Water supply management in peri-urban settlements

In order to bring drinking water to peri-urban populations we need:

- Water treatment plant – make water fit for drinking
- Pipes – transportation of water to homes
- Water metres – Measure quality of water
- Technicians – maintain technology
- Costs
  - Measuring consumption
  - Billing process
  - Questions
    - Who covers the costs

If private sector is involved we will need:

- Regulation
  - Avoid monopoly
  - Retain peoples access to water (protecting rights)
  - Question
    - Who will be regulator?

Private sector will need:

- Incentive

What will the private sector do?

- Supplying water from mountains
- Storing rain water
- Recycling of water

Malawi project

*WaterAid: managing communal water kiosks in Malawi*

- **Location:**
  - Lilongwe, Malawi
    - Peri-Urban areas- Mtandire, Mgone, Ngwenya; Chinsapo and Kauma
- **Purpose:**
  - To improve management of water services in unplanned low-income neighborhoods

- **WaterAids assessment of the problem**
  - Poor people double-charged for their water
    - Water prices twice as much more as in high-income areas
    - Private operators bought the subsidized water from the Lilongwe Water Board (sole supplier of water in Lilongwe) and resold water to the people at high tariffs
      - No regulation by the Board
  - Poor charging system
    - No uniform charging system across communities
    - Different systems
      - Household equal monthly fees for different levels of consumption
      - Charge per bucket consumed
  - No oversight over kiosk managements system
    - Political and traditional leaders never remitted funds they collected for bills from communities to the Board
• Led to discouraged communities
  o Vandalism of facilities
    ▪ No maintenance of facilities
    ▪ Vandalism of metres created a situation where the Board had to estimate the average monthly consumption per kiosk and charge accordingly.
  o Lack of transparency in billing
    ▪ The water supplier factored the debts unpaid for consumption of water in the past by the communities into the water bills to cover money misused by community leaders. The communities were not consulted about these extra costs.
  o Inefficient billing system
    ▪ Problems with computerized billing system
      ▪ Could not reconcile current consumption with unpaid debts
      ▪ No routine checks made on database to identify and correct these anomalies.
  o No network monitoring system
    ▪ No routine inspections for network leaks
    ▪ Faults reported went unattended for over a month
    ▪ Illegal connections never suspected or monitored even though there were many
    ▪ No boundary metres to monitor inflows and outflows of water and therefore did not know true extent of problem.
  o Illegal water sources
    ▪ Although it is illegal to install boreholes within cities, there were some in densely populated communities whose water quality was never checked during construction or monitored during operation
    ▪ Enforcing compliance to this law was difficult because some MPs sponsored the construction of these boreholes for votes.

• Situation when WaterAid stepped in
  o Communities had outstanding debt which they owed to Lilongwe Water Board
    ▪ Led to kiosks being disconnected
    ▪ Community members resorted to unsafe water sources like rivers
    ▪ When kiosks are reconnected most communities drew water from the river for non-drinkable use
    ▪ Extreme poor cannot afford water from kiosk

• Solutions
  o Formed tripartite partnership
    ▪ Partners:
      ▪ Lilongwe Water Board
        ▪ Mandated by an Act of Parliament as sole water supply authority in Lilongwe
      ▪ Centre for Community Organization and Development (CCODE)
    ▪ Time it took to form partnership
      ▪ Over 18 months before agreement could be reached on the structure and mode of operation for the tripartite partnership
    ▪ Objectives
• Support Lilongwe Water Board to improve efficiency and provide safe, affordable and reliable water supply to informal settlements
• Establish a focal point within Lilongwe Water Board as an effective interface with community kiosk users to deal with their grievances and to ensure the accountability and transparency of the board’s actions when providing and billing for water services
• Develop an understanding of the context of Lilongwe Water Board as a public water utility and whether private sector principles could in some way be applied to improve the efficiency of billing, debt collection and reduction of water losses

