Water and sanitation service models for the urban poor:

*Defining stakeholder relations, achieving sustainable finance*

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*Defining stakeholder relations, achieving sustainable finance*

Content of session

**Introduction:** Challenge and strategy

**Case studies:** Ghana, Mozambique, Kenya

**Group-work** on delegated management
1. The challenge > complex environments

Expanding watsan services in poor urban zones:
a major challenge for utilities
1. The challenge > complex environments

Rising demand in complex settings:
- Lack of space and access
- Administrative barriers
- Low income population
- Loose social fabric
- Illegal interferences

Lack of capacity and understanding:
- Insufficient expertise in utilities
- Lack of appropriate model
1. The challenge > close the provision gap

- There is a major provision gap:
  Millions of people without access to services of official providers (up to 50% in Africa)

Alternative service providers fill the gap:
  - They play a very significant role
1. The challenge > close the provision gap

Figure. In some countries many households rely on small scale private service providers for water supply

(Kariuki and Schwartz 2005)
1. The challenge > close the provision gap

Alternative service providers:

- Play a very significant role
- Provide different types of services...
1. The challenge > close the provision gap

Alternative service providers:
- Play a very significant role
- Provide different types of services
- Are often informal, rarely regulated
1. The challenge > close the provision gap

**Price of Water by Type of Service Provider**

- Public
- Private
- Piped
- Unitized

1. The challenge > close the provision gap

Alternative service providers:

- A very significant role
- Different types of service
- Often informal and rarely regulated
- Have various status: entrepreneurs, CBOs, NGOs
2. Strategy

To serve the urban poor better requires:

- **Supporting utilities** in helping them respond in the short/medium term to this rising, complex demand.

- **Designing scalable solutions** adapted to the context of poor urban settlements (constraints/opportunities)
2. Strategy

Scalable solutions build on:

- Appropriate technologies
- Effective approaches
- Financially viable models
- Sustainable management models
  a) Accountable relationships
  b) Delegated management
Forms of accountability:

- Compliance (being held to account)
- Transparency (giving an account)
- Responsiveness (taking account of)

Adapted from www.AccountAbility.org
2. Strategy > accountable relationships

The state - public authorities

Citizen/client

Service providers

Client power

Long route of accountability

Compact

Voice

Short route

Watsan services

World Development Report 2004 – Making Services work for poor people
2. Strategy > accountable relationships

Citizen/client

Public authorities

Voice

NGOs

Water boards, Regulatory bodies, Asset owners

Compact

Alternative Providers

Utility

Client power
Delegated management (DM)
The process of assigning or transferring authority, decision making or a specific administrative function from one entity to another.

*In poor urban zones, typically:*

- Operation
- Maintenance
- New connections
- Revenue collection

Public utility delegates to:

- Private, NGO, CBO, CBE...
Three important issues:

1. DM as *interim* solution vs. *long-term* solution
2. DM in *greenfield* sites vs. sites with *existing services*
3. DM with *CBO* vs. *local private* operator
Delegated Management for Water: Kotei, Kumasi

- City has grown rapidly, swallowing up what were villages only a few years ago.
- Ghana Water network does not reach Kotei, and is not likely to in the short to medium term.
- Existing supply:
  - Shallow hand-dug wells.
  - Purchased at high price from on-sellers
Delegated Management for Water: Kotei, Kumasi

- New local boreholes are the only alternative to improve supplies in the short to medium term.
- But who will own it and who will run it?
- Is it urban or is it rural (CWSA or GWCL)?

Ghana Water Company (AVRL)

“If you want us involved ... ...we must own it.”

Community through the CMC

“We don’t trust Ghana Water.”

“USAID gave the money for us not them.”
3. Case studies > Ghana: Kumasi

Delegated Management for Water: Kotei, Kumasi

- Extensive consultation process with all stakeholders
  - Traditional Leaders, Community, Ghana Water.

Ghana Water Company (AVRL)
Offered to drill the boreholes with their rig at their cost.

Community Management Committee
Understood what was involved to manage and maintain the asset in the long term.
3. Case studies > Ghana: Kumasi

**GWCL** - Owns the asset and operates the system. Responsible for supply and quality of water. Agrees tariff with CMC not less than PURC tariff.

**CMC** – Responsible for contracting vendors and collecting tariffs, pays GWCL.

**Vendors** – Operate tapstands for agreed hours, keep 20% of PURC tariff, keep tapstand area clean.
3. Case studies > Ghana

Alternative delivery mechanisms?

Not just tapstands or household connections.

- Question put to MD of AVRL – “What motivates you to serve the urban poor”.

- Answer – “The business case”.
  (There is nothing in his contract with GWCL about extending services to the urban poor)

- Built a financial model that enables comparison between different delivery mechanisms.
3. Case studies > Ghana

Alternative delivery mechanisms?

