowns over the past 12 months.
- In Dagbamete, the WSMT reported they replaced a pump. However, the cost could not be ascertained by the study. An amount of GH¢ 3,000 was reportedly received from the Apetorku shrine as top-up to purchase the pump.
- The breakdown experienced at Avenorpedo had to do with burnt pump. The system was fixed with funding from their water revenue.
- The DA admitted that provision was made for WSMTs in financing major maintenance expenditure. For example in 2015 the DA set aside GH¢ 54,000.00 (1.93% of the DA Common Fund). The DA admitted that the GH¢54,000.00 allocated was not adequate. The DA however revealed that there was no request from the piped scheme WSMTs for financial support.
- The increase in population of Avenorpedo according to the WSMT has created a need for an additional water storage tank. All the WSMTs have also identified pump replacement as a necessity.
- The four WSMTs identified revenue from the sale of water and fund raising durbars as the major sources of funding for the anticipated capital expenditure needs.
- Avenorpedo WSMT indicated that they would seek support from the District Assembly, while the Dagbamete WSMT consider the shrine as a potential source of support.

Existing Mechanisms for Financing Major Repairs

- The Kpalbe WSMT has no major maintenance financing strategy in place. Their only hope is the DA Common Fund, which is also not forthcoming.
- The Talkpa WSMT counts on the DA, MP and the high communal spirit of the people as major maintenance financing strategy that is working for them now and hope to work for them in the future.
- The Daboashie system has not suffered any major breakdown apart from the irregular water supply from Ghana Water Company and bursting of two polytanks with the third one leaking. The WSMT has no major maintenance financing strategy in place. Their only hope is the DA Common Fund, which is also not working for them.
- The Kpembe system has not suffered any major breakdown. The only challenge in the past was that the system used to run on generator until it was connected to the national grid.
- The Makango system suffered a major breakdown because of drop in water level at the source (Volta Lake) and subsequently the pump broke down after sucking in mud. The system has been down for the past 12 months and still not restored.
- The Salaga system has been in existence for over 50 years and has encountered breakdown of pumps, damage to transmission lines, leakage of high level tanks, etc. The WSMT counts on revenue generated from sales of the water and the DA to finance major maintenance costs.

Existing Mechanisms for Financing Major Repairs

- The Dashie system has not suffered any major breakdown apart from erratic water supply from Ghana Water Company and leakage in one of the overhead poly tanks.
- The WSMT has no major maintenance financing strategy in place. Currently, households are levied to pay GWCL water bills, which is working, but one cannot tell whether the levy system can be effective in financing major maintenance should the system suffer one.
- The East Gonja Assembly believes support to WSMTs with funds for major maintenance is phenomenal but limited to the Salaga system, which happens to be the biggest system.
- The smaller systems do not run into major maintenance problems due to less pressure on them. The WASH unit of the DWD however noted that the DA's support has never been adequate in any circumstance.
- The DA could not provide information on the cost of major components of all piped scheme because the officer in charge of such records was not available at the time of the study.

Existing Mechanisms for Financing Major Repairs

- Only Jema piped system had incurred major maintenance expenditure
- Given that the other three piped systems (except the one at Nante) were fairly new, the WSMs indicated that they had not incurred any major maintenance expenditures.
- The WSMs however anticipated the following as some major maintenance expenditure:
 - ✓ Replacement of solar panels (Krabonso and Amoma);
 - ✓ Construction and mechanisation of a borehole to augment surface water intake(Nante);
 - ✓ Construction of additional storage tank and procurement of a new treatment plant (Nante); and
 - ✓ Replacement of all transmission and distribution lines to curb frequent pipe bursts (Jema).

Existing Mechanisms for Financing Major Repairs

- *'The only strategy we have in place for financing our maintenance activities has been reliance on revenue from the sale of water. This strategy has been working very well because whenever people fetch water, they pay and we account to the community. We have been able to save enough money to even finance other developmental activities such as construction of a public toilet, and installed street lights in the community.'* [Nante WSMT member].
- Aside the revenue generated by the various WSMTs which was identified as a key source of funding major repairs, the Kintampo District Assembly indicated that it has set aside two percent of its total budget (an equivalent of GHC 58,576.70) to support WASH activities in the 2016 Composite Budget (KSDA, 2015).
- According to the DA, financial support to WSMTs to meet the cost of repair/maintenance needs is strictly demand driven. WSMTs need to make a formal request to the District Assembly for assistance after which designated officers are assigned to examine the problem.

