

All systems go Africa



The use of performance monitoring data for regulating and improving water services in small towns.

All Systems Go Africa
19-21 octobre 2022



Introduction



Thematic 3 : Improving evidence-informed decision making and accountability



The use of performance monitoring data for regulating and improving water services in small towns.

- Characteristic of small towns
- Monitoring and regulation for what purposes ?
 - *Answer to the different challenges*
 - *Informing decisions at all level*

Overview

1. Quick introduction – Perrine Bouteloup, Programme Solidarité Eau
2. Presentation of mechanisms from 2 countries for monitoring water services in small towns
 - Boubacar Macina, AGED2AEP, Mali
 - Mohammed Ibrahim Adokor, CWSA, Ghana
3. Panel discussion :
 - Macina Boubacar, Director, AGED2AEP, Mali
 - Mohammed Ibrahim Adokor, Director, Planning and Investments, CWSA
 - Saïdou Ouedraogo, General Secretary of Commune de Léo, Burkina Faso
 - Basilia Nanbigne , Executive Secretary, CONIWAS
 - Athanase Compaoré, Director, SAWES



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Technical and financial monitoring (STEFI) in Mali



Groupe AGED – 2AEP

Agence Générale d'Expertises pour le Développement
Assistance aux Adductions d'Eau Potable



Historic and organization of monitoring system in Mali

In Mali, the national strategy for drinking water supply recommends :

- Transfer from the State to municipalities of the management of water infrastructure
- Delegation of water services management to an operator (public or private)
- Technical and financial monitoring of water services

The DNH tested it, in 1993, during the implementation of water services projects in Northern Mali.

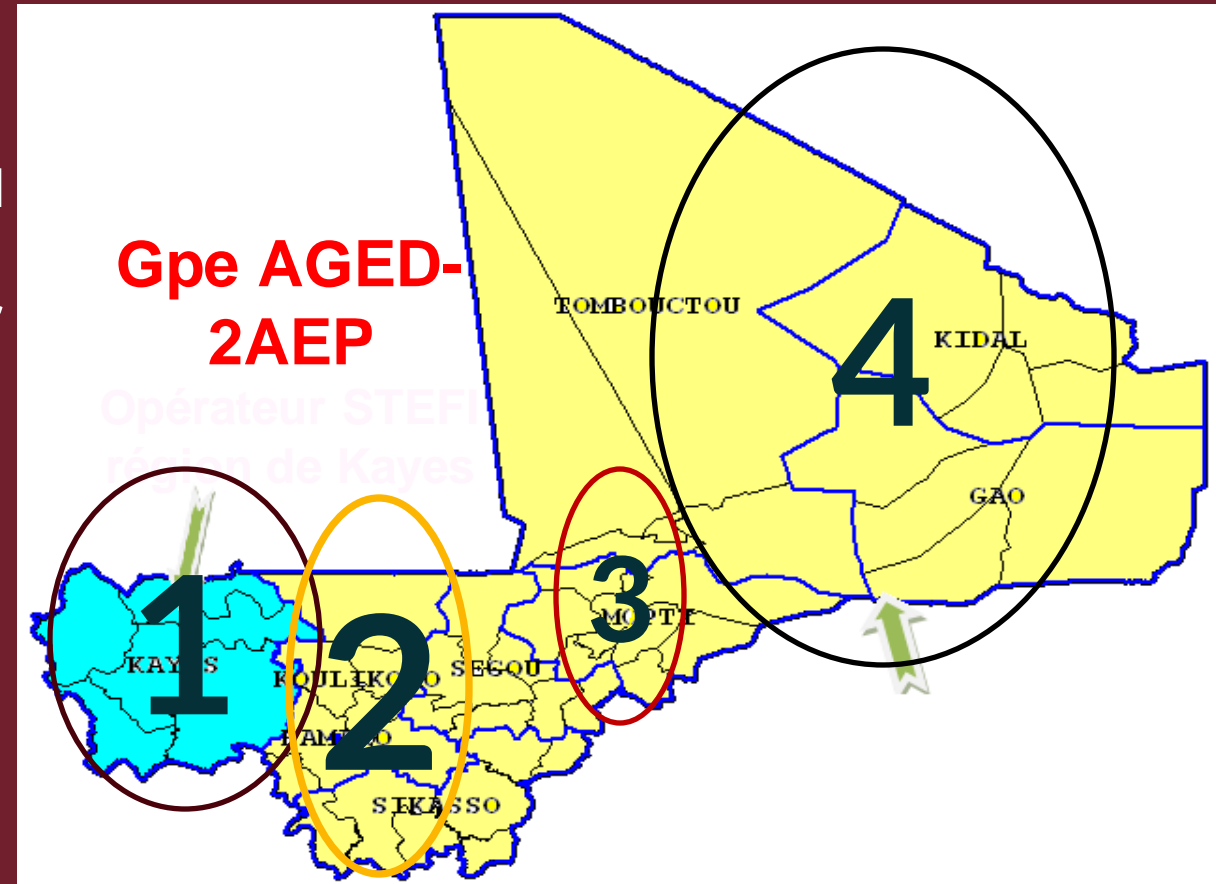
In 1998, it was broadcast at national level in Mali, produced by an operator CCAEP which later became GCSAEP.