Structure

- Roles of key players
  - WaterAid
    - Helping Lilongwe Water Board and CCODE to undertake processes that aim at improving access to safe and affordable water supply, sanitation and hygiene education in the peri-urban areas of Lilongwe.
    - Support Lilongwe Water Board through funding and technical support for establishment of Kiosk Management Unit
    - Funding to rehabilitate all communal water kiosks, replacement of metres and construction metre boxes and improvement of drainage facilities at the kiosks in target areas
    - Support CCODE through strengthening institutional capacity to mobilize communities to identify kiosk management options
    - Build CCODE capacity to improve their sanitation facilities
    - Ensure management system that is adopted is performing satisfactorily
  - Lilongwe Water Board
    - Under take all rehabilitation works of the kiosks
    - Extend network to unserved communities
    - Set up the Kiosk Management Unit and co-finance its operations
    - Develop a business plan of the Kiosk Management Unit
    - Support the work of CCODE in its efforts to mobilize communities whenever the need arises
  - Centre for Community Organization and Development (CCODE)
    - Initial goal
      - Focus primarily on mobilizing communities around water and sanitation issues in target communities
      - Help communities develop sustainable management systems
    - Later goal
      - Educating communities
        - Undertake sanitation and hygiene education in these areas while building the community capacity to engage with service providers, not just in water but also in housing and land matters
  - Kiosk Management Unit
    - Initially be housed in Lilongwe water Board but later move out to become independent and self-sustaining
    - Responsibilities
• Facilitate the establishment of effective and efficient kiosk management options in close partnership with CCODE
• Liaise with the Projects Unit of Lilongwe Water Board to rehabilitate existing facilities and oversee the extension of the pipe network to new connections
• Regulate water pricing
• Facilitate the establishment of mechanisms that ensure timely reporting and response to faults in the kiosk-served communities
• Ensure kiosks operated by legally recognized entities
• Liaise with Revenue Accounts Unit to ensure efficiency in the production and delivery of bills
• Facilitate dialogue between the communities and Lilongwe Water Board and other stakeholders on the provision of water in the low-income areas

**Management**

o Several management options
  
  **Management by Lilongwe Water Board:**
  
  • The Board places its own kiosk attendants to sell water and collect funds
  
  • Pros
    
    o Issuance of wages
      • Attendant paid by the communities through a levy in water bill per kiosk
    
    o Collection of revenue
      • Board designates revenue collector who comes to collect money
    
    o Issue of money shortages resolved
      • All shortages charged against a kiosk attendant instead of to the water bill
  
  • Criticisms
    
    o While trying this type of management system, the Board found that many Revenue collectors would come to collect money from communities periodically, tempting water sellers to use the money for their personal needs

  **Management by private operators**
  
  • Management of kiosks by private operators
    
    • Pros
      
      o Facilities would be maintained
        • Professional management of facilities would be ensured; therefore, ensuring a clean kiosk environment
        • faithful payment of bills to Lilongwe Water Board
      
    • Criticisms
      
      o Require a good regulation mechanism to ensure operators didn’t overcharge for water
      • Business to run the kiosk would be offered to any interested bidder which would enrich the already rich
people who would make money from the poor people and not reinvest it in the communities

- Lead to an increase vandalism of the facilities because community won’t have much of an incentive to take care of these services especially if they can’t afford them

**Management by water point committees**
- Communities appoint water point committees
- Water point committees purpose
  - Sell water from kiosks
  - Pay Lilongwe Water Board through an appointed steering committee
- Criticisms
  - It was this arrangement that had led to the mismanagement of funds meant for water bills

**Management by water user associations**
- Communities establish a legal business entity and register it with government to operate all water facilities in a designated area
  - The community creates a parastatal
    - Government owned corporation
    - Association has a constitution, a board of trustees, executive committee and a secretariat headed by an administrator
    - Administrator manages a pool of water attendants and kiosk inspectors
- Water pricing and revenue
  - Water sold at a tariff agreed with the Board
  - Sign a business contract with the Board
  - All mark up is put back into the community for development projects.