Sustainable and Innovative Strategies for Addressing Major Repairs of Piped Schemes

- Apart from revenue from sale of water and community fund raising, the WSMTs in Akatsi South could not mention any innovative way of addressing major maintenance issues.
- All, the WSMTs admitted they had never heard of 'pool funding'. There were mixed reactions from the various WSMTs about the concept. The Akatsi WSMT was of the view that funds might not be available in the Pool at the time one needs it most.
- With regard to Bank loan, no WSMTs in Akatsi South showed any appreciable enthusiasm because of 'high interest' on the Bank loan.
- With the exception of Lume-Avete WSMT, all the other three had mixed feelings about the Insurance as a feasible funding strategy.
- *"Bank loan will attract interest, it will not help. Insurance is 'dead money', forget it. Pool Funding is better, but the question is, how will the fund be managed? However, to me, the best is revenue from the sale of water." (Dagbamete WSMT member).*

Sustainable and Innovative Strategies for Addressing Major Repairs of Piped Schemes

- The Akatsi WSMT is capable of self-financing because the system is able to generate enough revenue, which could finance major maintenance expenditure.
- Though Dagbamete piped scheme appears to be performing poorly in terms of standard management and financial practices, the homogeneous nature and religious set-up of the community provides a strong financial backbone to the operation of the WSMT.
- The DA further indicated that they have no arrangements in place to support the WSMTs to take loans for major repairs.
- The Akatsi South DA opined that there has not been any innovation beyond the status quo.
- The DA indicated that bank loans may also help but should be the last resort because of the high interest rate and the ceiling on the amount the banks can give to the WSMTs.
- DA staff indicated that they had knowledge about the Pool Funding Concept. Different opinions were however expressed. The consensus was that clear procedures and modalities must be spelt out first.
- *“...for me, there is no better promising innovative financing mechanism than for the water systems to generate their own revenue and be self-sustaining that is why the DA must monitor, supervise and give technical support to the WSMT.” WASH Engineer Akatsi South.*

Sustainable and Innovative Strategies for Addressing Major Repairs of Piped Schemes

- All the WSMTs in East Gonja had never heard of the pooled funding.
- The WSMTs are not enthused with the idea of taking bank loans for the fear of defaulting.
- **The Kpalbe WSMT** is well aware of insurance schemes but have never applied for their services.
- **The Talkpa-Abromasi WSMT** believes that setting realistic tariff and implementing it is the surest innovative and promising way to address major repairs.
- **The Daboashie WSMT** is aware of insurance schemes but think that they would not be able to afford it by paying the premium, since they are indebted to GWCL and are always not able to meet their bills.
- **The private operator of the Kpembe** could not tell whether the private owner (Water Health) has subscribed to any of the insurance schemes or would go in for a loan if the need arises.
- **The Makango WSMT** would not be able to take the decision to insure since the system is privately owned (Water Health).

Sustainable and Innovative Strategies for Addressing Major Repairs of Piped Schemes

- **The Salaga system** stands the chance of contributing more and benefiting more since the smaller systems rarely run into major maintenance problems
- **The Dashie WSMT** is aware of insurance schemes but think that they would not be able to afford it. The WSMT laments that they do not consider any bank granting them loan facility since they do not operate account
- **The WASH unit of the DWD of East Gonja** believes that the Salaga piped system and Water Health systems at Kpembe and Makango are capable of self-financing capital maintenance expenditure.
- **The DA unfortunately** has no arrangement in place to support WSMTs to take loans. The WASH unit of the DWD mentioned that they once suggested to the Management of the Salaga system to go for a loan facility to expand the system but they declined on grounds that they might default at payback time.
- Metering the Salaga system and accessing loan facility from the bank are some of the potential, promising, innovative financing mechanisms that can be implemented for addressing major maintenance.

Sustainable and Innovative Strategies for Addressing Major Repairs of Piped Schemes

- In Kintampo South, all the WSMTs and district staff interviewed identified revenue from water sales as the major means for financing major repairs.
- The District Assembly also noted that with the appropriate form of support to Amoma and Krabonso, those systems could also be self-financing.
- In addition to the sales revenue, the WSMTs identified the following as potential sources of funds for major repairs:
 - ✓ Bank loans (Krabonso, Nante, Amoma and Jema WSMTs);
 - ✓ Community contributions/levy (Krabonso and Anyima WSMTs);
 - ✓ Community fund raising durbars (Krabonso WSMT);
 - ✓ Support from the District Assembly (Jema, Anyima and Amoma WSMT);
 - ✓ Support from NGOs/Development Partners such as WVG (Anyima and Amoma WSMT)
- *'Sustainable financing would depend on the effective management of the piped system. We are able to generate some money through sales revenue. If every member of the WSMT continue to play their roles well and the piped system functions sustainably, we can generate a lot of money to finance future maintenance needs.'* [Amoma WSMT member].

