

Unlocking financial viability for low-income consumer business models

Complexities, enabling environment and trigger points

Innovate for water Conference

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Emanuel Owako



Integrating OSS and FSM into City's vision, strategy and planning

- Most of (Lusaka's, Dhaka's, Kisumu and Nakuru) population live in low-income neighbourhoods known as 'Peri-Urban Areas'
- These are densely populated and lack infrastructure, including sewerage (only 10-27% of city connected)
- On-site sanitation facilities (used by over 60% of population) not matched by safe FSM
- High water table means that groundwater is contaminated by pits that leach, leading to frequent cholera outbreaks
- Vacuum tanker operators tend to work in the city centre and target septic tank owners (around 30% of city population) rather than pit latrine owners
- FSM and safe manual emptying not included in city's planning

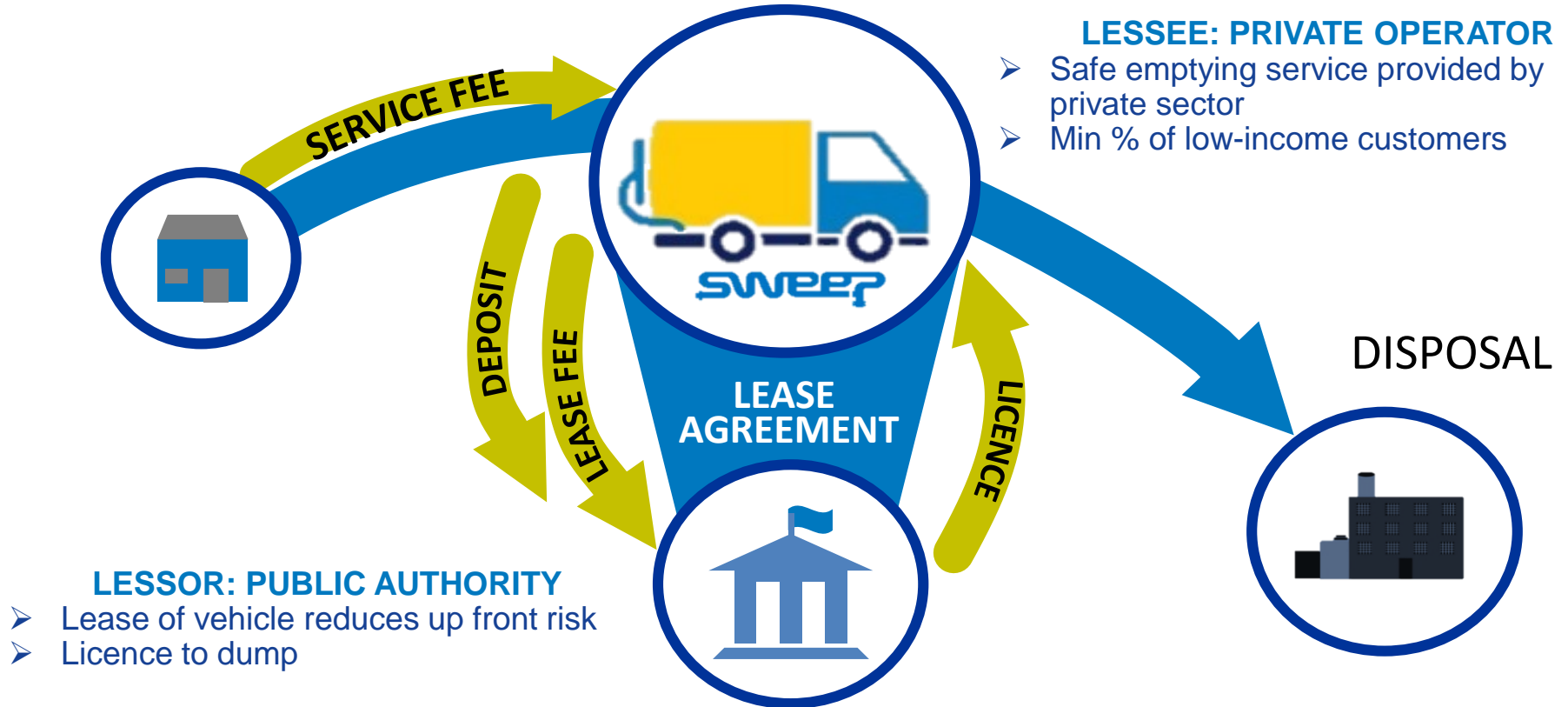


Effectiveness in application

Institutional Arrangements

- **Heavily determine effectiveness of progress to financial viability**
- **Value in assessing gaps in arrangements**
- **Strengthening arrangements and competencies where possible**

