

# Water and Sanitation in Small Urban Centres

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Dr. Graham Alabaster, Programme Manager,  
Water, Sanitation & Infrastructure Branch,  
UN-HABITAT



## Structure of the Presentation

- Urbanisation: the changing patterns in cities and towns
- Key WATSAN issues in small urban centres
- Establishing the baseline, mapping the poor, inadequacies of data
- Pro-poor urban water governance framework
- Case Study: Lake Victoria Water and Sanitation initiative LVWATSAN
- Conclusions

## Urbanisation: the changing patterns

- Currently 20 - 50 % of the worlds population in most low and middle income nations live in small towns and large villages
- Increasing urbanization means over the next twenty years the major population growth will be in smaller towns
- Three types of settlements: Rural areas; large urban centres; small towns/large villages need different approaches
- “One size fits all approach” not acceptable

### Proportion (%) of Total Population in Urban Areas

(derived from UNDESA statistics, 2004)

Nations and regions	Rural areas	Urban areas < 500,000	Urban areas 500,000 – 4.999 million	Urban areas 5 million – 9.999 million	Mega-cities > 10 million
Africa	62.9	22.3	12.4	1.1	1.3
Asia	62.9	18.4	12.4	2.5	3.9
Europe	27.3	46.1	20.5	4.7	1.4
Latin America & Caribbean	24.5	37.1	23.4	3.7	11.3
North America	20.9	29.8	35.6	4.3	9.4
Oceania	27.3	31.7	41.0	-	-
World	52.9	24.5	15.7	2.7	4.1

## What are the key challenges for Water and sanitation in small urban centres ?

### Policy Approaches

- Lack of integrated approaches (water sanitation, solid waste, drainage, housing & other infrastructure, urban planning)
- National policies (sector reforms) don't cater for urban centres of all sizes, no mechanism to "localise" national policy
- Will the policy makers "accept" the target population: do we know where the poor are and how they are best served?
- How do we integrate WATSAN planning with housing/urban development and environmental concerns
- Clustering: opportunities for cooperation

### Financing Mechanisms

- Larger cities get more ODA, smaller towns have to rely on market-based approaches,
- Linking livelihood opportunities to service provision

## What are the key challenges for Water and sanitation in small urban centres ?

### Technical Options

- How do we manage so called "modern mixes" of technology
- Opportunities for "ecological approaches" to water and sanitation are different. Large cities vs. smaller centres

### Capacity to Implement & Sustain Investments

- Available capacity varies: usually available in large cities, not so much on smaller urban centres
- Fragile Utilities
- Conflicts between WATSAN utilities and local authorities
- Balance of physical investment and supportive capacity-building
- Procurement & capacity to assimilate investments

### Project/Programme Design

- Time-frame too long, does not fit in the "political window"
- New delivery approaches needed (rehabilitate and extend)
- Avoid duplication and focus on local structures (Paris Declaration)