Sustainable and Innovative Strategies for Addressing Major Repairs of Piped Schemes

- While some district staff were aware of the concept of pool-funding, none of the WSMTs interviewed had ever heard about it prior to the survey.
- The District Assembly mentioned that the idea of pool-funding was laudable, and further noted that the various WSMTs wouldn't really have a choice in rejecting it if a directive comes from the District Assembly for its implementation.
- All the WSMTs also indicated their willingness to join such a scheme (pool-funding) if it becomes operational, but based on certain conditions:
- Four out of the five WSMTs interviewed indicated that they would consider adopting insurance policies for some components of their piped systems. The components to insure would be those, which would require huge amount of money for replacement/repair. The Kintampo South District Assembly supported this position.
- The WSMT at Nante, which was not in favour of buying insurance policies for their water systems, cited potential difficulties/delays in the payment of claims by the insurance companies as a reason for their decision.



Key Findings from the Study

- The WSMTs and the DA reported that the various piped schemes could be self-financing if realistic tariffs are charged and the sales revenue is properly managed.
- There was poor records keeping culture among all WSMTs.
- There was willingness among the financial institutions surveyed to provide monetary support to the piped schemes if WSMTs meet their conditions.
- There was limited awareness and application of water sector guidelines for the management of the piped schemes by the WSMTs and the DA.
- Financial management of all the WSMTs was observed to be weak.
- There was no control over the disbursement of funds generated by the various WSMTs, and this could lead to funds mismanagement and inappropriate expenditure.
- Tariff settings was done arbitrarily by almost all the WSMTs; and tariffs being used by WSMTs were not submitted to the DA for approval.
- The DA and the WSMT supported the pool-funding concept on the basis that the modalities for its implementation were clearly spelt out from the on-set.
- Opinions however differed regarding insuring components of the piped schemes.

Recommendations

- Regular Monitoring Visits – from national , regional and district to the communities
- The DA should support the WSMTs to use the LCCA in determining a realistic operational tariff for the management of water facilities
- Formation and one time training of WSMTs is not enough. Regular refresher trainings in operation and management will ensure that they are always up to scratch with their responsibilities.
- All WSMTs should be supported to maintain the requisite record books and operate the mandatory bank accounts to facilitate their access to financial support from the Banks when the need arises.
- Provisions should be made for the procurement of water meters for public standpipes in communities where these were not available.
- The pool funding concept is considered by most of the respondents in the study as promising. Stakeholders want the pool funding to be guided by transparency and accountability if it is to be implemented.
- For the current regime of funds mobilization and management by the WSMTs to be effective, there will be the need for constant monitoring, support, capacity building and technical backstopping to the various WSMTs by the District Assembly and CWSA Regional Office.
- Instituting incentive packages for the WSMT members as a token of appreciation for their stewardship is key since the issue of volunteerism is demotivating.
- **The Small town systems should be handed over to CWSA to ensure they are managed effectively.**

Conclusion

- In the three districts studied, the WSMTs simply flouted the operational, governance, management roles and responsibilities. The communities are practicing some form of cost recovery mechanisms (collect tariffs for operation, maintenance, and repairs) but are not able to plan and mobilize enough funds for capital maintenance & major repairs.
- The reasons are due to poor management, low and unrealistic tariff and poor revenue collection efficiency. For WMSTs to effectively manage the funds generated the WSMTs require support and routine monitoring to ensure they are doing the right thing.
- The study could not unearth any innovative mechanisms of financing capital maintenance expenditure for piped schemes in the three districts.
- It was however identified that all the piped schemes could be self-financing if realistic tariffs are charged and the sales revenue are properly managed by the various WSMTs.
- The study conclude that innovative mechanisms for the financing of CapManEx of piped systems in Ghana may not necessarily fix the problems of poor service delivery
- What is critical, to effectively address CapManEx, relates to governance, management and financial management regimes of the WSMTs to bring about the necessary change

Validation workshop in Akatsi South



Validation workshop in East Gonja



Validation workshop in Kintampo South



