Innovative taxation models for urban ecosystem sanitation

Stockholm World Water Week
29th August 2018

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WORLD BANK GROUP Water
WSUP Water & Sanitation for the Urban Poor
KEWASNET Improving Governance in the Water and Sanitation Sector

Innovative taxation models for urban ecosystem sanitation

Innovative redistributive financing models for equitable urban ecosystem sanitation: taxation models and tariff cross-subsidy models

Urban sanitation is a critical problem

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In sub-Saharan Africa:

Urban population without “basic water”:

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Urban population now: 400m

by 2050:

Urban sanitation is a critical problem

In sub-Saharan Africa:

Urban population without “basic water”: 18%

Urban population without “basic sanitation”: 59%

Urban population now: 400m

by 2050: 1000m

Urban sanitation costs big $$$

If we take the example of Kenya…

Population 43 million

Estimated financial cost of urban sanitation investment 2013 and 2030 = ???

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If we take the example of Kenya…

Population 43 million

Estimated financial cost of urban sanitation investment 2013 and 2030 = $ 5 billion ($ 5000 million)

Where is the money going to come from?

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Tariffs [what people pay directly to private or public operators, in return for services received]

Taxes [what people pay to government, to enable government spending in the public interest]

Transfers [i.e. development aid]

Where is the money going to come from?

In slum communities, the costs of urban sanitation exceed ability to pay. So part of the cost must be subsidised. So in this session we're focusing on REDISTRIBUTIVE financing mechanisms: cross-subsidies within tariff systems, and taxes.

Possible redistributive financing mechanisms

a) National-level taxation (general taxes like income tax; or specific sanitation taxes)

b) Local-level taxation (general taxes; or specific sanitation taxes)

c) Cross-subsidy components within tariff systems: wealthier people pay more than the value of services they receive, poorer people pay less

Are KENYAN water customers willing to pay a pro-poor sanitation surcharge?

Presented by
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The Aquaya Institute-Nairobi, Kenya

Stockholm WWW, 29 August 2018

aquaya

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UNIVERSITY OF CALIFORNIA

Background

- In urban Kenya:
  - 45% of people have piped water on their premises
  - 69% of people use shared, unimproved, or no sanitation
  - Can the former (at least those paying a water bill) cross-subsidize sanitation improvements for the latter?

- Examples of cross-subsidies in Kenya:
  - Electricity and fuel levies

OBJECTIVE

- Determine the willingness-to-pay of utility customers for a pro-poor sanitation surcharge
- Investigate factors that influence their willingness-to-pay

METHODS (qualitative)

- Two Kenyan utilities were selected: A and B

- Qualitative data collection:
  - 39 interviews & 4 focus-groups with utility customers
  - 26 interviews with stakeholders (utilities, government officials, landlord association, CBOs, etc.)

FiNDINGS (qualitative)

- Corruption was the most cited concern

> *"I think one of the most discouraging things in Kenya is corruption which permeates the whole society…it even prevents me from contributing because I think I am enriching the already rich"*
>
> (Utility customer in town A)

- Customers would be willing to pay if the quality of their services improved:
  - Continuous water supply
  - Sewer connection