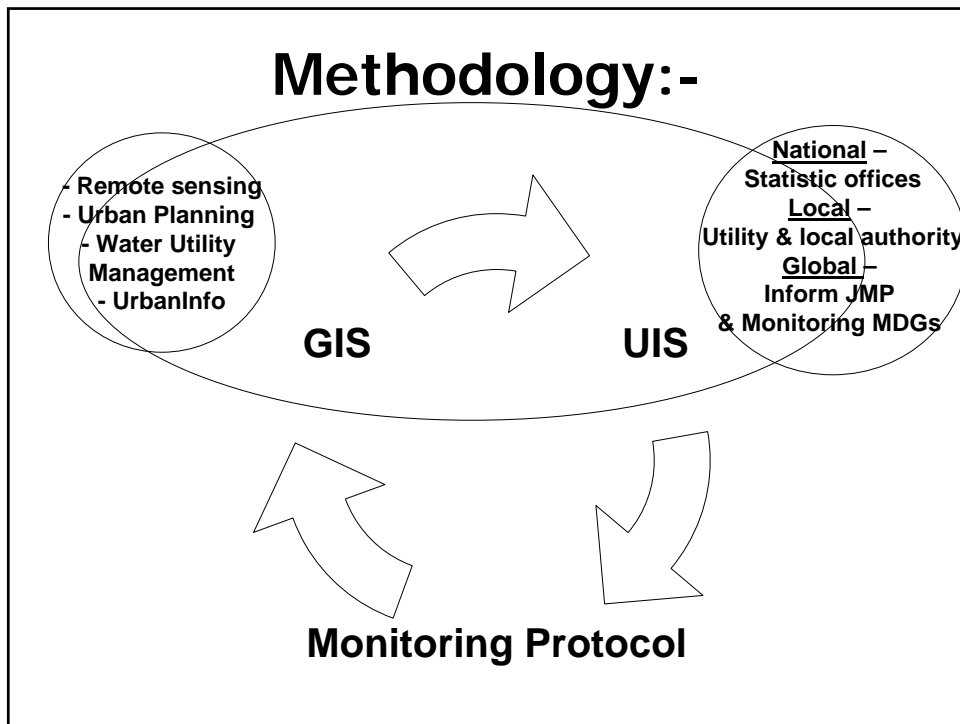
## Inadequacies of existing coverage data

- Data not disaggregated for peri-urban areas, gender
- Travel/distance to facilities
- Shared facilities not recognized as coverage
- Not all people who have access to facilities actually use them

Interventions will be ineffective if we don't know the target population or their needs!

## Better assessment tools: the Urban Inequities Survey (UIS)?

- Tool developed by UN-HABITAT to monitor low income urban areas.
  - Consists of 5 questionnaires:-
    1. Community/Cluster Profile
    2. Household questionnaire
    3. Women's questionnaire
    4. Childs questionnaire
    5. Homeless questionnaire (NEW)
- Adapted to establish a baseline for (W&S, drainage and SWM) and to track progress in meeting the MDG 7, target 10.



### UIS additional questions (over and above MICS DHS) on:-

#### Water

- Volume and payment of water (piped and non-piped),
- Separation of vendors (tank, cart, bicycle),
- Separation of time (time taken to collect water and time taken in queue),
- Questions on water for drinking, bathing, cooking washing separated
- Reliability of water, perception of water quality,
- Treatment of water.

#### Sanitation

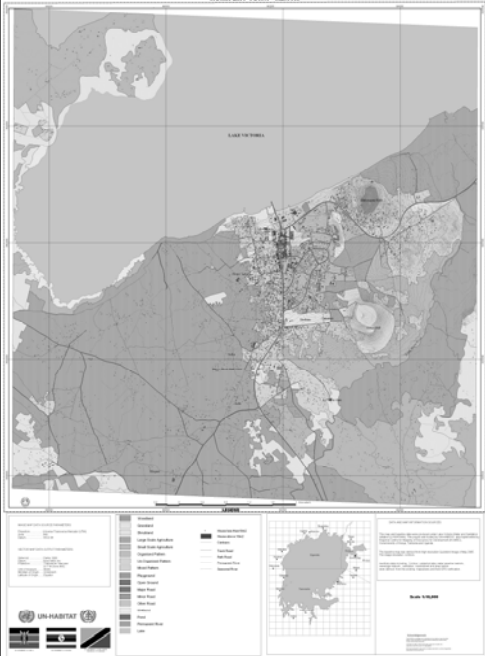
- Cost
- Sanitation Technology separated between on-site and off-site
- Emptying of latrines
- Safety of sanitation system (particularly for women)

