Up-scaling sanitation in low income urban areas

The Kenya approach

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Water sector reforms
Since 2002 comprehensive water sector reforms in Kenya

Positive Results

- Strong institutional set-up which separates policy making, regulation and service provision
- Annual reporting on coverage and utility performance by the Water Services Regulatory Board (WASREB)
- MajiData creating transparency on the situation in 2,000 low-income urban areas
- Pro-poor approach streamlined in sector policies, legislation, strategies, mandates: Human Right to Water and Sanitation 2006
- Pro-poor financing institution through Water Services Trust Fund

Kenya Water Institute (KEWI)
National Water Harvesting and Storage Authority (NWHSA)
Water Sector Trust Fund (Pro-Poor) - WSTF
Water Works Development Agency (WWDA)

MWI
WRA
BWRC
WRUA
WASREB
WSP
WAG (Consumer Groups)

MWI: Ministry of Water and Irrigation
BWRC: Basin Water Resources Committee
NWHSA: National Water Harvesting and Storage Authority
WAG: Water Action Group
WASREB: Water Services Regulatory Board
WRA: Water Resources Authority
WRUA: Water Resources User Association
WSP: Water Service Provider
WWDA: Water Works Development Agency

ABBREVIATIONS

Water Resource Management
Water and Sanitation Services

Policy Formulation
Regulation
Service Provision
National Government
Consumer/User
County Government
Existing institutional framework for water and sanitation

**National level (ministries)**

- **Ministry of Water and Irrigation**
  - Policy formulation and management (Water Sector)

- **Ministry of Health**
  - Policy formulation (Public Health)

- **Ministry of Environment and Natural Resources**
  - Enforcement of environmental laws

**County level**

- **Water Service Providers** (owned by county governments)
  - Water and Sanitation Service Provision

- **Public Health Department**
  - Awareness creation, hygiene education and enforcement of PH laws

- **National Environmental Management Authority Regional Offices**
  - Environmental guidelines, EIA
Water Services Trust Fund

- A state cooperation established under the Water Act 2002
- Objective: is to finance water and sanitation services for the underserved communities in urban and rural areas
Key facts and figures:

- Urbanisation rate: 4.2% p.a
- 60% urban coverage (with sewerage constituting 16% down from 19% in 2010)
- Over 2000 low income urban areas (Maji Data)

The Constitution of Kenya 2010

§ 43 Social and economic rights
Every person has the right:
(b) to accessible and adequate housing, and to reasonable standards of sanitation
(d) to clean and safe water in adequate quantities

- Vision 2030 goal for water and sanitation
- Sustainable Development Goals (Nr. 6)
- Other sanitation related declarations, conventions and commitments
Up-scaling water supply through the Water Services Trust Fund

- Successful up scaling in water supply through the Urban Projects Concept (UPC) since 2009
- Construction of decentralised systems such as water kiosks and yard taps through the water utilities
- Sanitation component of the UPC constituted of public sanitation facilities
- Based on the above experiences the sector through WSTF developed a concept for plot level/ household sanitation in urban LIAs known as **UBSUP**

**Achievements to date**
- 492 water kiosks
- 530 yard taps
- 41 Public Sanitation Facilities
What is UBSUP?

- UBSUP means Up-scaling Basic Sanitation for the Urban Poor
- Programme financed through the Water Services Trust Fund (WSTF) and implemented by the Water Service Providers (WSPs)
- Co-financing: BMGF and the German Government to the UBSUP programme
- **GOAL**: Improving living conditions by offering sustainable sanitation to residents of urban low income areas in Kenya.
Objectives of the UBSUP Programme

- Provide **sustainable sanitation** to at least 400,000 people
- A **monitoring system** for tracking access to safe water and basic sanitation facilities in urban low income area dwellers is in place and accessible to the public
- Sector institutions and small-scale private entrepreneurs have the capacity to **actively participate** in the provision of basic sanitation to the urban low income areas
- A sanitation **up-scaling concept** in line with the **water sector reforms** ensures sustainable use of facilities and is used for the further development of the sanitation sub-sector.
Key UBSUP development partners/stakeholders

Local Implementation: Water Utilities and Public Health Department
UBSUP Implementation methodology

1. WSTF makes a call for proposal
2. Registered Water Utilities apply
3. Water Utility prepares Funding Proposal and WSTF staff appraise the proposal
4. Water Services Board recommends Proposal to WSTF
5. WSTF Approves successful Proposals
6. Water Utility signs contract with WSTF
7. WSTF releases funds to WSP
8. Water Utility implements within its jurisdiction
How does the UBSUP programme work?

- Work only with **licence registered Water Utilities**
- Focus on **urban low income areas**
- Focus on **household/plot level** sanitation
- Build **capacity** at **Water Utilities** level
- Enable **Water Utilities** to **increase revenue** through sanitation
- Facilitate the change of **best practices** between **Water Utilities**
- Monitor **impact** and data presentations
- Supporting **innovations** across the sanitation value chain in sanitation
- **Strong sanitation marketing** that focuses on increasing demand, sanitation education, marketing of technologies across the sanitation value chain
Why Social Marketing?

