

# TRAINING PROGRAMME:

## PROFESSIONALIZING RURAL WATER SUPPLIES - SHARING LESSONS AND STRATEGIES ACROSS REGIONS

Harold Lockwood, Aguaconsult, UK

Dr. Regina Souter, International Water  
Centre, Australia



**WATER**  
**WASH** 2023  
**FUTURES**

Achieving SDG6 in a Changing Climate



#WaWF23



## HOW FAR HAVE YOU COME?

- Less than 50 km?
- 1,001 to 5,000 km?
- 51 to 500 km?
- 5,001 to 15,000 km
- 501 to 1,000 km?
- >15,000 km

# WHO MANAGES YOUR WATER SUPPLY?

- Select a management option that best fits your situation and the name of the provider if you know it?
- Give an indication of whether you are happy with the overall service, reliability, price etc.



# AGENDA FOR THE DAY

## Session 1:

Introduction, definitions and typologies of rural water service provision

## Session 2:

Understanding the challenges and why we need to professionalize.  
Diagnostic group work.

## Session 3:

Case studies of professionalization – what is starting to work  
Panel discussion.

## Session 4:

What can you do to professionalize service delivery  
Group work and action plan.

# Why is professionalization of rural water so important?

- Low functionality rates and poor sustainability of rural schemes, particularly under CBM approaches is well documented – climate change will only exacerbate these challenges
- Achieving universal access and SDG 6.1 without rural is impossible - 80 % of people without even a basic service live in rural areas (JMP, 2021)
- Only 17% of countries reported having sufficient supply of trained personnel graduating annually from training institutions to meet needs of small-scale drinking water schemes ( $n = 102$ ; GLAAS, 2022)



Broader decentralization processes and sector reforms, coupled with demographic changes and demand for higher service levels as aspirations of rural population rise



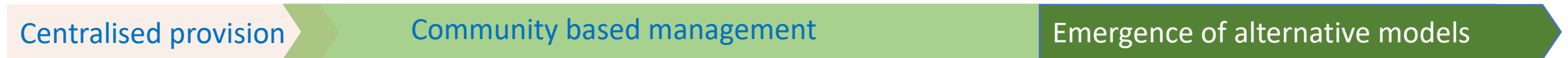
**Centralized approaches** fail to deliver improvements  
**Little or no community consultation**  
**Hardware driven**

UN International **Drinking Water and Sanitation Decade** (1980 - 1990)  
**Focus on 'software' and community participation**

**CBM evolves as predominant model** across most countries  
**User contribution to capital investment**  
 Rural water dominated and financed by international aid donors and NGOs  
 Abdication of (some) govt. responsibility

**Limits of CBM and failure to adequately support communities**  
**Need to support CBM**  
**Shift from voluntary CBM towards "CBM plus"**  
**Decentralization** and transfer of mandate but **limited capacity** to fulfil roles

**Service Delivery Approach**  
**Full life-cycle** requirements  
**Increasing aspiration** of rural populations  
**Strengthening enabling environment**  
**Alternative management models:** public utilities, PPP, delegated professionalized maintenance  
 Decentralization remains important, with **consolidation** as emerging trend



[Source: Adapted from Aguaconsult/WaterAid; 2018]

# Professionalization of rural water service delivery: *different things to different people*

- Adoption of good managerial and technical practices:
  - Training and certification
  - On-going accreditation
  - Improved financial management
- Strengthening unsupported or basic CBM:
  - Formalize roles and responsibilities
  - Move away from volunteerism – trained/paid staff
  - Outsourcing specific tasks to (private) suppliers
  - More structured, systematic support = “CBM +”
- **Alternative management models:** public utilities expanding service mandates into rural and private operators working under different contracting mechanisms to agreed standards
- Rethinking scale of service provision:
  - Aggregation of service areas under one management entity
  - Pooling of risk and possibilities for cross-subsidies and more qualified staff





# GROUP WORK 1: DEFINING SERVICE DELIVERY MODELS

Split by type of organisation into groups and talk through your different experiences, reflecting on:

- Which service delivery models can you identify?
- Who is responsible for day-to-day operation, maintenance and management?
- Who owns the assets and invests in capital maintenance?
- Where does the authority sit for ensuring water services are delivered in rural areas?
- Who is responsible for regulation of rural water services?