- Pre-paid meters
- Household meters
- Meter clusters
- Volume limited free (e.g. Durban)
- Private sellers operating tapstands
- DM piped local area (e.g. branch lines in Kisumu)
- DM piped wide area (e.g. EMA sub-concession)
- Etc... etc... etc...
3. Case studies > Ghana

- Capex
- Opex
- CapManex
- Cost to alternative providers
- Cost to consumers
- Revenue (inc NRW)
3. Case studies > Ghana

Benefits of the approach:

- Stimulate GWCL to consider and trial different delivery mechanisms.
- Basis for discussions between the utility (GWCL) and the regulator (PURC).
- Helps address some of the anomalies such as life-line block that doesn’t help the poor!!
3. Case studies > Ghana

Compound supply model

Housing block shared by 5 families

1 x 200 ltr drum per family filled once per day

Meter

Street

Utility supply
3. Case studies > Mozambique: Maputo

Communal latrines: Tchemulane Maputo

- Communal i.e. shared by a number of households.
- Area of rented single room dwellings very low income.
- Very poor existing facilities.
3. Case studies > Mozambique: Maputo

Communal latrines: Tchemulane Maputo

- Properly managed communal facilities can work and can be viable

- 5 have been working well for the last 9 months.
3. Case studies > Mozambique: Maputo

Institutional arrangements:

- Municipality
- ADM (Water Utility)
- Water Kiosk
- Management Committee
- Bairro Administration
- Community (15 to 55 families)
Institutional arrangements:

Municipality.

Provided the land, approved the design, re-ordered boundaries to allow vehicle access, is the asset owner.

Management Committee

Elected by community and trained by WSUP, have a formal agreement with the Bairro administration who monitors performance, sign up to a formal statement of their function, sets the monthly tariff.

Community

Elects the MC, cleans the facility on a rota basis, pays a monthly fee to the MC for maintenance and desludging.
3. Case studies > Mozambique: Maputo

Finances:

Tariffs rise steeply for less than about 25 households

See WSUP Practice Note: www.wsup.com/sharingandlearning
3. Case studies > Mozambique: Maputo

Lessons:

- Realistic but affordable tariff
  - Tariffs have been set by the MC and some are too low. This could be regulated by the municipality.

- Efficiency of design
  - Smaller septic tank and beneath the structure
3. Case studies > Kenya: Kibera, Nairobi
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Estimated population of Kibera: 350,000 – 1 million
WSUP’s project area: Kambi Muru village
3. Case studies > Kenya: Kibera, Nairobi

**Planned physical model**

- **Master meter**
- **100m³ tank**
- **Existing water main with guaranteed daily night flow to fill tank**
- **New water mains**
- **Ablution blocks** (toilets, hot shower, laundry)
- **Sludge reception tanks** with wash down facility
- **Condominial sewer**
- **Existing trunk sewer**

**Population to serve:** 10,000
3. Case studies > Kenya: Kibera, Nairobi

- Protective gear
- Legal disposal points
- Cost effective technologies
- Raised social status

Existing water vendors connect to reliable water supply

Existing water main

- Master meter
- 100m³ tank

New mains

- Ablution blocks
- Sludge reception tanks
- Condominial sewer

Pit emptiers hire equipment

Condominial sewer

Gulper + sealed drum and cart

Plot based pour flush toilets

Existing trunk sewer
3. Case studies > Kenya: Kibera, Nairobi

Proposed mgmt. model

The infrastructure
- Ablution block
- Ablution block
- Master meter & tank
- Pipes to ablation blocks
- Condominial sewer from blocks

Manager(s)

WSUP
- Build & transfer ownership to

Water Service Board
- Confers mgmt. responsibility to

Utility

Community
- Uses and is the guardian of

Operator
- Operates
- Delegates management to

Neighbour. Committee
- Selects & oversees

Pit emptiers
- Licenses & hire out gulper to

Private sewer connections
- Connects & sells water to

Water kiosks
- Connects & sells water to

Does not hallucinate.
3. Case studies > Kenya: Kibera, Nairobi

How to make these relationship accountable?

- Design and formalisation of agreements clearly defining roles and responsibilities (R&R). Needs to be participatory and flexible.
3. Case studies > Kenya: Kibera, Nairobi

**Suggested arrangements**

- **Code of conduct**
- **Pit emptiers**
- **Private sewer connections**
- **Water kiosks**

**The infrastructure**

- Manager(s)
- Contract

**Community**

- Neighbour. Committee
- MoU

**Operator**

- Sub-agency Agreement

**Utility**

- Service Provision Agreement

**WSUP**

- Asset Transfer Agreement

**Water Service Board**
How to make these relationship accountable?

- Design and formalisation of agreements

What levels of compliance and enforcement?

e.g. Will the utility supply water reliably and stop illegal connections? Will the oversight committee apply penalties?