Historic and organization of monitoring system in Mali

In 2004, following a tenders process, the “Direction Nationale de l’Hydraulique” selected two operators to provide technical and financial monitoring services for drinking water supply in two exclusive areas:

Other operators :

District de Bamako, régions de Koulikoro, Sikasso, Ségou, Mopti, Tombouctou, Gao et Kidal



Financier and technical monitoring system

STEFI operators carry out the following activities on behalf of municipalities and DNH (Direction Nationale de l'Hydraulique) :

- a. A half-year statement of the management accounts
- b. Technical inspection of facilities
- c. Capitalization of operating data in a database.
- d. Edition of audit reports by center, sent to operators and municipal authorities
- e. Restitution of this results in a assembly of users (HRD + Commune)
- f. Edition of semi-annual regional reports for the National and Regional Water Resources Departments in Bamako and Kayes.

STEFI operators are paid on a flat-rate basis : 20 CFA francs per m³ of water produced.

Exemple of annual operating account



Annual exploitation report : lien

General indicators in 2021	
1. Performance : 92% for the regional level	4. Self-funding capacity : 457.451.513 FCFA in 2021
2. Recovery rate : 95% for the regional level	5. Savings from user associations : 1,6 milliard
3. Operating income : 80% surplus (320 millions)	

Impacts of technical and financial monitoring system



- Control of operating cost and reduction of the water prices
- Better sizing of the infrastructures
- Transparency in management and regular information of the users which guarantee a social cohesion
- Contribution to a regulatory system by public authorities
- Improvement of regulation mechanism by public authorities (integration of the technical and financial monitoring system to the regulatory commission (CREE))

A better water services management contributes to the implementation of solidarity mechanisms.

Thank you!



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THE USE OF PERFORMANCE MONITORING DATA
FOR REGULATING AND IMPROVING WATER
SERVICES IN SMALL TOWNS.

Mohammed Ibrahim Adokor,
COMMUNITY WATER AND SANITATION AGENCY (CWSA),
Ghana



Content



1. Establishment and Mission of CWSA
2. Service Monitoring of Small Towns Water Systems
3. Uses of Monitoring Data
4. Monitoring of Small Towns Water Systems since 2018
5. Conclusions

Déroulement



1. Structure et mission de CWSA
2. Suivi des services d'eau dans les petits centres
3. Utilisation des données de suivies
4. Suivi des services d'eau dans les petits centres depuis 2018
5. Conclusions