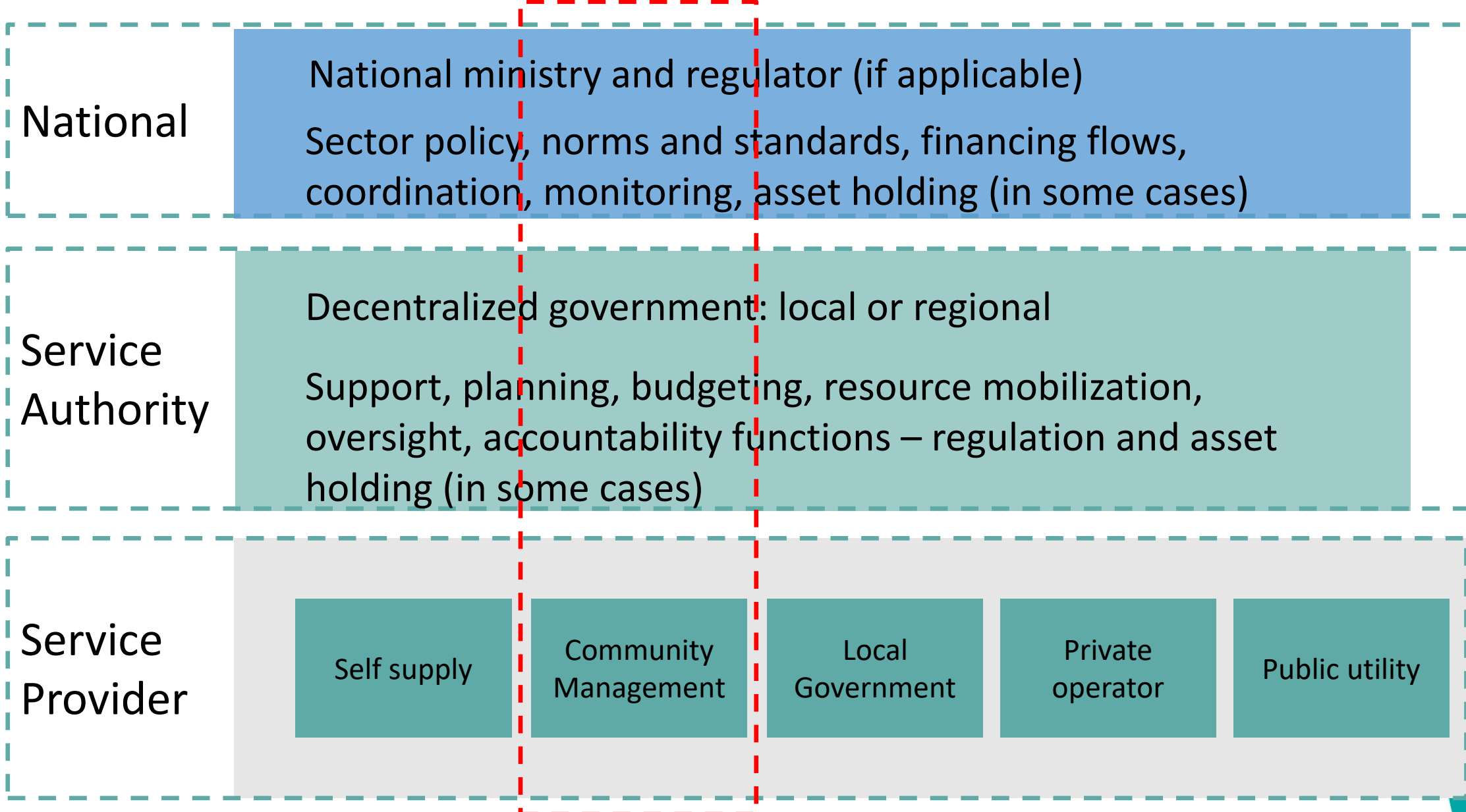




## TYOLOGY OF SERVICE DELIVERY MODELS

- Self Supply
- Community based management basic or supported (*CBM plus*)
- Private utility or operator
- Local government (district, municipality, commune) public provision
- Public utility

# SERVICE DELIVERY MODELS REPRESENT MORE THAN JUST THE OPERATOR



In reality the world is more complex and there are many different hybrids of models