- Work on incentives: what levels of incentive? vs. incentives/status quo

e.g. utility (↘ NRW, ↗revenues)? oversight committee (↗revenues, expand role)? operator (↗clients, utility threat)?
How to make these relationship accountable?

- Design and formalisation of agreements
- Work on incentives
- **Strengthen client power and voice relationships**

3. Case studies > Kenya: Kibera, Nairobi
3. Case studies > Kenya: Kibera, Nairobi

- Strengthen *client power* and *voice* relationships

  • **Transparency**
    Operator selection process
    R&R of operator & oversight committee (public signs)

  • **Responsiveness**
    Representativeness of committee
    Communication channels and grievance mechanisms
    Higher authority appeal (municipality, court, mediator)
3. Case studies > Kenya: Kibera, Nairobi

**On-going project:** DM is the preferred model yet there are pending issues:

- **Ownership:** legal vs. community feeling of ownership
- **Management:** CBO vs. entrepreneur, pioneering initiative, enabling envir.? Market distortion/cartels?
- **Oversight:** sufficient incentives? let go of management role? Internal cohesion?
3. Group-work on Delegated Mgmt. Model

Group-work
3. Group-work on Delegated Mgmt. Model

**DMM for Water Supply**
- Interim vs. long-term solution
- Greenfield vs. existing services
- CBO vs private operator

**DMM for Sanitation**
- Interim vs. long-term solution
- Greenfield vs. existing services
- CBO vs. private operator
3. Group-work on Delegated Mgmt. Model

1. Under which circumstances should delegated management be considered as an interim solution instead of long-term solution? What are the implications?

   a) Water

   Intended temporary solutions may become permanent. It depends on the reliability of the service provider.

   b) Sanitation

   If there is a long-term plan to bring sewer lines into the area then any on-site sanitation options may be only temporary.

   Overall, the solution needs to be what the customers want, and its success depends on whether the community have confidence in the delegator and the delegatee to deliver what is agreed. Some parts may be delegated, some parts may not, and there may be some options in between. Decisions will be made on what is working at the current time – if the current operator is working well then this may continue, but if it is not then a new solution needs to be sought. There may be no planning beyond current needs.

   The municipality may be keen to delegate sanitation services and write contracts, but neither the private sector nor CBOs may be keen to take it on. If the context is such that waste is a keenly felt issue then this may be different, but if drainage is easy it may be harder. In fact CBOs may be keen to pass the responsibilities back to the municipality. However if wastewater is valuable for irrigation then CBOs may see managing it as a profitable business.

2. What do we need to be aware of (or to consider as a priority) when implementing a delegated management model in greenfield sites (without previous investment in water supply/sanitation services) as opposed to areas with existing services?

   a) Water

   In greenfield sites there is the potential to phase in options gradually, and there is more space to explore a range of options, assuming that there is sufficient water and drainage. However, it may be difficult to identify community leaders and there may be uncertainty with land tenure.

   If services already exist there will be existing skills and capacity, but there may be vested interests.

   b) Sanitation

   If new infrastructure is provided there will be a capital cost that needs to be recovered. But are new customers willing to pay?

   If a delegated management model is used in an area with existing services, there needs to be integration of the existing and new services. Existing providers may need to be regulated and undergo quality control. They will have vested interests, and there may be reprisals if they feel they are losing out. Any services need to be affordable.
3. What are the pros and cons of delegating management to a CBO as opposed to a private operator?

a) Water
CBOs are closer to the community, and self management can be more sustainable. CBOs can also guarantee against outside interference. Well managed CBOs can upgrade to CBEs. However, CBOs are fragile and can collapse if they are badly managed. They may lack technical expertise or leave out marginalised groups.

The private sector is more skilled, professional and dynamic. There was disagreement as to whether they would be more or less political. They are more concerned for their financial sustainability, although this may lead to overcharging. They may be less responsive to actual community needs and less accepted by the community.

b) Sanitation
CBOs are more directly accountable to the community and can be more responsive to demand. They are run on a not-for-profit basis and can empower social capital. However, they may not be legal and they may lack technical capability and professionalism, especially regarding corruption. They operate a monopoly. Emptying pits also carries a social stigma, which they may not want within their own community.

Private operators can be more responsive to demand, and have greater technical capacity, managerial capacity and professionalism. The service provider has a clear identity, for example a name, and cannot be confused with other organisations. Private operators may compete on service and price and create jobs. However they may not be regulated and there is a greater risk of poor quality work with no accountability.

An ideal solution may be to have private service provision, overseen by CBOs, although this may become overly complex. Where there is money to be made the private sector will want to get involved.
Thank you