Establishment and Mission

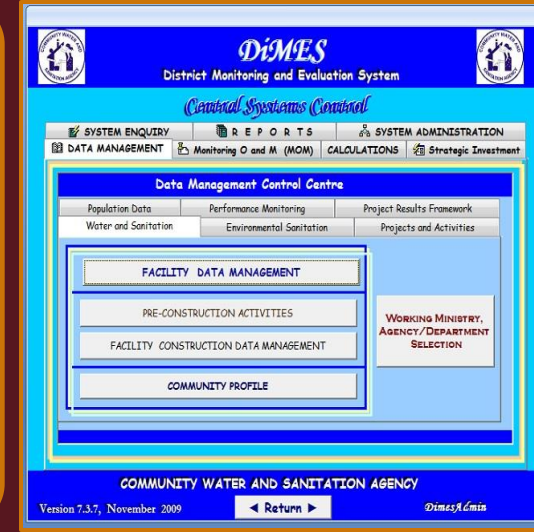
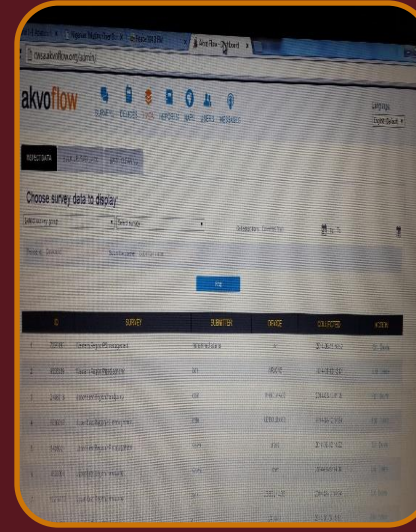
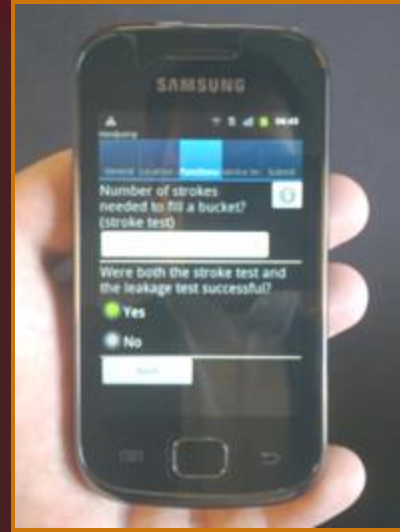
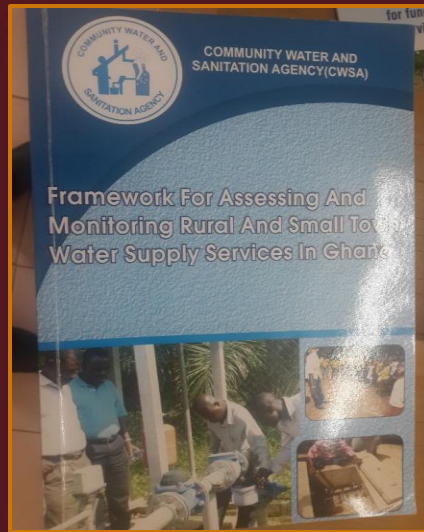


- Established by an Act of Parliament 1998, Act 564
- Committed to delivery of safe and sustainable water and related sanitation services to rural communities and small towns in Ghana.

Service Delivery Options



Service Monitoring – Indicators & Tools



INDICATOR SYSTEM:

- Functionality Indicators
- Service level Indicators
- Service provider Indicators
- Service Authority Indicators

AKVO FLOW:

- ✓ Smartphone – android
- ✓ GPS operated
- ✓ Camera
- ✓ Upload of Questionnaires

A DASHBOARD

- ✓ Cloud Storage of Data Collected with Mobile Phones
- ✓ Monitoring of data collection on the Dashboard
- ✓ Data Cleaning and Export to Excel;
- ✓ Data Analysis & Creation of Fact Sheets


DIMES

- ✓ CWSA Data Base
- ✓ Data Analysis
- ✓ Generation of Reports
- ✓ Sharing
- ✓ Interoperability of the ICT Systems involved

COMMUNITY WATER AND SANITATION AGENCY(CWSA)


Framework For Assessing And Monitoring Rural And Small Town Water Supply Services In Ghana