Bangladesh SWEEP model: incentivises both parties

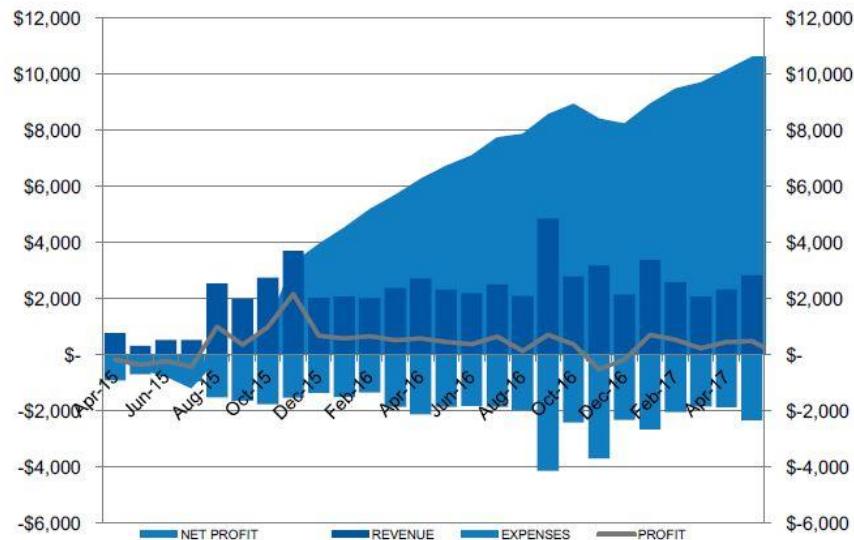


SWEEP: the bottom line

- Profitable in Dhaka on an O&M basis within **5 months**
- Profitable in Chittagong on an O&M basis within **4 months**
- **330K** people served
- **10m BDT total revenue (approx. 120K USD)**
- **1.9m BDT total profit (approx. 22K USD)**
- Approx. **42%** people served from low-income areas
- Model to be expanded to 2 additional cities (Rangpur, Barisal)

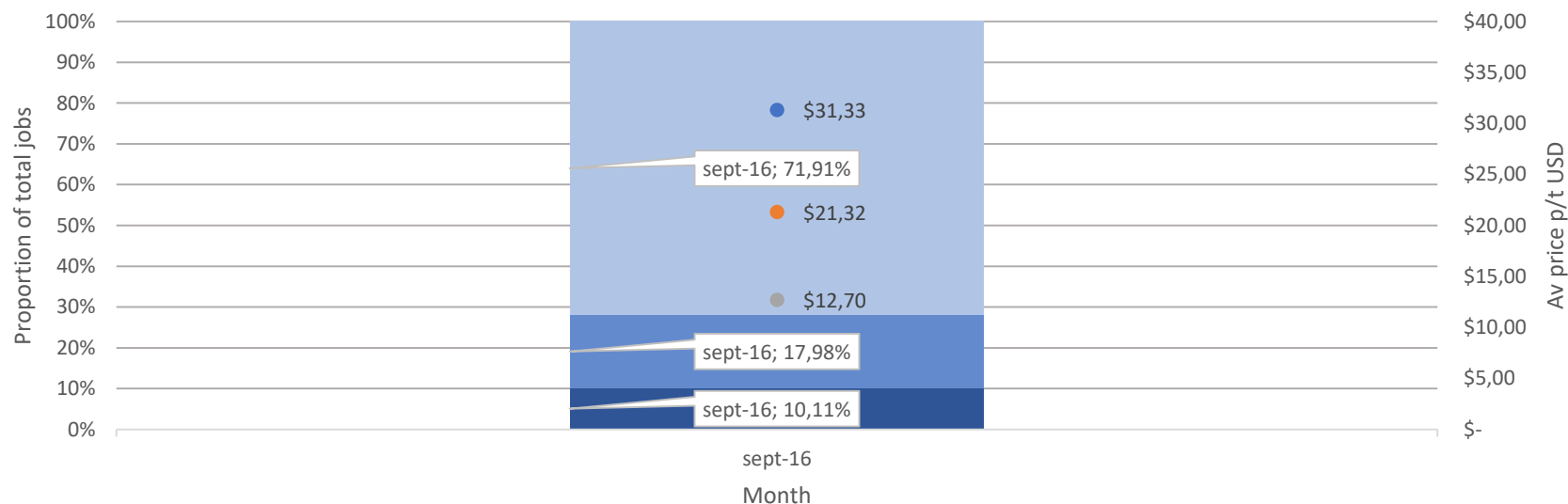
Risks and approach: balancing affordability and financial viability