**Supported Community-Based Management**

**Private Service Providers**

**Public Service Provision**

**CBM 1:**  
Water committee management with external support from the service authority

**CBM 2:**  
Water committee management with the formal delegation of some technical functions to private operators

**CBM 3:**  
Grouping of water committees into associations or federations to support water supply facility management

**PRIVATE 1:**  
Privately owned and operated schemes (invest, build, operate)

**PRIVATE 2:**  
Private operators delegated operations and management functions by local government

**PRIVATE 3:**  
Private companies delegated operations and management responsibilities by specialised asset holding entity

**PUBLIC 1:**  
Local government unit or department directly manages water supply infrastructure

**PUBLIC 2:**  
National or sub-national utility directly manages water supply infrastructure

**National Level (Enabling Environment)**

Regulatory agency, ministry, or delegated third-party entity (i.e., local government)

Independent regulatory agency, designated entity (i.e., Ministry) and / or asset holding entity

Designated entity (i.e., Ministry) or informal self-regulation

Independent regulatory agency or designated entity (i.e., Ministry)

**Service Authority Level (Local or regional government)**

Local government, or other

**Service Provider Level**

Water Committee

Private Operator

Local Mechanic

Private Operator

Association or federation

Local government unit or department

National or sub-national utility

**Examples**

Ghana; Mali; Mozambique; Peru; Senegal; Tanzania; The Philippines; Uganda; Zambia

Ghana; Uganda;

Tanzania; The Philippines, Brazil (Ceará), Honduras

Ghana, India

Mali; Mozambique; Rwanda

Mozambique; Senegal, Benin

India; Peru; Tanzania; The Philippines; Uganda

Ghana; Tanzania; Uganda; Zambia



# KEY TAKEAWAY MESSAGES:

**Professionalization is not just about the service provider and their technical and managerial capacities**

- **Building the architecture to support professionalization:**
  - Clarifying legislation to underpin sector institutional roles and management arrangements
  - Identifying asset ownership – who is responsible for what and establishing independent asset holding entities
  - Establishing regulatory arrangements
- **Establishing financing mechanisms:**
  - Decentralization of public funds
  - Viable tariff setting to support operations (regulator)
  - Identifying subsidies and mechanisms for delivery
  - Attracting external funding from donors or repayable financing from private sector
- **Government role in influencing consumer behaviours**
  - To pay water tariffs – no electioneering
  - Water conservation

# THE SEVENTH VIDEO: UNDERSTANDING THE CHALLENGES OF COMMUNITY-BASED MANAGEMENT



**IRC**

# SESSION 2: DIAGNOSING PROFESSIONALIZATION FOR RURAL WATER SUPPLY



# THE BUILDING BLOCKS OF A STRONG WASH SYSTEM



**INSTITUTIONAL  
ARRANGEMENTS &  
COORDINATION**



**FINANCE**



**SERVICE DELIVERY  
INFRASTRUCTURE**



**REGULATION &  
ACCOUNTABILITY**



**MONITORING**



**WATER RESOURCE  
MANAGEMENT**



**PLANNING**



**LEARNING & ADAPTATION**

# BUILDING BLOCKS THAT SUPPORT PROFESSIONALIZATION



## INSTITUTIONAL ARRANGEMENTS & COORDINATION

**This building block supports professional service delivery when:** Sector laws, policies and institutions for service provision, and service authority exist and have clearly defined mandates and sufficient capacity is in place. Coordination mechanisms are in place.



## SERVICE DELIVERY INFRASTRUCTURE

**This building block supports professional service delivery when:** Roles and responsibilities and capacity are in place for managing infrastructure, including asset ownership; technologies and service delivery models must be appropriate for the context.



## MONITORING

**This building block supports professional service delivery when:** National and subnational monitoring frameworks exist, are readily updated, and data is used proactively to improve the performance of service providers and quality of services on a routine basis.



## PLANNING

**This building block supports professional service delivery when:** Clear frameworks exist developing plans and budgets at all levels of government and for all types of service providers, as well as when there is capacity development programmes in place.



# BUILDING BLOCKS THAT SUPPORT PROFESSIONALIZATION



## FINANCE

**This building block supports professional service delivery when:** Clear frameworks and sufficient funding from different sources are available to meet life-cycle costs, including targeted subsidies that be required either for poor consumers or for service providers.



## REGULATION & ACCOUNTABILITY

**This building block supports professional service delivery when:** A regulatory framework with defined functions and mechanisms, and the capacity to oversee service providers and set viable tariffs. Mechanisms are in place to hold service providers to account for equitable services.



