



Online **ADB Sanitation Dialogue 2021**

ACCELERATING INCLUSIVE SANITATION

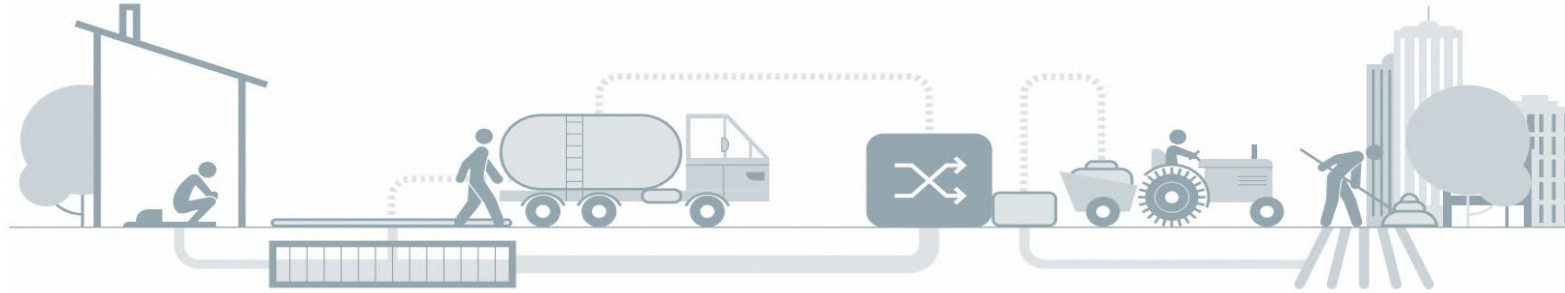
12–22 April 2021

CITYWIDE INCLUSIVE SANITATION (CWIS): A PUBLIC SERVICE APPROACH FOR EQUITABLE SANITATION SERVICE DELIVERY

Roshan Shrestha, Deputy Director

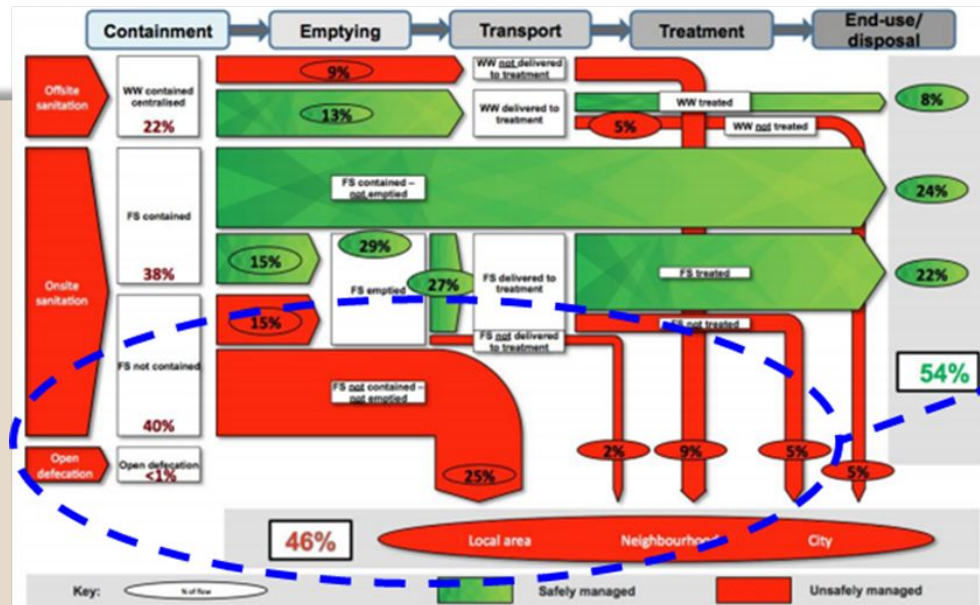
BILL & MELINDA GATES FOUNDATION

WHY ARE WE TALKING ABOUT CWIS?