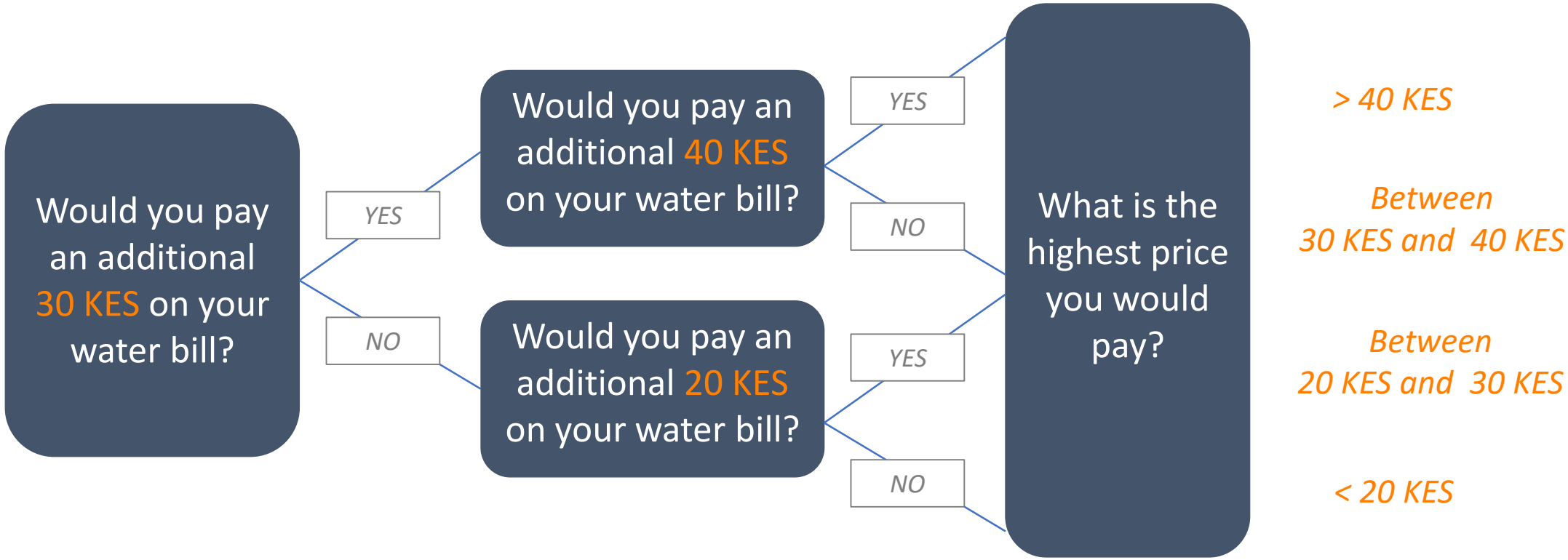
METHODS (quantitative)

- Quantitative data collection:
  - Survey of 402 utility customers to determine WTP
  - Stated WTP: double-bound dichotomous choice method

- We randomized implementation scenarios:
  - Messaging: Community Health vs. Clean Environment
  - Type of Sanitation: Sewered vs. On-site
  - Type of Billing: Flat Amount vs. Proportional Rate

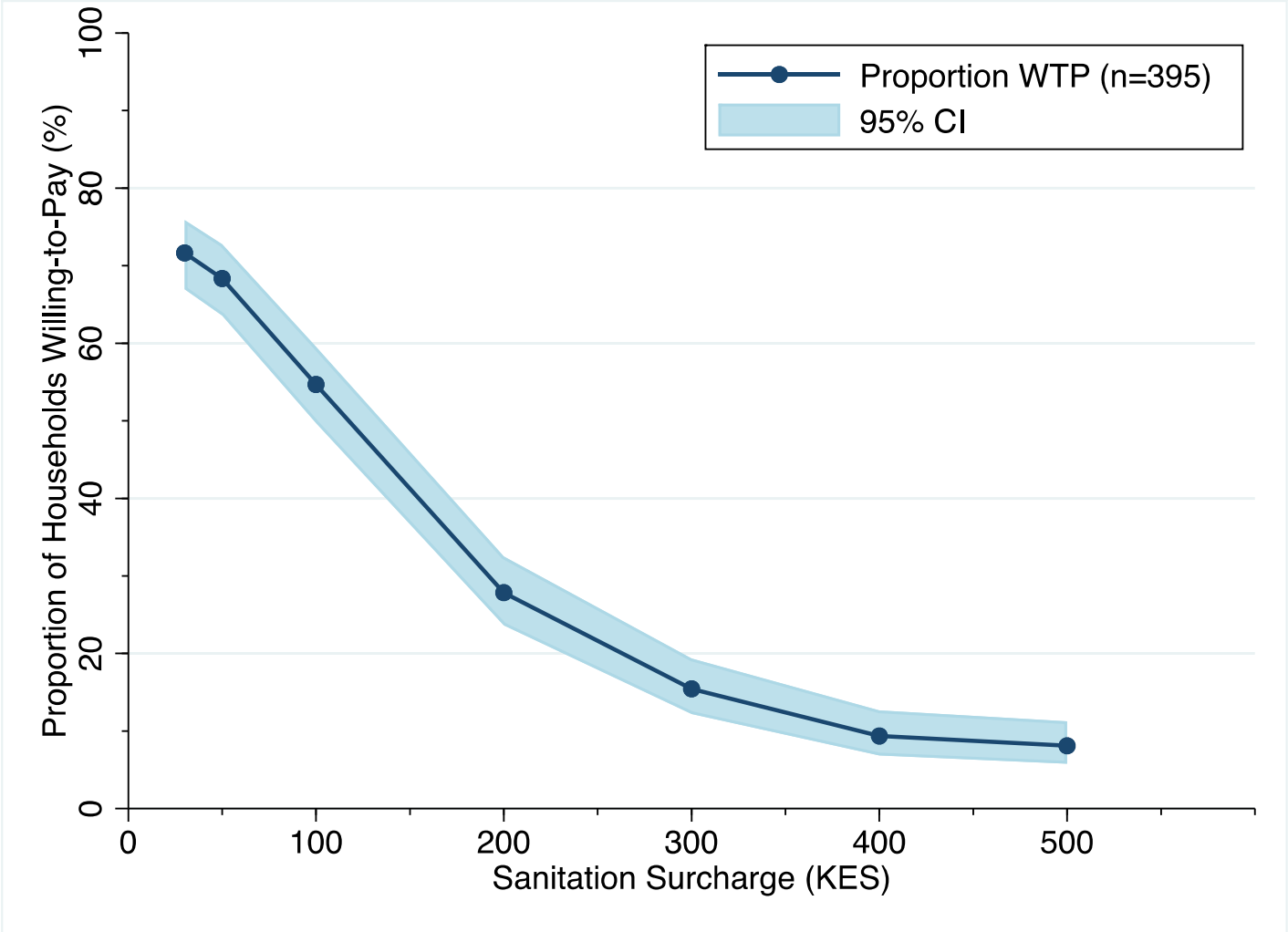
METHODS (QUANTITATIVE)