- UBSUP is **demand-driven**!
- Sanitation is not always a priority for landlords and their tenants. Focus on **awareness creation and enforcement**
- Although toilets are **subsidised**, they will be sold to landlords, landladies and householders
- Marketing of the different types of UBSUP toilets
- Education on the risks of poor sanitation and the importance of emptying, transport and treatment
Who are social animators/sanitation marketers? Tasks and Responsibilities

- Door to door marketing of the toilets (use of scale models)
- Community mobilisation and awareness creation
- Organising and holding public meetings (barazas) and SafiSan mini-fairs
- Collecting data and data transfer to the water utility
- Assisting in identifying the most appropriate type of toilet
- Assisting in toilet site identification
- Determining the number of required toilet units
Who are social animators/sanitation marketers? Tasks and Responsibilities

- Monitoring construction of SafiSan toilets and providing advice to artisans & customers
- Training toilets users on toilet use, cleaning and maintenance
- Post-construction monitoring of SafiSan toilets to ensure sustainable use
- Promote the hygienic management of sludge (collection, transportation & disposal)
- Hand-washing awareness & education
- Implementing hand-washing programme at schools
Urban sanitation pro-poor at WSTF

Achievements

- 3 pilot projects
- 2970 subsidised toilets and 2 Decentralised Treatment Facilities with approx. 30,000 beneficiaries

National up-scaling of sanitation

- Call for proposals, 40 Water utilities applied
- 20 projects are currently being financed (target 4000 toilets and 10 DTFs)
- 4000 toilets constructed benefitting 40,000 people
UBSUP: Complete Sanitation Service Delivery

1. Infrastructure development
2. Service provision for transport, treatment, disposal and reuse
3. Advocacy/ Social marketing
4. Hygiene education
5. Enforcement
The UBSUP Sanitation Value Chain - TOILETS

1. **Dry Toilets**
   Double vault Urine Diversion Toilets (UDDTs)

2. **Water based toilets**
   Pour flush toilets
   Cistern Flush toilets
The UBSUP Sanitation Value Chain: Emptying and Transportation

• Identification, training, registering, certification and licensing of Sanitation Teams (emptiers)
• Design of the transportation component (SaniGo)
• Use of exhausters (working with regulator to reduce tariffs for the low income areas)
Decentralized Treatment Facility (DTF) modules

1. Receiving Bay / Balancing tank (RBBT)
2. Settler (ST)
3. Anaerobic Baffled Reactor (ABR)
4. Vertical Flow Constructed Wetland (VFCW)
5. Sludge Drying Reed Beds (SDRB)
6. Composting Area (CA)
7. Operator Store (OS)
Co-Composting process

Windrow making with 3 different sort of layer: UDDT matter + organic waste (brown) + green waste

Co-composting shed with compost windrows

Sieving of mature compost
MajiData

- MajiData is the pro-poor database covering all the urban low income areas of Kenya which has been prepared by the Ministry of Water and Irrigation (MWI) and the Water Services Trust Fund (WSTF) in cooperation with UN-Habitat, the German Development Bank (KfW), Google org. and GIZ.

- Its core objective is to develop a legal framework for sharing and centralizing data from the various stakeholders involved for communicating to the public and decision making.

Specific Objectives:
1. Visualization of thematic data
2. Standardization of data management processes (collection, verification, saving, transfer, updating)
3. Develop strategies for ensuring data consistency
4. Querying functions

With MajiData, WSTF has been able to recognize areas that need specific intervention and can calculate the impact of the project in the various urban low income areas. MajiData therefore assists WSTF in monitoring its projects.
Maji Data

A comprehensive online database about the water and sanitation situation in the more than 2,000 poor urban areas, is available as a planning tool.
Criteria of defining the urban low income areas identified in MajiData

1. Water supply and sanitation
2. Population, layout and infrastructure
3. Land ownership
4. Type of housing
5. Socio-economic situation
6. Community characteristics
7. Policy and development interventions
8. Public health

These are the main sections that were considered when defining the urban low income areas that could receive the WSTF pro-poor interventions
SafisApp: A monitoring tool

SafisApp: It is a mobile application that has been created by WSTF (with technical assistance from GIZ) to identify and monitor real-time construction of household sanitation facilities from the urban low income areas that are implementing UBSUP (with Geo referenced pictures) Online dashboard (WSP admin, WSP general user, WSP finance)
Lessons learnt

- National up scaling only works with structures/concept in place
- To achieve progress in onsite sanitation, one has to go beyond awareness creation and build infrastructure
- Demand creation takes time
- Choice of technology is important
- Growing acceptance of the Water Services Trust Fund
- Utilities willing to engage in onsite sanitation
- Willingness to pay for improved sanitation
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<tr>
<th>Challenges</th>
<th>Mitigation</th>
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| Inability of landlords to cover investment costs of building toilets to completion | Development of affordable toilet options  
Timely payment of subsidies |
| Slow initial uptake                                                      | Robust sanitation marketing and timely payment of subsidies               |
| Less attention to hand washing facilities                                | Posters put in every toilet  
Hand washing facilities as a pre requisite for subsidy payment           |
| Reluctance of landlords to provide copies of ownership documents         | Basic proof such as allotment letter or chiefs letter                      |
| Slow construction of Decentralised Treatment Facilities                 | Use of contractors and SuSanA                                           |
Lessons learnt

• For up-scaling, low cost decentralised solutions built according to standards are key to reaching more people at less per capita cost

• It is possible to address the entire sanitation value chain

• The permanent presence of social marketers and community health workers is crucial

• Different stakeholders from different ministries have to be incorporated to ensure acceptability, sustainability and ownership
Tools available: www.waterfund.go.ke

- The Technical handbook
- The Social handbook
- UBSUP pilot phase and the finalization of the Up-scaling concept
- The SafiSan toilet sale posters with prices
- Toilet use manual
- The SafiSan app with different technologies
- Sanitation Team concept

Many more in the modules of the UBSUP/SafiSan toolkit
Questions