- The tripartite partnership manages this system through water user associations.

**Progress under this management system**
- The Kiosk Management Unit is operational and has since established itself as an important arm of the utility, attracting the admiration of many organizations. (Blantyre Water Board approached WaterAid to help establish one in Blantyre). The unit is headed by a Kiosk Unit Manager and supported by three Technical Assistants. The Board has lately recruited and assigned a cashier for the unit
- Participatory selection of suitable management options for the kiosks was carried out through sensitization and mobilization meetings with communities in six low income areas of Mgona, Mtsiriza, Mtandire and Piyasoni. The system most preferred in all the areas was Management-by-Associations (MBA)
- Six chapters of water user associations are established and have signed contracts with Lilongwe Water Board as acceptable entities to manage communal water kiosks in their respective areas. These are a form of trusts that, after developing their constitutions, and their Executive Board members, were registered with the Malawi Government through the Ministry of Gender, Child Welfare and Community Services.
• Communities are beginning to settle their previous debts through their water user associations. The water user associations are paying off the previous debts to the Lilongwe Water Board.
• Under this arrangement, Lilongwe Water Board has handed over all the facilities and operations including system maintenance and revenue collection to the associations. The Board is selling water to the water user associations at a subsidized tariff. The two parties have also agreed a markup to support the overheads of the associations.
• Water meters that were previously exposed to vandalism before the project have been secured with meter boxes.
• Identification and a correction system of faults to reduce water losses is in progress and a fault reporting and response mechanism has been developed.

Learning from the work in peri-urban areas
Several lessons have been drawn from working to improve access to safe and affordable water in the peri-urban areas.
• Working in the urban areas to improve access to safe and affordable water is much more complex, with many factors, players and policy issues to deal with than in rural programming. Providing sustainable, affordable and safe water to the poor while embracing a full service cost recovery calls for greater consideration of the livelihood aspect of the poor in the urban areas who have to survive under a strict and often harsh cash economy. Issues of land tenure, tenancy, and governance equally impede on provision of water to low income areas.
• The tripartite partnership between the Lilongwe Water Board, WaterAid and Centre for Community Organization and Development (CCODE) demonstrates that it is possible and is important for public/private and civil society to partner to enhance efficiency in the delivery of water services to the poor. The legal mandate and capacity of the LWB as a utility, clearly does not go beyond a meter point and yet what happens thereafter, at the public consumer level, has serious bearing on its operations and reputation. NGOs and civil society organizations are better positioned to handle complexities of social issues than the utilities.
• The poor, if properly organized, can manage and afford to pay for services they appreciate, even if it means paying more for the services. In all the six areas of this project, the establishment of water user associations and the progress made towards fully paying their arrears bears testimony to this. The Lilongwe Water Board has had problems with the payment of arrears by public and private institutions, while within a year, poor communities have paid about half their arrears.
• If a public/private water utility is going to be efficient and effective in providing water to the urban poor, it must have a dedicated unit to address issues that often go unattended by the utility company, especially the revenue collection and projects departments. Since the establishment of the Kiosk Management Unit, Lilongwe Water Board has been able to improve its revenue collection and more importantly its understanding of challenges in providing water to low income areas. The need to have a dedicated unit within the structures of the Board has also been noted by the European Investment Bank and the World Bank who are supporting the establishment of a similar unit in the Blantyre Water Board.

A recently completed World Bank funded Poverty and Social Impact Analysis (PSIA) recommends water user associations as a form of private sector participation in the provision of water services in low-income areas that needs to be encouraged and scaled-up in the country. Despite such endorsement, the Kiosk Management Unit and WaterAid are still working to develop the associations to their fullest potential.
All notes adapted from Roundtable discussion and WaterAids report on *Managing communal water kiosks in Malawi: Experiences in water supply management in poor urban settlements in Lilongwe*