## WATER RESOURCE MANAGEMENT

**This building block supports professional service delivery when:** There are clear frameworks for the allocation and management of water abstraction and water quality, which are implemented through a range of systematic practices.



## LEARNING & ADAPTION

**This building block supports professional service delivery when:** Capacity and frameworks exist to capture lessons learned and to adapt and update service delivery models, management approaches, and the wider building blocks in the face of change and lessons learned.

## GROUP WORK 2: BUILDING BLOCK DIAGNOSTIC

- Divide into country groups
- Briefly discuss the status of each building block and strengths and weaknesses
- Identify the most critical building block(s) that enquire strengthening to enable more professionalized service delivery, and unpack why
- 30 minutes for discussion and preparation to present back to plenary







## PANELLISTS

- Kylie Climie, Power and Water Corporation, NT, Australia
- Uatea Salesa, Secretariat Pacific Community
- Nur Aisyah Nasution, Ministry of National Planning and Development Indonesia
- Shona Fitzgerald, World Bank



# PANEL DISCUSSION

- *How do you interpret professionalisation in your country?*
- *What is happening in your country or programmes to support this?*



# CASE STUDIES OF PROFESSIONALIZATION

---

- Indigenous Essential Services, Northern Territory, Australia
- SNV Kenya
- PASIMAS, Indonesia
  - Peru - supported CBM
  - Brazil - association of CBM
  - Uganda - CBM with professionalized maintenance providers
  - Rwanda - district PPP for O&M
  - Ghana – public utility provision

# PERU: SYSTEMIC, NATION-WIDE SUPPORT FOR CBM

## PUBLIC FUNDING

Increase in transfers to local governments for sector investments from US\$ 2.5 million in 2015 to US\$ 32 million in 2020

## REGULATION

SUNASS -*Superintendencia Nacional de Servicios de Saneamiento* - extending regulatory arrangements to rural water sector

> 28,000 CBM operators serving 86% of rural population

## DIRECT SUPPORT TO CBM

Municipal Technical Area - *Áreas Técnicas Municipales*

## ASSET OWNERSHIP

*Decreto Supremo 1280 (2016)* makes Municipal Governments responsible for major repairs and rehabilitation works

Reglamento de calidad de la prestación de los servicios de saneamiento brindados por organizaciones comunales en el ámbito rural



Aprobado por Resolución de Consejo Directivo N° 015-2020-SUNASS-CD y publicado en el Diario Oficial El Peruano el 31 de mayo de 2020

# CEARÁ STATE BRAZIL: FEDERATED MODEL WITH CLEAR RESPONSIBILITIES FOR FINANCING



**State utility (CAGECE)** –  
new system construction,  
monitoring and training,  
laboratory services

**Federation:** 8 regional units -  
major maintenance, billing, water  
quality testing

**Member Associations:** 729 community  
service providers - day to day O&M, user  
awareness meter reading

**Financing is aggregated and responsibility for costs are clearly defined at different levels:**

- Association tariffs cover operational costs and technical support.
- Federation is responsible for financing capital maintenance of assets with short life-spans and corrective maintenance of major assets.
- The state government pays for capital maintenance and new investment from general state taxes.

