

# Improved Public Sanitation Facilities



## THE WATER SERVICES TRUST FUND

In Kenya, the Water Services Trust Fund (WSTF) was established as a corporate body under the Water Act 2002. Its mandate is to help finance the provision of water and sanitation services to underserved rural and urban areas. The WSTF operates as a poverty fund, with the support of the Kenyan Government and a number of cooperating partners. With the assistance of German technical and financial cooperation, the WSTF started funding projects targeting low-income and underserved urban areas in 2008. With funding of €15.5 million from German financial cooperation (KfW) and the European Union Water Facility (EUWF), the WSTF aims to provide more than 1 million people with sustainable access to safe water for the first time, and to give more than 100,000 people access to individual household sanitation facilities. The WSTF uses low-cost technologies, such as water kiosks and decentralized on-site sanitation facilities to fast-track access. The projects are implemented and operated by commercialized Water Service Providers (WSP). The first call for water project proposals for Kenyan WSPs was launched in February 2009.

The WSTF will also fund the construction of Public Sanitation Facilities, each consisting of a water kiosk, toilet and shower blocks. Public Sanitation Facilities will be built in low-income urban areas and in busy public places such as markets and bus terminals. Pilot activities were carried out to test the funding and implementation concept and to prepare for the upscaling.

## CURRENT SITUATION

- It is estimated that 50% of Kenya's urban population has sustainable access to safe water and basic sanitation. Only 19% of the population are connected to centralised sewer systems and 31% rely on on-site sanitation.
- More than 50% of the urban population (7 million people) is poor and lives in low-income, densely populated settlements, where only 20% of residents have access to safe water. Sanitation coverage in these settlements is even lower.
- Due to the poor water and sanitation services in these settlements, waterborne diseases such as diarrhoea and even outbreaks of cholera are common. Groundwater pollution is worsening as a result of unsafe sanitation practices.
- Access to safe water and basic sanitation is not only a problem for households but for the general public. Places where large numbers of people meet, such as local markets, schools and bus terminals, suffer especially from inadequate water supply and sanitation facilities, where they have any facilities at all.



Older public toilet block that has been poorly maintained



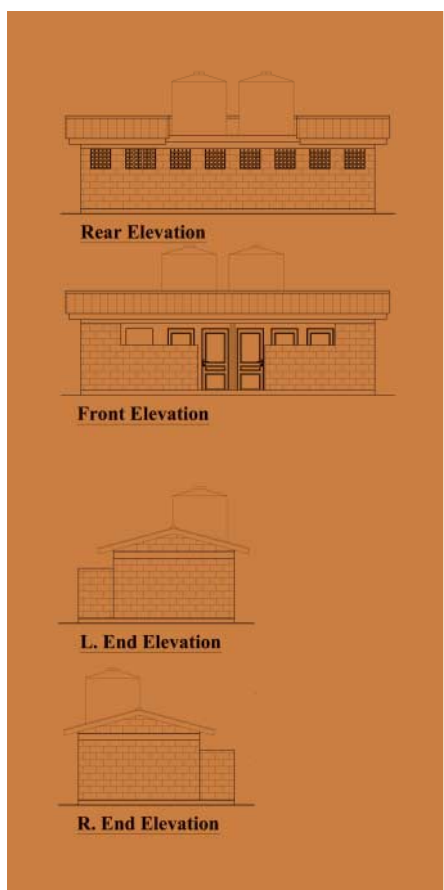
A biogas digester is located next to the facility



Installation of biogas appliance inside the water kiosk



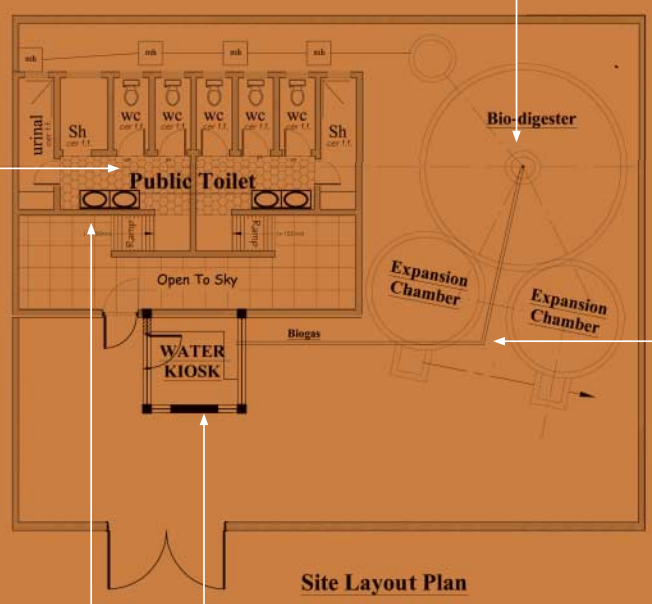
A newly built Public Sanitation Facility