- To determine willingness-to-pay, we used the *double-bound dichotomous choice* method



FiNDINGS (Quantitative)

- 75% willing to pay some amount
- Average: 290 KES/month *(2.90 USD)*
  - 8% of average water bill
- Median: 100 KES/month *(1.00 USD)*



FiNDINGS (Quantitative)

- **Factors affecting willingness to pay:**
  - Bill type (higher for proportion of bill vs. flat amount)
  - Trust (trust in utility; distrust in county government)
  - Higher WTP if customers are younger, wealthier, shared toilets, had higher water bills

- **Factors NOT affecting willingness to pay**
  - Type of messaging
  - Proposed sanitation
  - Perceived own benefits
  - Solidarity
  - Satisfaction with current services

CONCLUSION

- 75% of customers were willing-to-pay some amount
- At the median WTP of 1 USD/month, the 88 water regulated utilities in Kenya could raise a combined 19 million USD annually for sanitation improvements in low-income areas
- Messaging around *trust* and calculating the surcharge as a *proportion of the water bill* are recommended

PILOT IN NAKURU

- Water utility (NAWASSCO), County government, and regulator (WASREB) have discussed piloting the sanitation surcharge in Nakuru

  - Who pays? All water utility customers (sewered and not, domestic and commercial)
  - What billing type? Tiered flat amount
  - Who benefits? 60% for low-income areas, 40% for other areas
  - What type of sanitation? Sewerage or on-site sanitation, depending on the area
  - What management? Ring-fenced account managed by utility
  - When? Process to start in 2018/2019

Which statement is closest to your opinion?

1) Redistributive financing doesn't work: subsidy is sequestered by the middle classes, and inhibits household investment and enterprise.

2) Redistributive financing is essential for slum sanitation. But in current political contexts, significant redistribution is practically impossible.

3) Redistributive financing is essential for slum sanitation. Achieving this is challenging but certainly possible: it's about creating the political will.

