



# PROFESSIONALIZING RURAL WATER SUPPLY MANAGEMENT

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**WATER  
&  
WASH** 2023  
FUTURES

Achieving SDG6 in a Changing Climate



#WaWF23

# WHY IS PROFESSIONALIZATION IMPORTANT FOR RURAL WATER?

- Low functionality rates and poor sustainability is well documented particularly for CBM – climate change will only exacerbate underlying stresses
- Achieving universal access for 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 have sufficient supply of trained personnel 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** fails to deliver expected results  
**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

Centralised provision

Community based management

Emergence of alternative models

Pre-1980s

1990

2000

2010

2015

2020

Millennium Development Goals

SDGs

# PROFESSIONALIZATION MEANS DIFFERENT THINGS TO DIFFERENT PEOPLE

- Adoption of good managerial and technical practices:
  - Technical training and certification
  - On-going accreditation
  - Improved financial management and business practices
- Strengthening unsupported or basic CBM:
  - Formalize roles and responsibilities
  - Move away from volunteerism – trained/paid staff
  - Outsourcing specific tasks to (private) suppliers – maintenance providers
  - More structured and 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





# 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 covering 86% of rural pop.

## 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 CBM 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



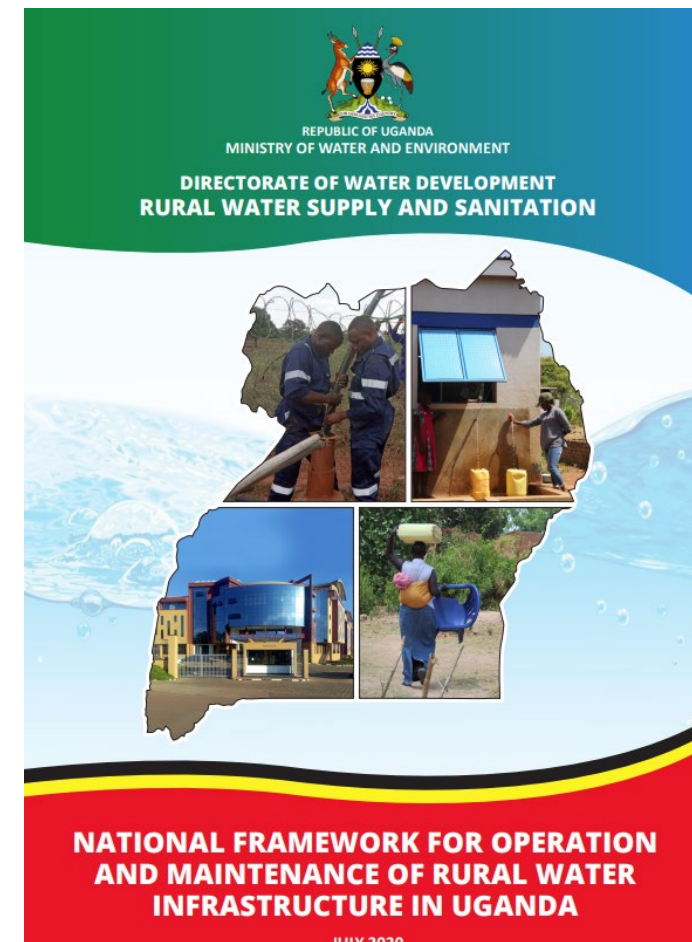
# UGANDA: NEW NATIONAL O&M FRAMEWORK FOR WATER POINT MANAGEMENT

- 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

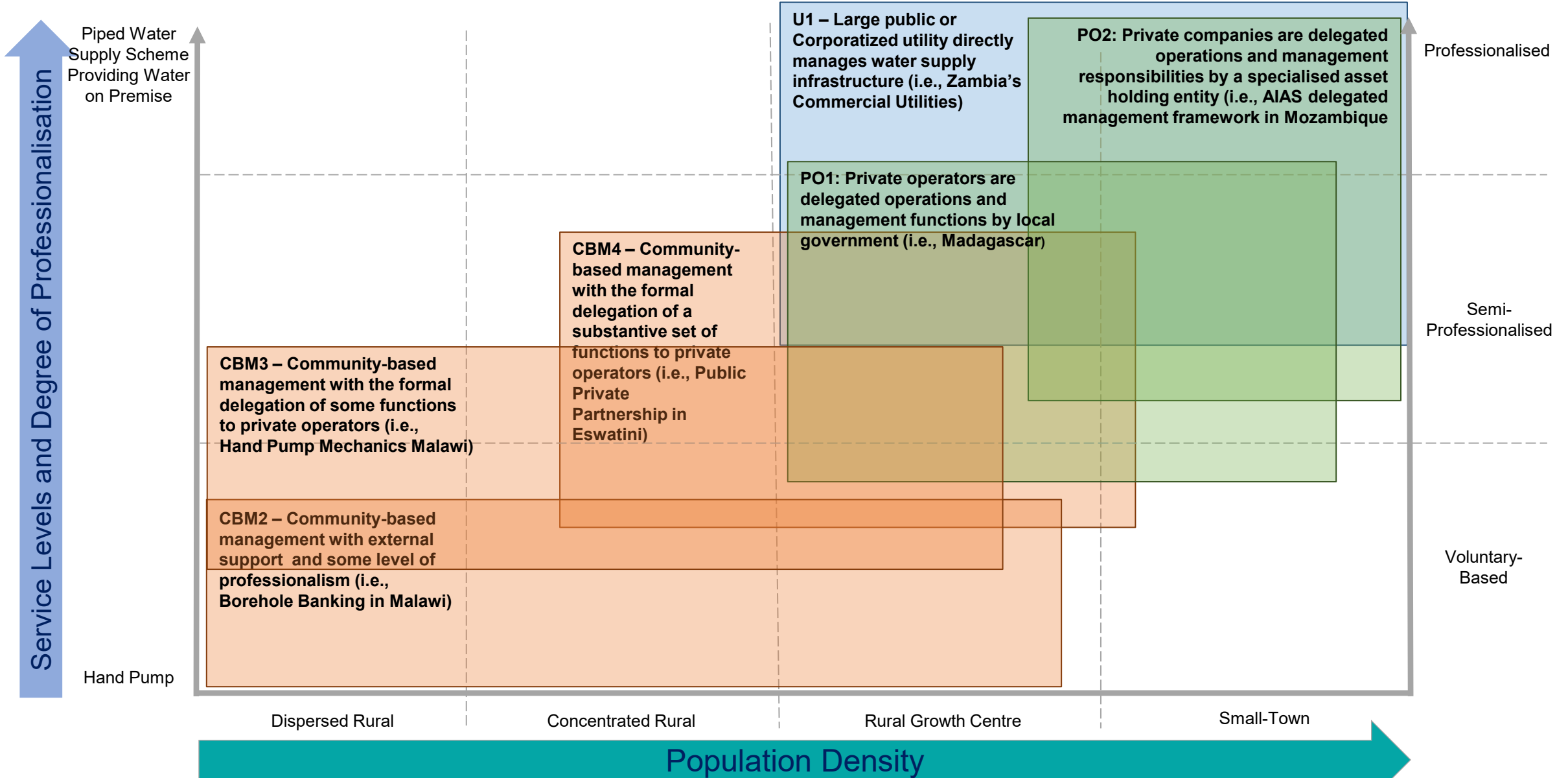
# RWANDA: DISTRICT LEVEL PUBLIC-PRIVATE PARTNERSHIP FOR OPERATION AND MAINTENANCE