Source: World Bank; 2017



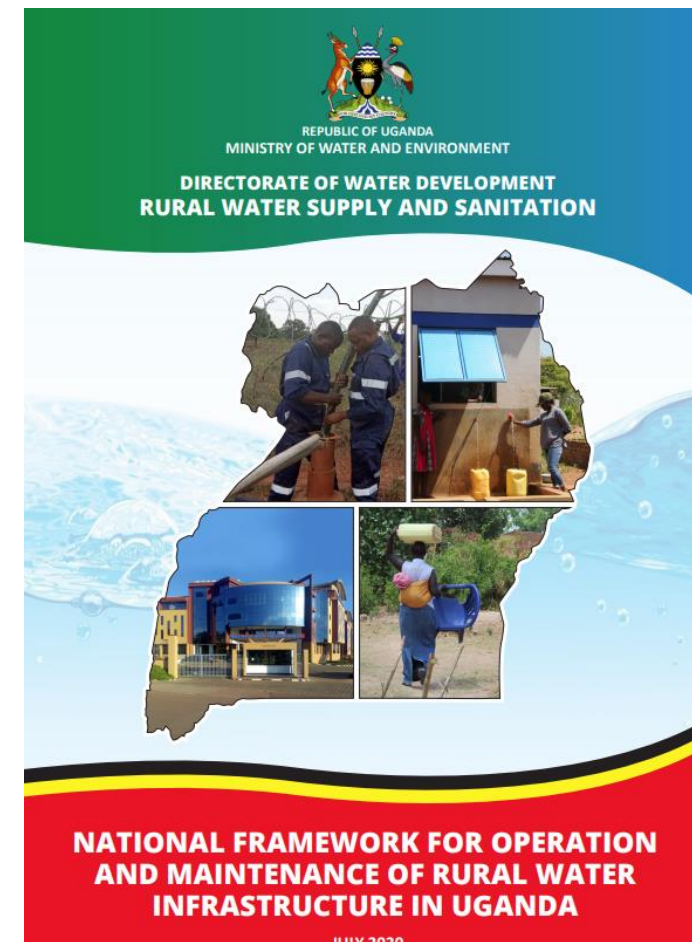
# UGANDA: NEW NATIONAL O&M FRAMEWORK FOR WATER POINT MANAGEMENT

- Recognizes and responds to short-comings of conventional CBM
- Defines professional management structures with 'Area Service Providers' providing maintenance and other tasks in support of CBM
- Performance- based contracts signed with District Water Boards and communities, including core KPIs

**Whave:** social enterprise operates across 10 Districts

- ~ 275,000 consumers under ~900 maintenance agreements
- Focus on staff training, oversight and spare parts quality
- Functionality rates of ~98% and repair times < 2 days on average
- Acts in advisory capacity to help local government operationalize new O&M framework
- Managed on commercial lines with potential for financial viability through aggregation of service areas and pooling of risk
- Still reliant on development partner financing support, but increasing scope for domestic public financing and increasing tariff revenue

<https://www.whave.org/>



**Whave**  
a fair future

# RWANDA: DISTRICT LEVEL PUBLIC-PRIVATE PARTNERSHIP FOR OPERATION AND MAINTENANCE



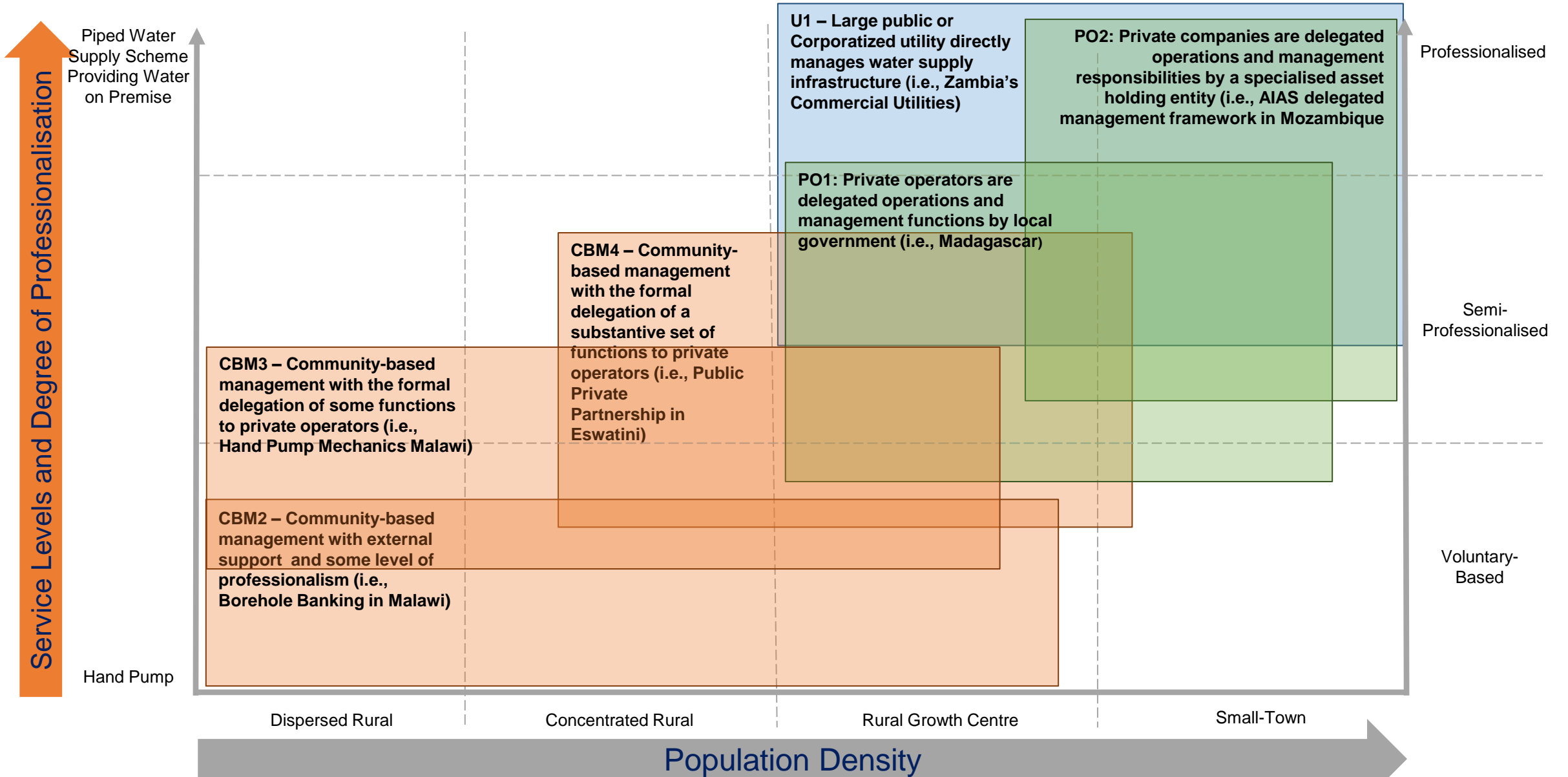
- 46 licensed operators for piped schemes working across 27 rural districts – on-going trend of rationalising to fewer number of larger, better-performing operators
- District government retains ownership of the assets and receives % of sales revenue as fee
- Community structures still play a role in liaising with operator – maintains trust
- Forum of Private Operators of water and sanitation systems in Rwanda (FEPEAR) - umbrella organization to support PPP capacity
- Professionalization of operators remains a work in progress:
  - Only 24% of schemes with chlorination units
  - 46% of surveyed operators with trained staff on O&M
  - High rates of metered connections (99%) but low metering of bulk supply
  - 79% average rate of billing collection efficiency