1. Focus on **medium and large customers** to establish commercial viability
2. **Differential pricing model** to facilitate service offering to low-income customers
3. Clause introduced mid-2017 mandating GCC to ensure **30% of customers are lower-income**



Example monthly customer segmentation and pricing model

Average price per trip mapped against monthly composition of job type



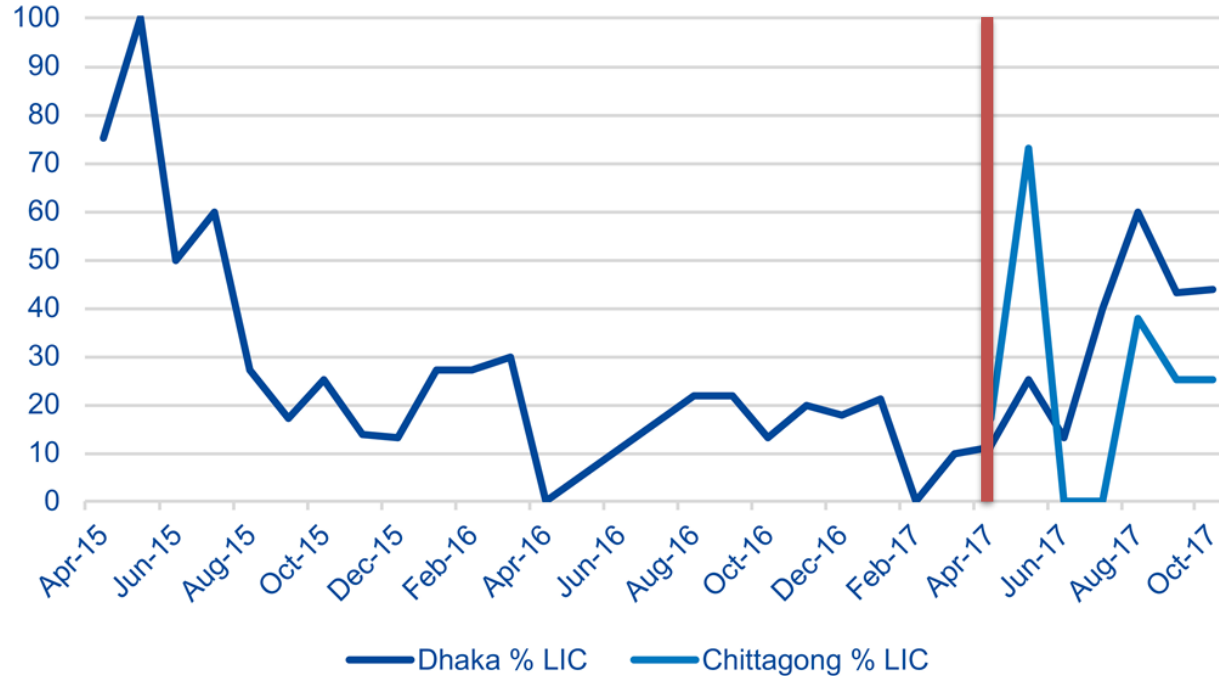
Total Trips
= 178

■ LIC trips as % of total trips ■ HIC trips as % of total trips ■ Inst trips as % of total trips
● Av Price for Inst empty (p/t) USD ● AV Price for HIC empty (p/t) USD ● AV Price for LIC empty (p/t) USD