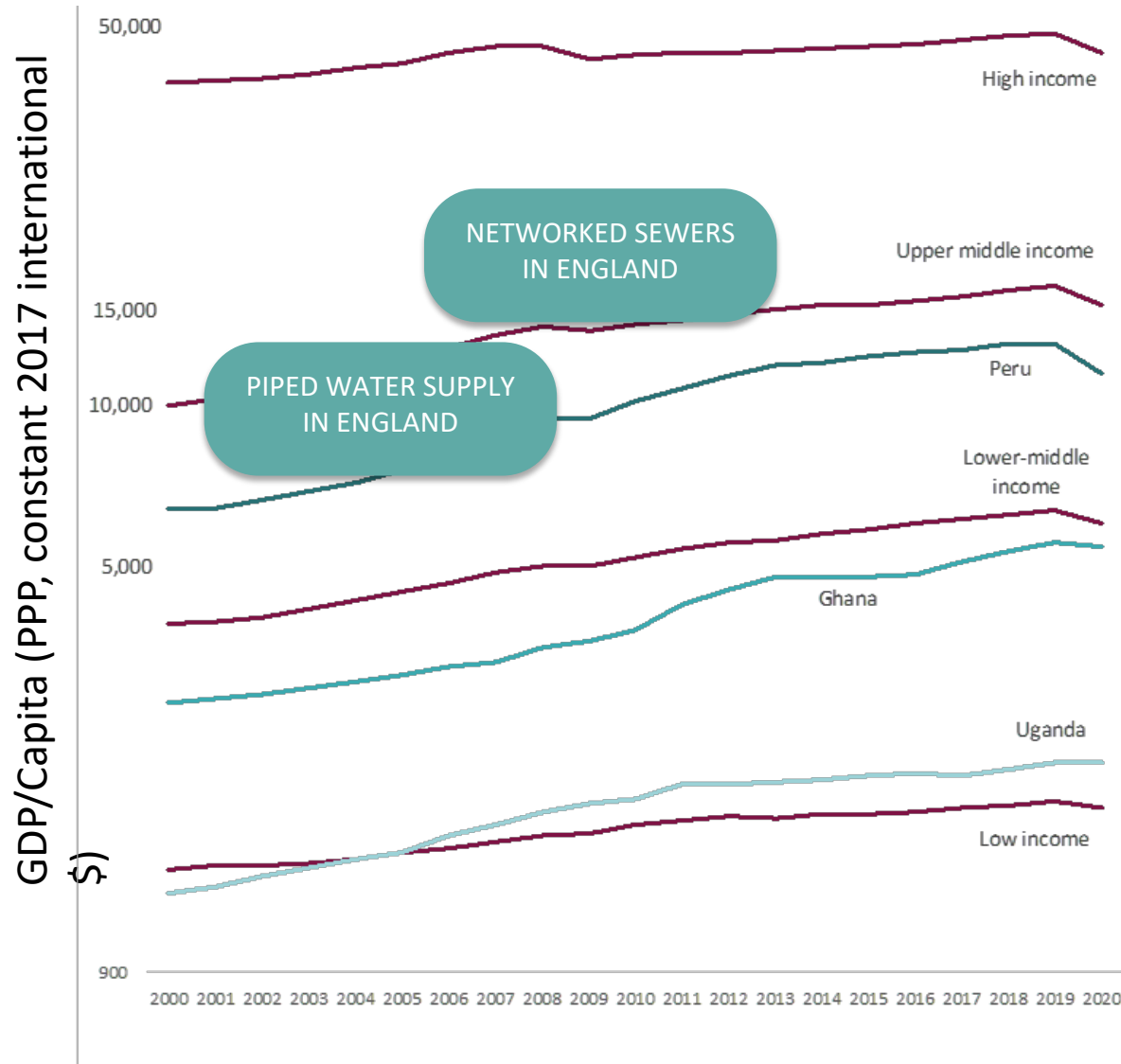
- 46 licensed operators for piped schemes working across 27 rural districts – on-going trend of rationalising to fewer number of larger, better-performing operators
- District government retains ownership of the assets and receives % of sales revenue as fee
- Community structures still play a role in 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



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



# PAYING FOR PROFESSIONALIZATION: SERVICE LEVELS TEND TO FOLLOW GROWTH IN OVERALL WEALTH



- England reached full coverage with professionalized water at ~\$10,000 GDP/capita and sewerage at ~\$15,000 (adjusted mid-1960s)
- By comparison (World Bank 2020)

Mozambique: \$1,229	Senegal: \$3,320
Rwanda \$2099	Kenya: \$4,339
Uganda: \$2,175	Fiji: \$4,646
Mali: \$2,225	Ghana: \$5,445
Solomon Is. \$2,305	India: \$6,165
Tanzania: \$2,635	Philippines: \$7,953
Zambia: \$3,277	Perú: \$11,260





## LEARNING FROM THE PAST: OECD EXPERIENCE

*“The “three lows”:*

- *Low revenue*
- *Low investment*
- *Low quality of service*

(Hendry and Akoumianaki, 2016)



# OECD: COMMON APPROACHES TO PROFESSIONALIZING RURAL WATER

- Technical assistance, training and translation of complex resources, laws and guidelines into more user-friendly formats
- Formalizing operator qualifications and on-going certification programmes
- Structured programs of financial support for investment, including grants, loans and improving credit-worthiness
- Imposition of public health regulation to progressively improve service quality
- Aggregation of schemes under single management entity

California Rural Water Association

LAST CHANCE TO REGISTER  
RESERVE YOUR SPOT.

