Citywide and Countywide Inclusive Sanitation and the Role of Simplified Sewerage

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Moving from the MDGs to the SDGs

- Goals are technology neutral with ladder concept
- Sanitation service chain is adopted
- Aspects of sustainability included
- Hygiene goal introduced
The world figures are looking lower…

According to the 2015 SDG baseline:

- **4.5 billion people** in the world don’t have access to safely managed sanitation
- **57% of people living in urban areas** do not have toilets which provide a full sanitation service
- **16%** don’t have a basic sanitation service
...as are Africa’s...
The sanitation service chain

MDGs

- Containment
- Simplified or Conventional Sewerage
  - WC
- Non-networked Systems
  - Latrine or septic tank
  - Container-Based Sanitation

SDGs

- Emptying
- Conveyance
- Treatment
- End-use/Disposal

**Simplified or Conventional Sewerage**

- Sewerage network
- Pumping stations
- Sewage treatment works
- End-use/Disposal

**Non-networked Systems**

- Vacuum truck
- Primary emptying
- Transfer
- Treatment plant
- End-use/disposal

- Collection
- Transport
- Treatment
- End-use/disposal
Growing cities and growing... sanitation problems

- In city, everything is interconnected
- Service providers can’t keep up with population growth
- Business as usual is not working

....We need to think differently
In a city, everything is interconnected…
the need for integrated thinking
Citywide Inclusive Sanitation means that…

- **Everybody benefits** from adequate sanitation service delivery outcomes
- Human waste is **safely managed along the whole sanitation service chain**
- Effective **resource recovery and re-use is considered**
- A **diversity of technical solutions** is embraced, being **adaptive, mixed and incremental**
- **Comprehensive approaches** to sanitation improvements needed, with **planning, technical innovation, institutional reforms and financial mobilization**
- Cities will need to demonstrate **political will** and technical and managerial **leadership**, and to manage **new and creative ways of funding** sanitation
- Combines **both onsite sanitation and sewerage solutions**, in either **centralized or decentralized systems**, to better respond to realities faced in cities
- Needs to consider **complementary services**: water supply, drainage, greywater, solid waste

...so, we need to think differently...

‘Business as Unusual’
The World Bank-Gates Foundation Urban Sanitation Innovation Partnership (USIP)

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Operational Support

Resources, Tools, Reference Material, Support Documentation

Guidance Notes, Manuals, Capacity Building:
- Shared and Public Sanitation =>
- Fecal Sludge and Septage Treatment =>
- Container Based Sanitation =>
- Connecting the Unconnected

Generic ToRs:
- Design of Fecal Sludge Management Projects and Components

Good Practice Documentation:
- CWIS good practice videos =>
- Health, Safety and Dignity of Sanitation Workers (with WaterAid, WHO, ILO)

Tools and eLearning:
- CWIS Costing & Planning Tool…
- Urban Sanitation MOOC with SANDEC…

Strategic CWIS Knowledge & Learning Events
Experiences from Kenya

Nakuru Countywide Strategic Sanitation Planning Process
Countywide Inclusive Sanitation Approach

Adapted from IWA
Countywide Sanitation Planning in 5 Steps

1. Who?
2. Why?
3. What for?
4. How?
5. What?

Guiding principles:
- Motivation for change (current situation)
- Benefits of future situation (vision)
- Short term
- Medium term
- Long term
STEP 1: FORMULATE YOUR MULTI_SECTORAL TEAM

Governor
Sanitation Champion

CECs Water and Health Patrons

Chief Officers Water and Health Advisors

NACOSTEC
Nakuru Countywide Sanitation Technical Steering Committee

NAIVASHA SUB-COUNTY COMMITTEE
(Report through NACOSTEC)

Nakuru County Sanitation Technical Steering Committee (NACOSTEC)—officially gazette and launched
Stakeholder Engagement and Communication Framework
STEP 2 – WHY?: UNDERSTAND YOUR CURRENT SITUATION

Nakuru Countywide Strategic Sanitation Plan

CONSOLIDATED - SITUATION ANALYSIS, NEEDS AND CONSTRAINTS REPORT
WORLD BANK - WATER
UNDERSTAND YOUR CURRENT SITUATION
STEP 3 & 4 – WHAT FOR? HOW?:
DEVELOP A SHARED STRATEGY

- Developed by NACOSTEC in workshops during the period May 22nd -25th, 2018
Step 3: Develop a shared Vision

By the year 2030, we envision a County in which water resources are protected by full compliance with sanitation standards and policies.

Urban centres, informal settlements and villages alike are served with a combination of sanitation technologies (sewered and on-site) that include wastewater and sludge management, resource recovery and integrated solid waste management.

Through sanitation marketing, capacity building and political goodwill universal access to sanitation has been achieved, open defecation eliminated and waterborne diseases minimized.
Step 4: Guiding principles

- Governance, institutional and financial aspects
- Social inclusion and human rights
- Environmental aspects
- Technical aspects
STEP 5: PLAN YOUR INTERVENTIONS

THEME 1: Access to safe and sustainable rural water, sanitation and hygiene services

- Scaling ODF Campaign
- Increasing access to safe sanitation and hygiene facilities
- Sanitation marketing and private sector participation
- Social mobilization, participation, education and behavior change communication
- Water supply and catchment/source and environment protection
- Integrated Waste management (waste to energy)
- Gender and social inclusion
- Institutional WASH
- Expansion of sewerage network and services *(only urban)*
- Faecal sludge management *(only urban)*
- Piloting a condominial sewerage system

THEME 2: Access to safe and sustainable urban water, sanitation and hygiene services
STEP 5: PLAN YOUR INTERVENTIONS

THEME 3: Enabling environment - governance, institutional, policy and regulatory environment

• Policy, legal and regulatory environment
• Governance, institutional development and sector coordination
• Capacity building and training (Human Resources for Sanitation)
• Research and knowledge management

THEME 4: Planning and sustainable financing

• Integrated CWIS Planning
• Financing strategy
# Pre v post CWIS Plan – Naivasha Water & Sanitation

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**Sanitation, Excreta, and Wastewater Management**

**Short-Term Interventions:**
- Increase Wastewater and Fecal Sludge Treatment Capacity - establish a new plant in Mai Mahiu and expand treatment capacity of the existing WWTP in Naivasha Town
- Promote and support septic tank construction
- Sanitation Marketing

**Medium to Long-Term Interventions:**
- Establish scheduled universal FSM
Integrated Solutions

Plant size for 80,000 people
Creates 50+ jobs | Revenue >$1.5m | Saves >500K trees
Partners in Nakuru County

- Sanivation
- VEI
- WSUP
- BMGF
- USAID
- UNICEF
- UN-HABITAT
- Aqua for All