= Disaggregated data for children and women

#### Solid Waste module

## GIS component (1):

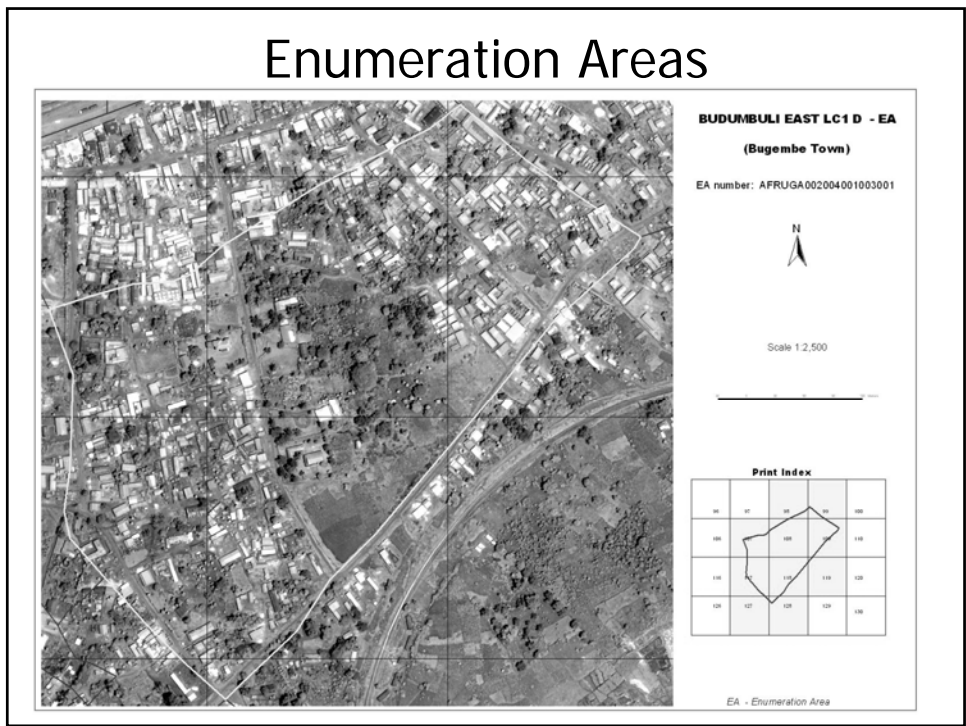
- Step one: procurement of satellite images (Quickbird 0.60m accuracy).
- Step two: digitization of images and development of GIS databases through field verification and additional maps (cadastral, town planning, utility plans etc..)
- Step three: demarcation of enumeration areas
- Step four: digitalize community profile results