1. Indicators




COMMUNITY WATER AND SANITATION AGENCY

HOW-TO-DO GUIDE
for functionality and service monitoring



2. Smart Phones



3. Training & Data Collection

THE PROCESS



6. Corrective Action



5. Dissemination of Results



4. Data Cleaning & Analysis

Results - Upper East Facility Map

Legend

Piped schemes

Functionality

▲ Fully functional

▲ Partially functional

▲ Not functional

Handpumps

Functionality

● Functional

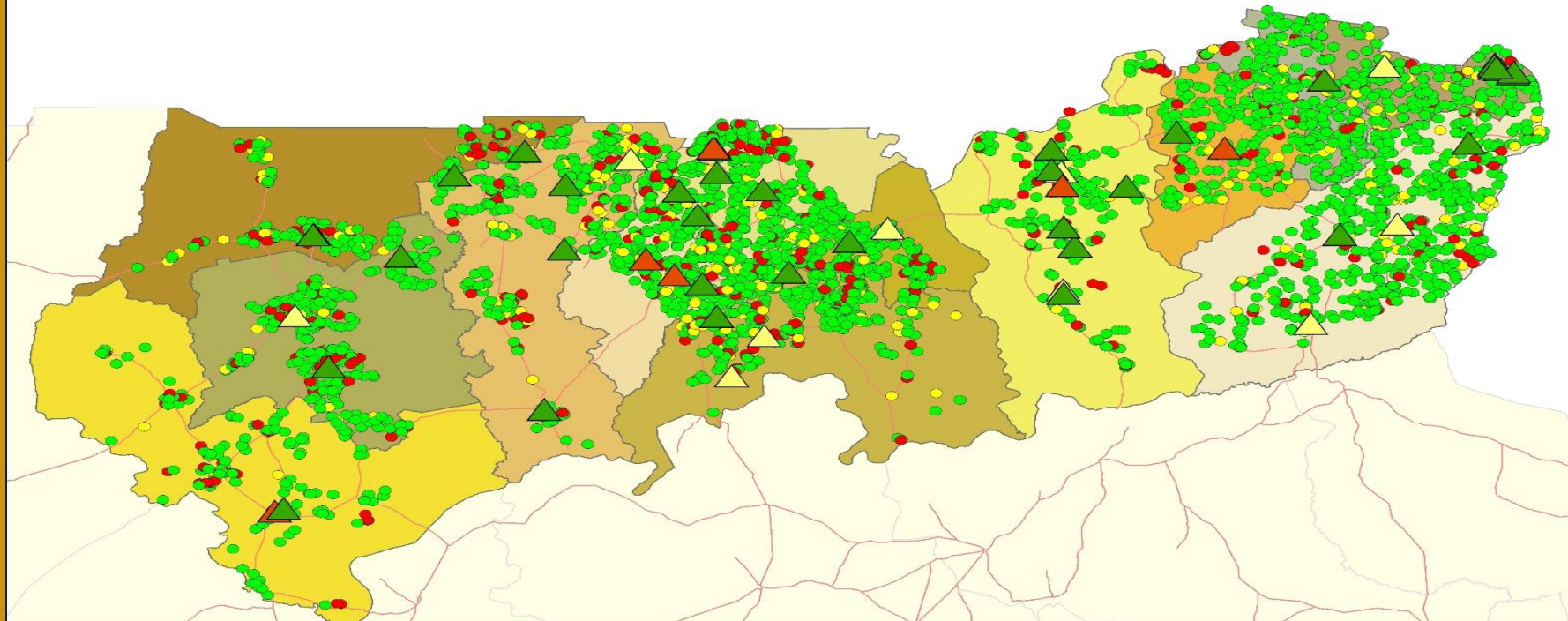
● Sub-optimally functional

● Not functional

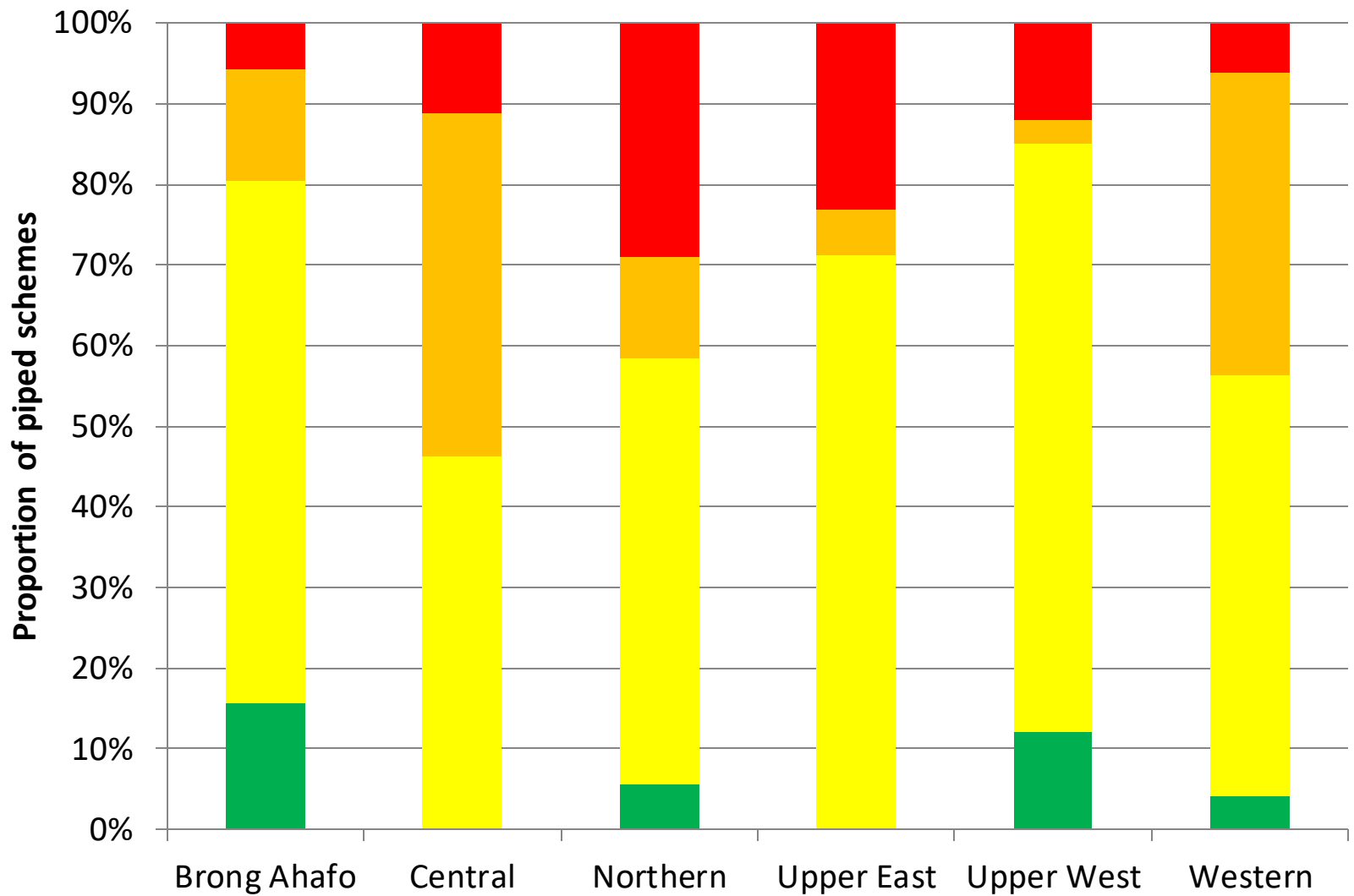
— Roads

■ Water body

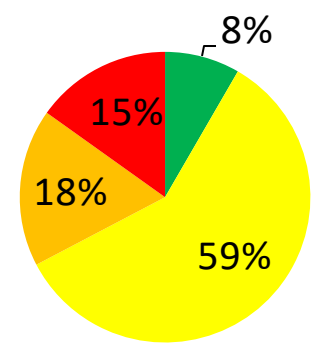
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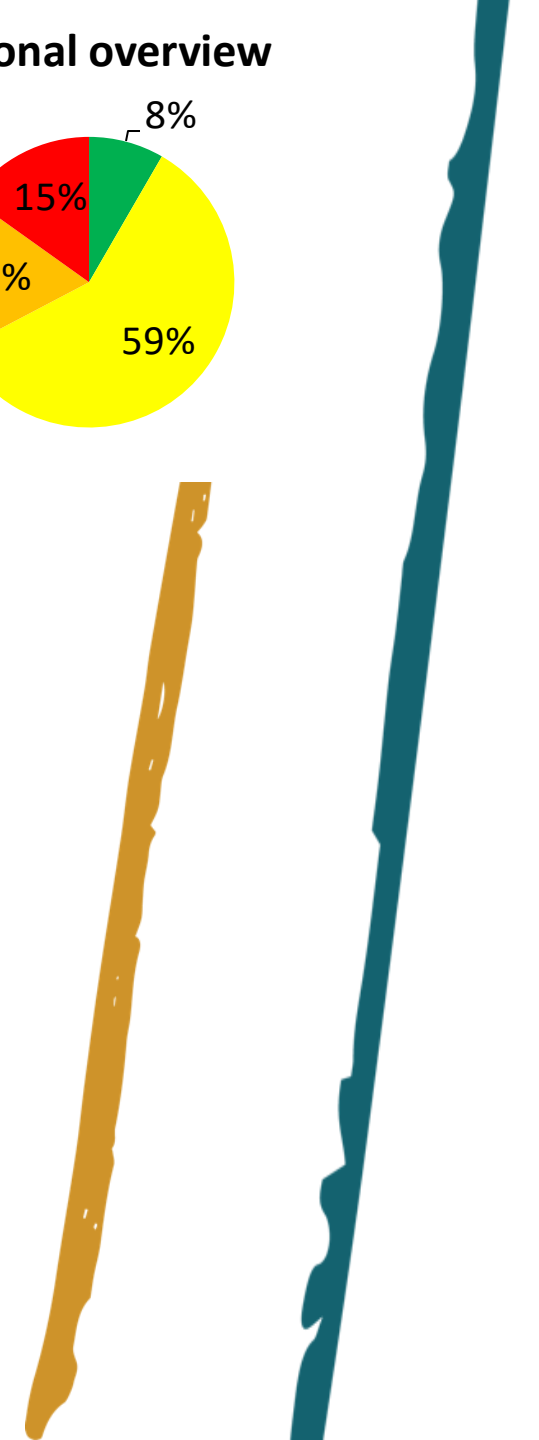
Results -Pipe Scheme Service