# GHANA: EVOLVING ROLE FOR CWSA AS PUBLIC RURAL UTILITY

- CWSA initiated reforms in 2017 to professionalize management of rural water services – response to perceived failures of CBM to deliver expected levels of service
- Amendment of the Community Water and Sanitation Agency Act (1998) to transform CWSA into utility service organization to operate and manage piped schemes
- New policy (2022) confers asset ownership of larger piped schemes to CWSA but to date only operating ~170 out of 1,022 – also has power to delegate to private operators
- Some tensions with Ghana Water Company Limited (urban) and requirement for regulation
- District Assemblies still responsible for community managed schemes (point sources)



# RURAL POPULATIONS ARE NOT MONOLITHIC AND MORE THAN ONE ARRANGEMENT CAN EXIST IN SAME GEOGRAPHY



# GROUP WORK 3: ACTION PLANNING FOR PROFESSIONALIZATION

## What can you do to professionalize rural water service delivery in your country?

- Look back at the analysis of strengths and weaknesses of the building blocks from the second group exercise
- Work on a matrix for improving professionalization:
  - Select 3 or 4 of the most important areas for action and assess what needs to change?
  - Who do you need to be involved to address reform or improvement?
  - What is the timeframe for such change?
- You will have 60 minutes to work on your plan

# RESOURCES

- [www.Aguaconsult.co.uk](http://www.Aguaconsult.co.uk)
- [www.ircwash.org/wash-systems-academy](http://www.ircwash.org/wash-systems-academy)
- [www.rural-water-supply.net/en/](http://www.rural-water-supply.net/en/)
- [www.uptimewater.com](http://www.uptimewater.com)
- [www.globalwaters.org/real-water](http://www.globalwaters.org/real-water)

THANK YOU FOR ATTENDING AND DON'T FORGET TO  
PROVIDE FEEDBACK ON THE DAY VIA THE CONFERENCE APP

Harold Lockwood

[h.lockwood@aguaconsult.co.uk](mailto:h.lockwood@aguaconsult.co.uk)

Dr. Regina Souter

[r.souter@griffith.edu.au](mailto:r.souter@griffith.edu.au)

**WATER**  
**WASH** 2023  
**FUTURES**

Achieving SDG6 in a Changing Climate