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The politics of local public financing for sanitation and water

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Innovative taxation models for urban ecosystem sanitation
#wwweek 29th August 1400-1530

Ian Langdown, Research Officer, Water Policy Programme

Overview and acknowledgements

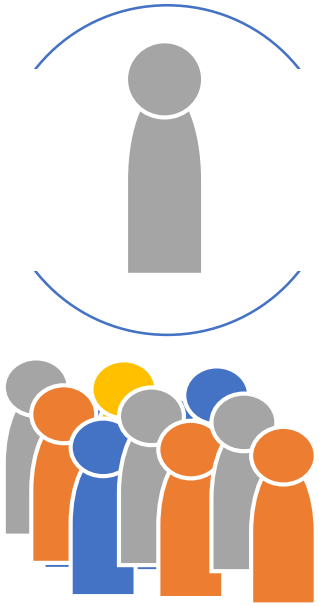
Objective: to take a step back and consider the wider political economy issues that could affect innovative local financing models for urban ecosystem sanitation

Content:

- Political economy factors affecting state / municipal leaders' decision making on local revenue raising and spending
- Two examples – how political economy factors affecting state / municipal leaders' decision making can play out in different contexts
- One example – how political economy factors can affect other local revenue raising mechanisms

Acknowledgements: Presentation draws on experience of staff from ODI, secondary research by MSc Students at University of Sheffield and WSUP/ World Bank

Leaders face many questions when thinking about how to raise money from citizens…



Municipal/ state leader

Citizens

How do I satisfy local interests?

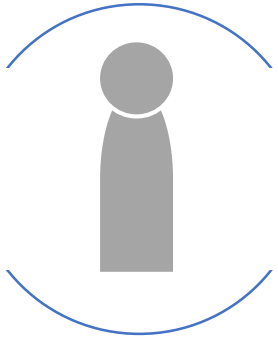
- Do I need to win competitive elections or satisfy a particular client-base?
- What are the politically salient issues and to who?
- How much credit or blame will I (personally) get for acting / not acting on different issues?
- How can I secure the support of other local elites?

Leaders face many questions when thinking about how to raise money from citizens…

How do I satisfy national government?

- What revenue raising and expenditure powers is national government willing to grant?
- What resources can I extract from national government (that are politically less costly than local taxes)?
- What is the best way to move up the political hierarchy?

National government



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And: who should pay and what to spend it on…

Does the sector offers wider political benefits besides meeting citizen expectations?

Can I control service quality and coverage?

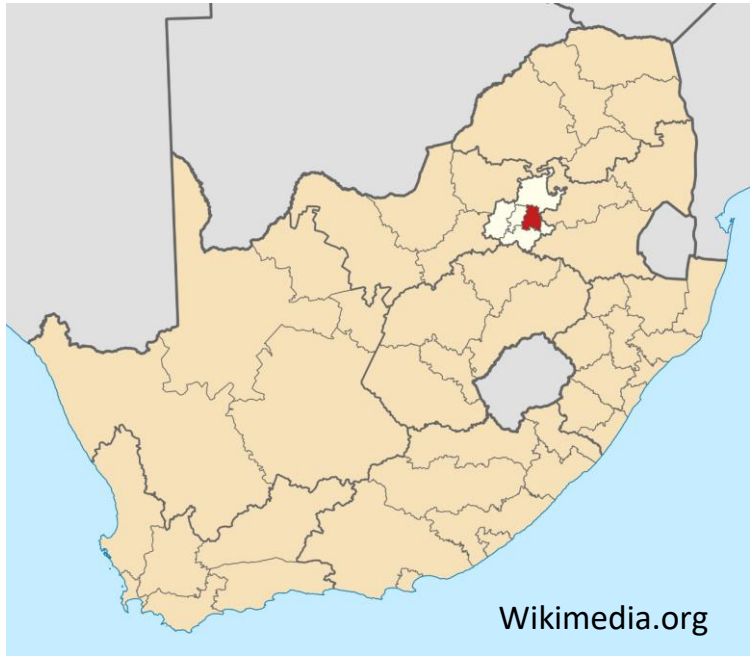
Are the wealthy likely to 'exit' from whatever public service is provided?

Do the people paying in get a benefit out?

Who will pay, how much, and what will happen to the money?

These can only be understood in relation to specific services, and for sanitation, within particular parts of the service chain.