Interior of the new facility



Hand wash basins



Site Layout Plan

## PILOTING THE TECHNICAL CONCEPT

- The Public Sanitation Facility consists of a male section with 2 toilets, 1 shower and 1 urinal as well as a female section with 3 toilets and 1 shower.
- A water kiosk is placed in front of the facility where water and other commodities are sold. It also serves as an entrance where user fees are charged and toilet paper and other toiletries distributed.
- All the wastewater is discharged to the biogas digester where it undergoes anaerobic treatment, producing biogas and lowering the pollution load. The semi-treated effluent from the biogas digester is drained into the existing public sewage system. The accumulated sludge can be used as fertiliser.
- The biogas is piped to a stove in the water kiosk where it is used to heat water for the showers, as well as for cooking and for lighting the facility at night.
- The biogas digester is a solid technology and works without electricity. It can cope with inflow fluctuations (from the dilution process of the waste water). The production of biogas is constant and the fixed dome technology provides for prolonged storage of biogas.

## WATER SERVICE PROVIDERS IN CHARGE OF PUBLIC SANITATION FACILITIES

The Naivasha public sanitation facility is owned by the regional Rift Valley Water Services Board, who is the asset holder. The respective Water Service Provider (WSP) is fully responsible for the construction and operation of the facilities. A special unit within the WSP has been established to guarantee proper operation and maintenance with a pro-poor customer focus. Guidelines, procedures and sanctions are introduced and regular inspections carried out to ensure

that facilities function properly. The WSP is ultimately held accountable for the quality of the services provided by the facility.

The day to day management of the facilities is entrusted to a private operator, preferably a woman, who has been recruited with the consent of the community. The operator signs a contract with the WSP, which lays out the rights and responsibilities of all parties. The operator is not an employee of the WSP but works on a commission basis (30 to 40 % of sales). Additional income can be generated by selling other goods at the water kiosk. Thus, the operator has a commercial incentive to maintain and operate the facility properly.

## BENEFICIARIES AND IMPACTS AND OF THE PILOT PROJECT

### BENEFICIARIES

Travellers, bus station or market customers and vendors and neighbouring residents frequenting the Naivasha Bus Park.

### ACCESS TO SERVICES

- Toilets: Can serve up to 1,000 customers per day.
- Water: About 5,000 litres drinking water are sold per day (500-1,000 persons).
- Showers: About 50 showers are taken each day.

### SOCIOECONOMIC IMPACTS

- Pro-poor regulated water and sanitation price ensured since prices must be approved by the Water Services Regulatory Board.
- Operators can generate income.
- Gender: Most facility operators are women.

### HYGIENE AND HEALTH IMPACTS

Reduction of incidence of water- and sanitation-related diseases thanks to the availability of:

- Safe water,
- Clean facilities,
- Safe disposal of human waste

### HEALTH PROMOTION AND EDUCATION

- Provision of hand-washing facilities.
- Design of the facility – provides space for information and awareness materials and for the sale of health-related articles such as condoms.

### ENVIRONMENTAL IMPACTS

- Protection of water resources: Treatment of effluents reduces the level of pollution of water bodies.
- Sustainable use of energy: Firewood, charcoal and electricity are replaced by biogas.
- Conservation of fresh water: Opportunity to recover wastewater which can be used for irrigation.

## WAY FORWARD: SCALING UP

During the pilot process, funding procedures (e.g. application forms) were tested along with technical and management concepts and stakeholder feedback made it possible to make further improvements. The WSTF now plans to scale up Public Sanitation Facilities by publishing nationwide calls for proposals open to all commercialized Water Services Providers in the country. The proposals that offer the best value for money will be selected on the basis of a range of criteria (including per capita investment cost, social and health criteria). The first call for Public Sanitation Facilities is expected in July 2009. The WSTF intends to build about 35 new facilities with the support of German financial and technical cooperation, which should give 26,000 people access to safe drinking water and 17,500 people access to basic sanitation facilities by 2011.

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