Rev: \$4854
Cost: \$4149
Profit: \$704

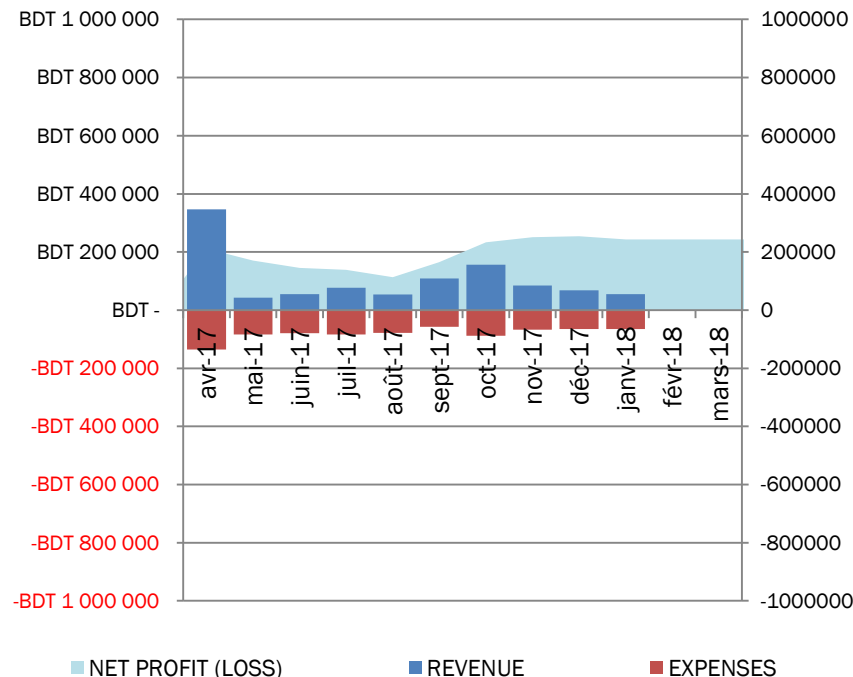
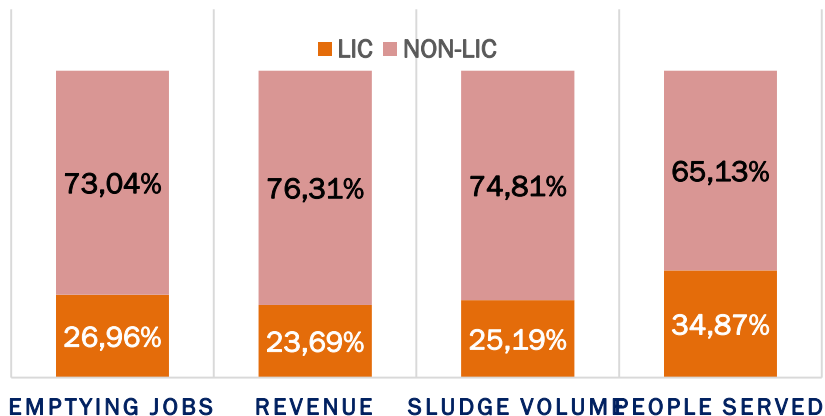
PPP contract conditionality ensures low-income customer base

Red line represents the introduction of the 30% minimum LIC contract clause in Dhaka



SWEEP replication in Chittagong: financial performance

- **18 months** in operation
- **BDT 1.704m (USD 20K)** total revenue
- **BDT 417,820 (USD 4.85K)** net profit
- **69K** people reached
- **34%** served from LICs