Example 1: Ekurhuleni Metropolitan Municipality, South Africa



- Large proportion of revenue raised locally.
- % of expenditure on services is roughly in line with the % of revenue made from charging for those services.
- So, social contract is working - citizens pay taxes and get services…

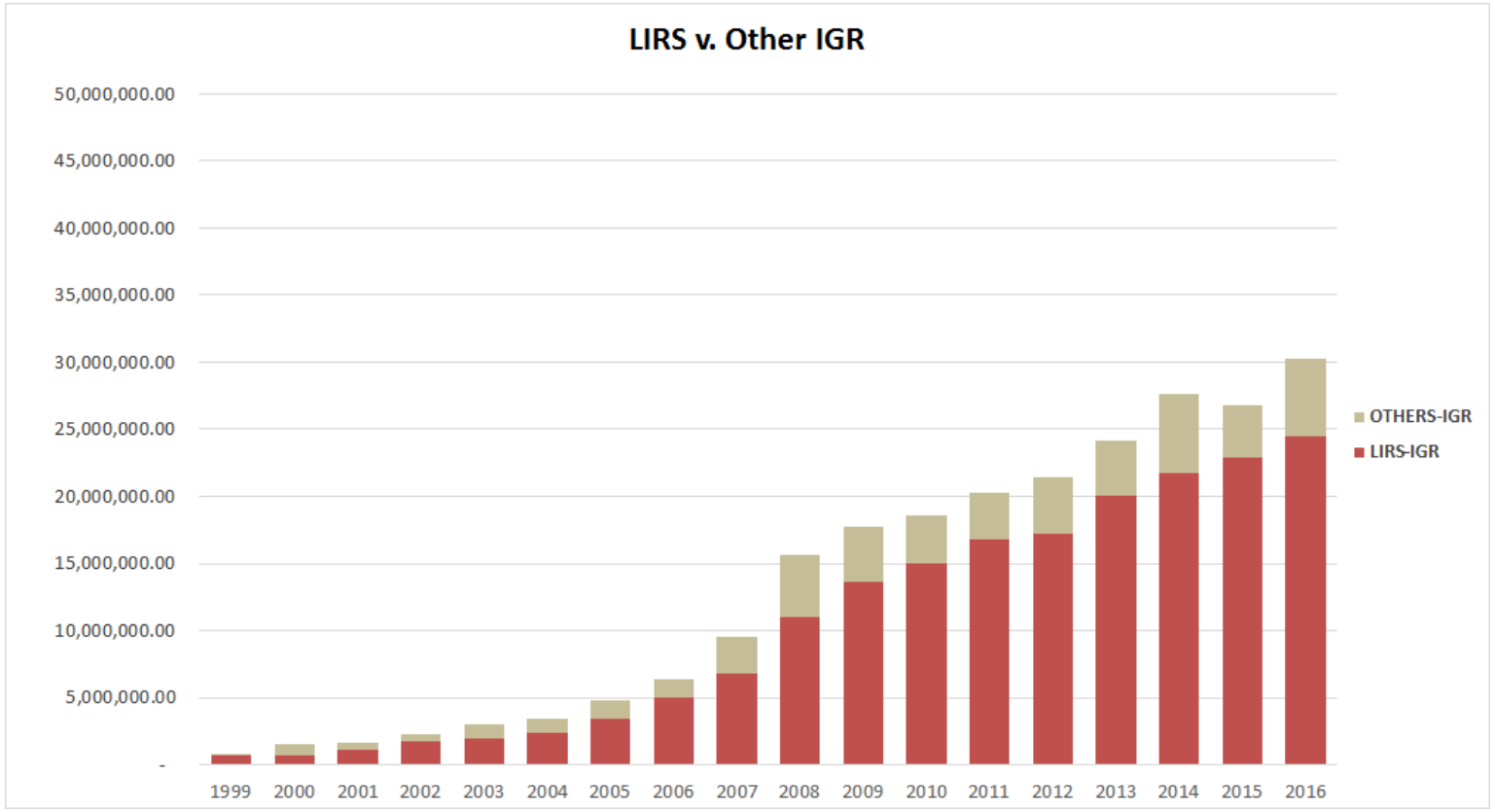
Example 1: Ekurhuleni Metropolitan Municipality, South Africa

Thulani Mbele/

… But,

- Services are worse for poorer citizens in informal areas.
- Protests around service delivery in informal areas.
- Ekurhuleni may be on a downward spiral - weakening social contract and reluctance to pay taxes.
- In recent elections, ANC has largely held on to wards most affected by service problems and protests.