National overview



- I
- II
- III
- IV



Results of Survey



Service monitoring from 2018 (within the Framework of the Policy Rural and Small Towns Policy Reform)



Performance Contract Indicators



Management Indicators

Submission of Quarterly Progress & Financial Reports

Quality of Quarterly Progress Report

Submission of Annual Progress & Financial Report

Quality of Annual Progress Report

Submission of Safe Water Coverage Report

Submission of Maintenance Programme for Assets

Submission of Safety Plan

Submission of Water Systems Performance Evaluation Reports

Submission of Monthly Financial Reports

Submission of Water Safety Plan

Operational Indicators

- Total Water Production
- Total Water Distribution
- Total Water Consumption

Non-Revenue Water

Payment Rate for Domestic Subscribers

Payment Rate for Institutional Subscribers

Payment Rate for Commercial Subscribers

Income from Sale of Water

Other Incomes

New Connections with Water Meters

Operational Expenditure/Income

Average Vendors' Commission to Total Standpipe Revenue

Results - Revenue Collection Efficiency

Region	Payment Rate for Domestic Subscribers (%)		Payment Rate for Institutional Subscribers (%)		Payment Rate for Commercial Subscribers (%)		Average Collection Rate (%)	
	Target	Actual	Target	Actual	Target	Actual	Expected	Actual
Ahafo	90	78.10	85	69.18	95	73.12	90	73.47
Ashanti	90	70.60	85	59.70	95	71.30	90	67.20
Bono	90	71.00	85	72.50	95	72.00	90	71.83
Bono East	90	73.83	85	79.94	95	91.87	90	81.88
Central	90	84.75	85	76.25	90	83.25	88.33	81.42
Eastern	90	92.47	85	67.02	95	66.81	90	75.43
Greater Accra	90	61.00	85	76.2	95	77.10	90	71.43
North East	90	83.00	85	48.00	95	73.00	90	68.00
Northern	90	53.90	85	49.34	95	71.15	90	58.13
Oti	90	80.30	85	80.03	90	119.11	88.33	93.15
Savannah	90	75.72	85	62.89	95	55.65	90	64.75
Upper East	90	112.64	85	42.56	95	76.25	90	77.15
Upper West	90	83.00	90	70.00	95	80.00	91.67	77.67
Volta	90	82.06	85	45.55	95	30.86	90	52.82
Western	90	90.63	85	94.65	95	99.40	90	94.89
Western North	90	90.00	85	92.00	95	88.00	90	90.00