REGISTER TODAY

WATER DISTRIBUTION SYSTEM

OPERATOR TRAINING

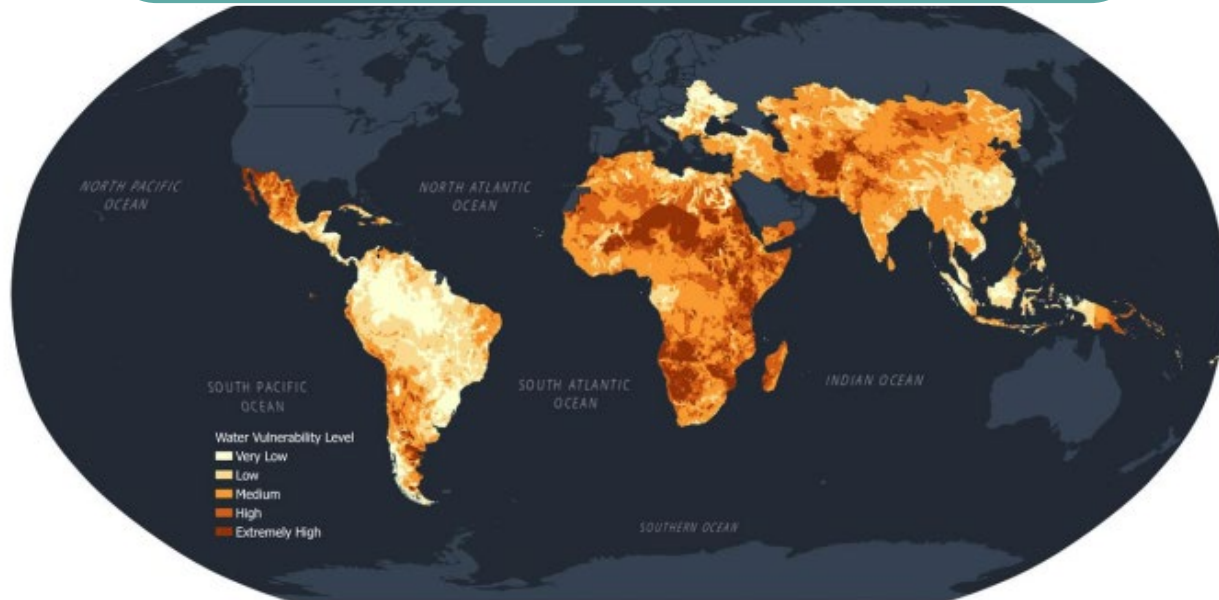
LOCATION	MO/DAY
NEW [Sacramento]	Aug 10-11
NEW [Rialto]	Aug 24-25



# PROFESSIONALIZATION MATTERS FOR CLIMATE CHANGE: MANAGEMENT, TECHNICAL AND FINANCIAL RESILIENCE

Water insecurity is overwhelmingly an issue among the most vulnerable populations - 1.42 billion people – including 450 million children – live in such areas of high or extremely high water vulnerability (UNICEF 2021)

*“In rural areas, deficiencies in management capacity and lack of professionalized service provision puts drinking water services at greater risk from climate change impacts” (State of the World’s Drinking Water. 2022)*



Map of areas of high or extremely high water vulnerability (UNICEF, 2021)







# ACCELERATING PROFESSIONALIZATION OF RURAL WATER SERVICES: POLICY IMPLICATIONS

- Policy responses require **flexibility and multiple solutions** and not a *one-size fits all* approach - alternative models are showing progress and can improve performance
- Expanding **scale of operations** is a common feature and aggregation brings multiple benefits through economies of scale and specialist HR
- **Timescales for reform and change are lengthy** and require significant investment to adjust legislation, clarify institutional roles and asset ownership, contracting modalities – think a decade
- Professionalization requires **increased public funding** to build capacity and to attract new investment - targeted support and subsidies will be required in most cases to ensure viability of rural operators





*“COMMUNITY BASED  
MANAGEMENT IS  
DEAD, LONG-LIVE  
COMMUNITY BASED  
MANAGEMENT!”*

- Emerging alternative arrangements focus on larger piped schemes with point source supplies still relying on CBM
- Expanding public utility and private operator models still need to engage with existing water supplies, retaining some element of community management and control
- CBM is - and will be - relevant, but needs significant investment, support and formalization to work effectively and meet the challenges posed by climate change

*Join us for the one-day training on professionalization of rural water on Thursday this week in Room E*

Harold Lockwood

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[www.Aguaconsult.co.uk](http://www.Aguaconsult.co.uk)

[www.globalwaters.org/real-water](http://www.globalwaters.org/real-water)

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