Example 2: Lagos State, Nigeria



Goodfellow and Owen (2018) based on LIRS and Lagos MoF data

Example 2: Lagos State, Nigeria

Political and technocratic factors and strategies:

- **Depended on lower-income groups and informal sector for their votes** i.e. not necessarily those paying the most tax
- **Transfers were withheld** due to dispute with Federal Government in 2003

Example 2: Lagos State, Nigeria

Political and technocratic factors and strategies:

- **Depended on lower-income groups and informal sector for their votes** i.e. not necessarily those paying the most tax
- **Transfers were withheld** due to dispute with Federal Government in 2003
- **Professionalised revenue collection -** grant to enumerate properties
- **Public campaigns** e.g. ‘tax payers money at work’ adverts around public works
- **Visible infrastructure projects** e.g. Bus Rapid Transit and improving waste collection
- **Transparency** e.g. revenue complaint and information unit and tax offices in markets
- **Narrative** around ‘mega-city’ with global ambitions

Example 2: Lagos State, Nigeria

What's it spent on?

- Roads, health and education.
- Limited on water and sanitation.
- Many residents opt out of municipal water systems - across income groups

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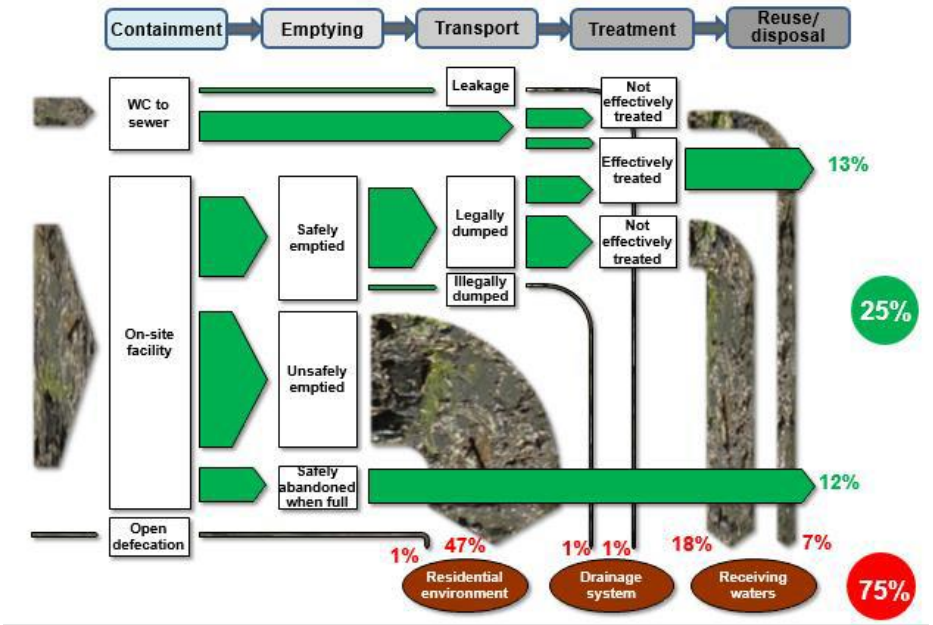
What's the future for local revenue generation?

- How long citizens will continue to pay taxes without seeing service improvements?
- Will low-income residents continue to support local taxes if they have to pay more? Increase property tax?

Example 3: Lusaka City, Zambia

- Levy attached to water bills charged to all the utility customers
- Separate from sewerage tariff
- Ring-fenced for sanitation improvements in low-income settlements
- Broadly progressive
- Regulator was a strong supporter
- Idea from utility

Example 3: Lusaka City, Zambia



WSP 2014/ GoZ MLGH 2015

Problems:

- Suspended and reinstated
- More technocratic arrangement but political economy factors
- Expenditure had been restricted to sewerage - potential national level political influence
- Regulator suspended the surcharge - 'ineligible use of funds'

Sources:
www.wsup.com/content/uploads/2017/08/DP004-ENGLISH-Sanitation-Surcharges.pdf
documents.worldbank.org/curated/en/171271493179546338/pdf/ITM00267-P149091-04-24-2017-1493072042924.pdf

Thank you

Evidence.
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1) Public institutions often struggle to convince non-poor citizens to pay a little bit extra to support services for poor citizens. Solutions? Ideas?

2) Public institutions (e.g. utilities) may struggle to find a balance between *raising more money* and *spending existing budgets efficiently*. How can they navigate this?

3) What innovative financing models (redistributive or non-redistributive) do you consider show promise for slum sanitation?