Results - Non-Revenue Water

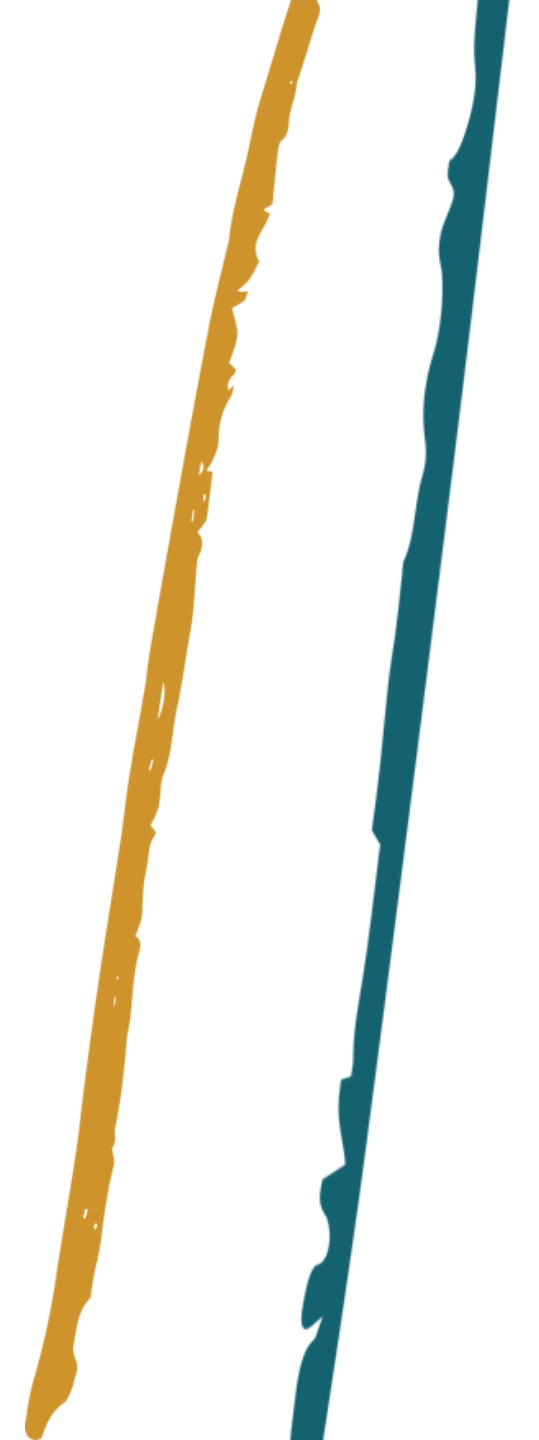
Region	Production (M3)	NRW (%)	NRW (M3)	Cost of NRW (GHS)	Revenue Collected from Water Sales (GHS)	Cost of NRW as a % of Revenue Collected
Ahafo	315,304.50	27.68	87,276.29	562,932.04	1,034,123.08	54.44
Ashanti	1,126,758.34	28.80	324,506.40	1,784,785.21	3,394,786.08	52.57
Bono	268,269.74	24.79	66,504.07	352,471.56	676,406.49	52.11
Bono East	175,885.30	16.06	28,247.18	151,687.35	683,417.85	22.20
Central	1,625,311.00	42.35	688,319.21	3,971,601.83	4,958,215.81	80.10
Eastern	984,183.00	28.19	277,441.19	1,561,993.89	3,490,607.63	44.75
Greater Accra	1,288,578.26	25.41	327,427.74	1,836,869.60	5,091,586.73	36.08
North East	245,753.28	10.00	24,575.33	137,621.84	1,005,583.59	13.69
Northern	511,059.00	30.10	153,828.76	846,058.17	1,499,425.66	56.43
Oti	357,676.00	33.10	118,390.76	615,631.93	1,132,352.14	54.37
Savannah	230,048.14	38.53	88,637.55	460,915.25	571,558.16	80.64
Upper East	567,266.95	31.01	175,909.48	879,547.41	2,382,560.93	36.92
Upper West	756,079.00	28.35	214,348.40	1,114,611.66	2,800,394.60	39.80
Volta	854,696.00	30.18	257,947.25	1,341,325.71	2,887,001.85	46.46
Western	629,214.30	23.47	147,676.60	812,221.28	2,704,695.82	30.03
Western North	345,526.20	28.30	97,783.91	537,811.53	1,213,788.85	44.31
Total	10,281,609.01	29.94	3,078,820.10	16,968,086.27	35,526,505.27	47.76

Conclusion :

- The policy reform in the Rural and Small Towns Sub-sector enables real time data collection by Professional Water System Managers as part of their routine work
- No need to wait for project funding to set up a data collection exercise



THANK YOU



Panel discussion

What are the issues for performing monitoring water services in small towns and set up regulatory mechanism to improve this services ?

- *Macina Boubacar, Director AGED2AEP, Mali*
- *Mohammed Ibrahim Adokor, Director, Planning and Investments, CWSA*
- *Saïdou Ouedraogo, General Secretary of Commune de Léo, Burkina Faso*
- *Basilia Nanbigne , Executive Secretary, CONIWAS*
- *Athanase Compaoré, Director, SAWES*

Moderation : Christophe Le Jallé, Directeur Adjoint, Programme Solidarité Eau



Thank you for you attention !