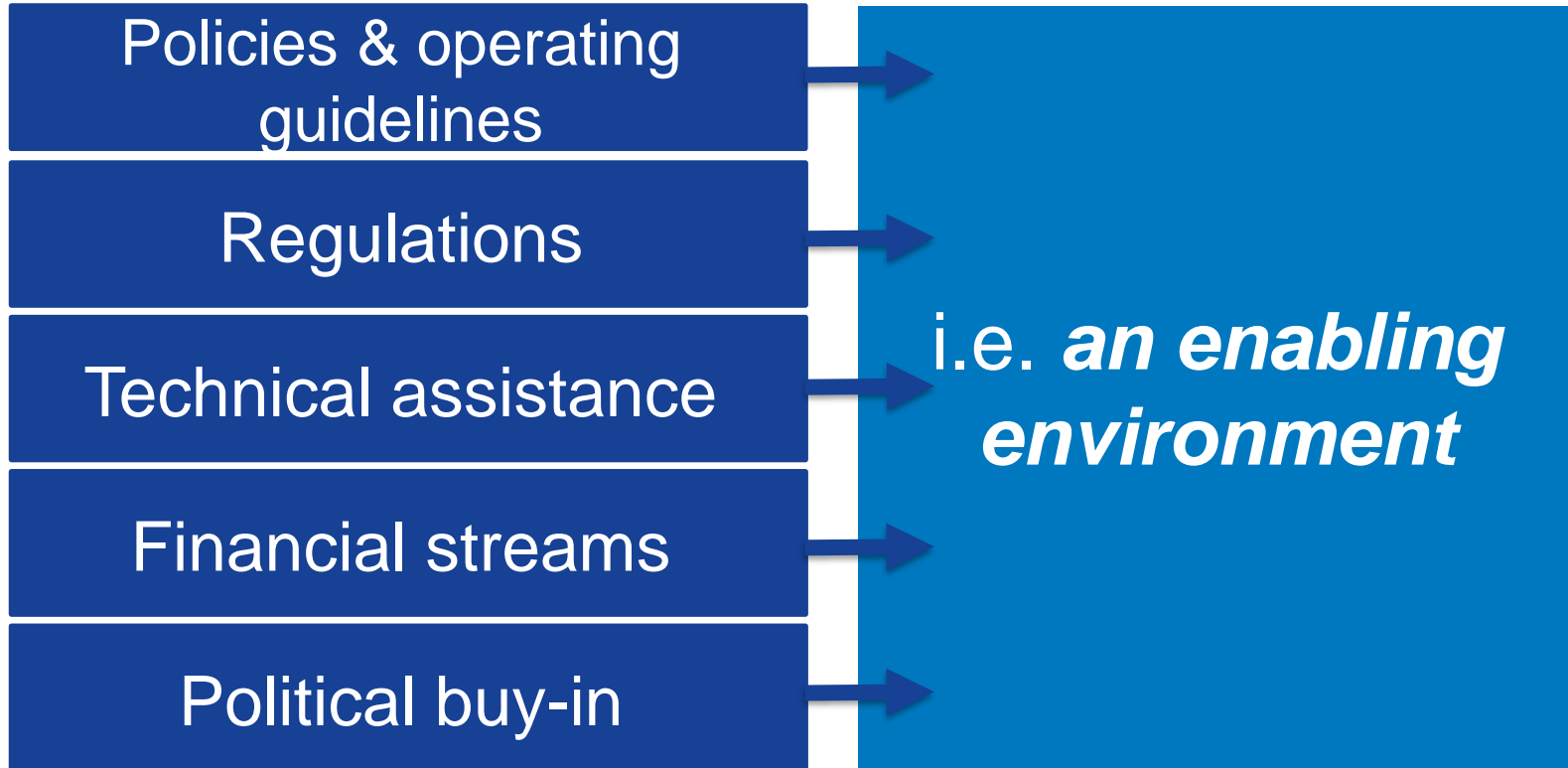


Conclusion

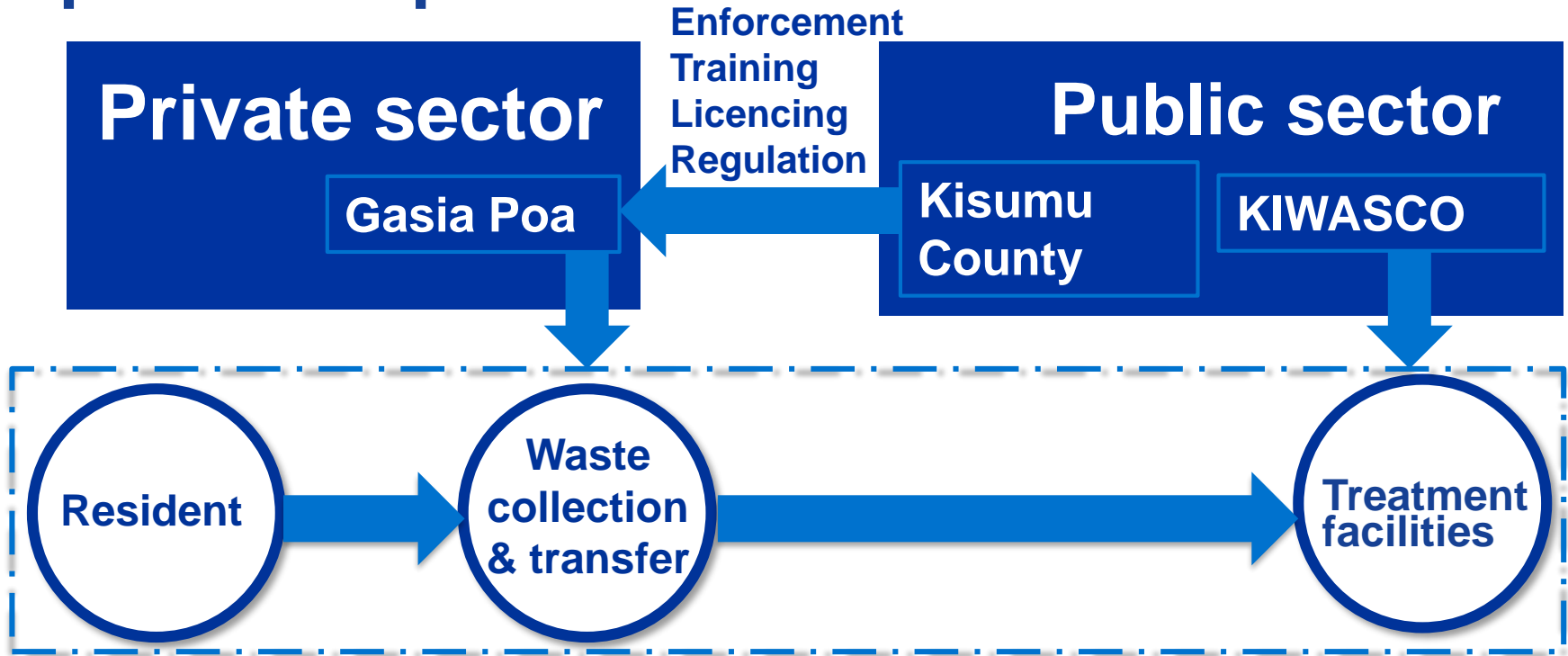
SWEEP is an example of a context-specific LIC business model providing services at reasonable scale in two cities. This has been achieved through the following trigger mechanisms:

- **Citywide approach** which leverages the middle and high-income customer base to rapidly establish financial viability
- **Differential pricing model** with internal cross-subsidy to promote affordability for low-income customers
- **PPP contract conditionality** which leverages the lease-based agreement to require development of the low-income customer base

Public sector must provide: Kisumu



Providing safe FSM: a public-private partnership



Targeting support to sanitation businesses

- Supporting compliance with County Government's licensing standards
- Developing marketing and customer acquisition strategy
- Providing financial modelling and training



RESULT: Gasia Poa maintaining progress



Next steps: Supporting businesses to reach low-income consumers

Financing

Pro-poor sanitation levy/tariff, increased county allocation, financial flows, investment plans, business linkages to financial institutions widening access to improved sanitation

Regulation

Policies, Bills and regulations (PPP arrangements) for Government, city boards and utilities to implement regulations that **create the conditions for formal sanitation businesses to succeed**

Private sector enablement

Institutional arrangements (focal point) and structure for all sanitation service providers, capacity building, standardisation and business linkages

Stimulating the market for on-site sanitation services in Kisumu

In Kisumu, WSUP supported SME Gasia Poa to **expand into urban sanitation**:

- Development of **public-private arrangement** between Gasia Poa, KIWASCO and Kisumu County Government
- Capacity development support including **financial modelling and training**
- Development of **Standard Operating Procedures (SOPs)** to raise standards for emptying and disposal