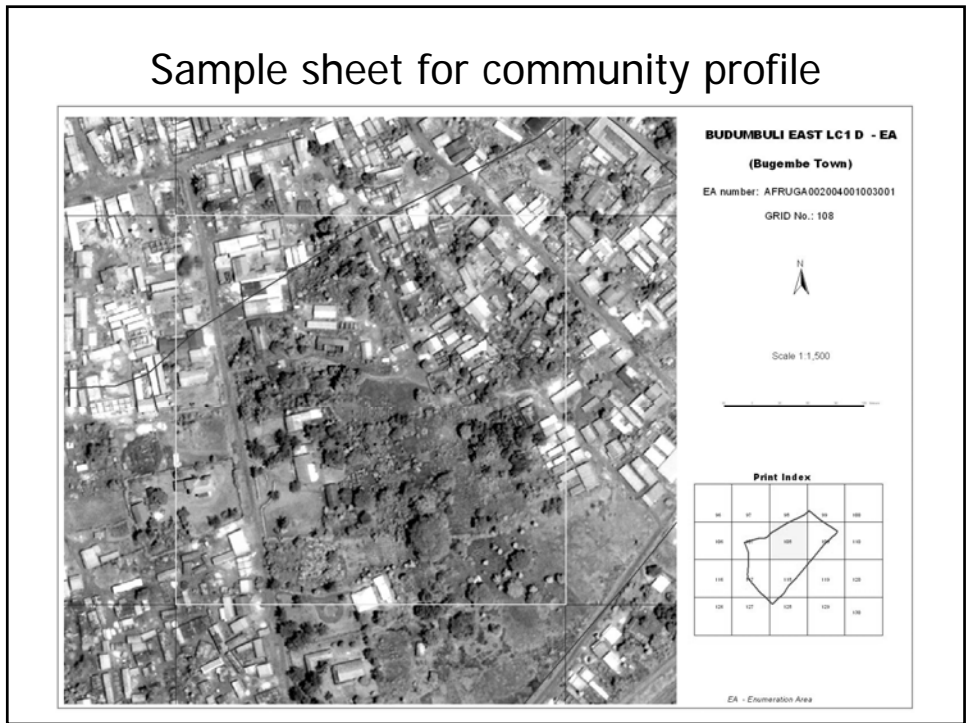
### GIS database for towns

- East Africa uses an old projection, satellite images in WSG.....
- Problems with sourcing of maps (especially cadastral maps).
- Interpretation of satellite images with cloud cover
- Some towns no images due to cloud cover, looking at other options IKONOS (1m) and aerial photography

# Enumeration Areas



# Sample sheet for community profile



## UN-HABITAT Proposed WATSAN Governance Framework

- 1.0 Pro-poor Legislation and policies;
- 2.0 Pro-poor Institutional arrangements;
- 3.0 Innovative financing/investment mechanisms; and
- 4.0 Pro-poor technical choices

## Applying the Framework

### **1.0. Mapping beneficiaries and resources**

This should involve the assessments for:

- Identifying target group(s) and beneficiaries (UIS)
- Identifying priority areas for interventions (stakeholder forums)
- Establishing available resources – human, financial & technical
- Establishing the status of the institutional and regulatory arrangements and capacities

### **2.0. Tool Development for improved governance capacity**

E.g. Negotiation; conflict mapping and resolution.

### **3.0. Monitoring – development of indicators**

### **4.0. Evaluation - Measuring Impact**



## Possible challenges

- **Ensuring the the target group is not excluded** – *calls consistent monitoring and evaluation of programmes activities is necessary;*
- **Selecting context-specific (locally-identified) indicators** – *Must be supported by specific tools and methods to suit the dynamics of each area and needs;*
- **Assessing risk management and outcomes for the communities and for the project** - *for each project the governance framework must be as adaptive as possible; and*
- **Achieving the right balance between efficiency, social equity and sustainability** - *Many efficiency oriented improvement interventions have not benefited the poor e.g water demand management does not directly help the poor*

## Small-urban centres: capacity-building interventions

- Local economic development
- Pro-poor governance systems with special attention to gender and marginalized groups (HIV/AIDS)
- Utility management
- Urban catchment management
- Advocacy and communication

## Lake Victoria Water and Sanitation Initiative: Project Objectives

Support pro-poor water and sanitation investments in the secondary urban centres in the Lake Victoria Region.

Build institutional and human resource capacities at local and regional levels for the sustainability of improved water and sanitation services

Facilitate the benefits of upstream water sector reforms to reach the local level in the participating urban centres

Reduce the environmental impact of urbanisation in the Lake Victoria Basin



### Lake Victoria Water and Sanitation Initiative (15 secondary urban centres)

- Assessment & Project design: baseline survey undertaken and MDG monitoring framework developed
- Immediate physical interventions (rehabilitate existing infrastructure and extend coverage to the poor)
- Capacity-building interventions (region-wide)
- Long-term physical interventions
- Implementation programme in 3-4 years

## Strategies for Service Delivery in small urban centres

- Urban areas need different approaches (political, institutional, technical) depending on size and needs
- Accurate mapping of target population essential (Use of GIS, remote sensing ultimately, utility mapping, link to urban planning systems)
- Technical approach: rehabilitation and service extension, followed by modern mixes of technology, (consider the reduced cost of condominal systems), WDM, Follow ecological principles maximising reuse where possible, particularly linking to livelihood generation
- Develop capacity for sustainability (small utilities, environmental management, clustering for small towns, marginalised populations)
- Innovative financing needed in small urban areas as no market-based money, targeted (gendered?) financing
- Develop participatory institutional structures at local level to improve political voice of the poor