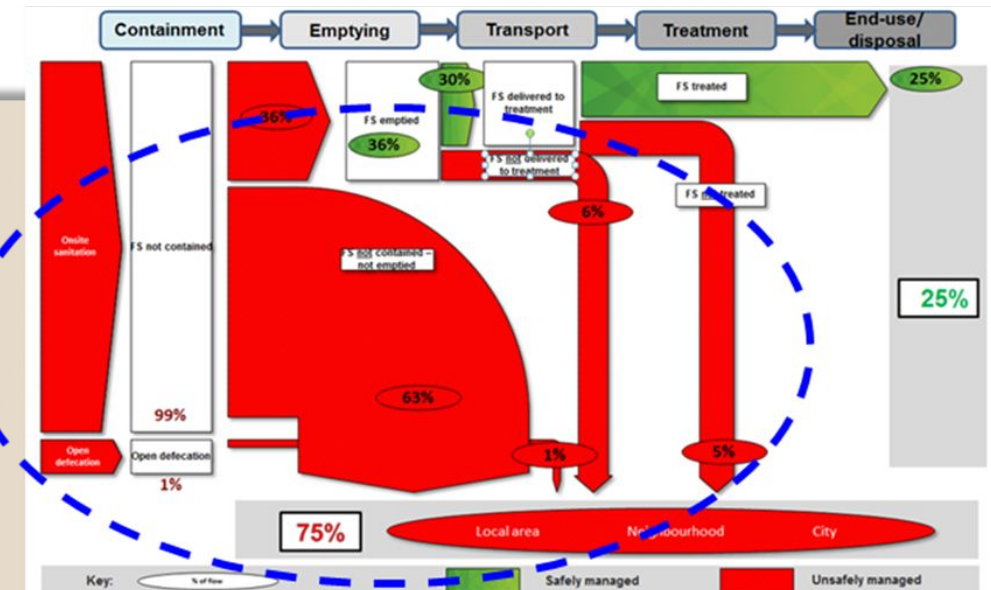


The current approaches for sanitation do not reflect & address the reality of low-income areas

CITY-WIDE



LOW-INCOME AREAS



THE NEED FOR CWIS

PAS TRADITIONAL APPROACHES

- Master planning/ investment only for **centralized systems**
- Financed by **central gov't/loans**
- **Wealthy/business districts** prioritized
- **Limited coverage**
- **Sustainability challenges** for O&M
- **Resource recovery not considered**
- No **performance management**
- **On-site, small network not considered**

PRESENT NSS / FSM APPROACHES

- **Often standalone pilots**, not mainstream
- **NGO / pilot financed**
- FSM value chain/fecal sludge treatment plants
- Poor communities targeted but often missed
- **Informal businesses, NGOs independent from service authorities**
- Business models often **unable to scale**
- Limited **professional capacity**

THE FUTURE CITY-WIDE INCLUSIVE SANITATION



CWIS focuses on promoting approaches to ensuring everyone in an urban area is served by **safe, equitable, and financially viable sanitation service systems**. This means systems are designed to **reach the poor and to ensure human waste is safely managed** along the whole sanitation service chain.

THE FUTURE: CITY WIDE INCLUSIVE SANITATION

We aim to achieve the following outcomes for sustainable changes in sanitation management:



EVERYONE BENEFITS from safe services and public investment equitably, with a focus on reaching the poorest



GENDER & SOCIAL EQUITY are designed into planning, management, monitoring



Human waste is **SAFELY MANAGED ALONG THE SANITATION CHAIN**, starting with containment



Authorities operate with a **CLEAR, INCLUSIVE MANDATE, PERFORMANCE TARGETS**, resources, and accountability



Authorities deploy **RANGE OF HARDWARE, FUNDING & BUSINESS MODELS** to meet goals



Comprehensive long-term planning **FOSTERS INNOVATION, PRO-POOR FINANCING**; informed by analysis of needs, resources



POLITICAL WILL & accountability incentivizes improvements in capacity, leadership, outcomes

GATES FOUNDATION CWIS FRAMEWORK: Promoting a Public Service Approach

CORE CWIS OUTCOMES



EQUITY

Services reflect fairness in distribution and prioritization of service quality, prices, deployment of public finance/subsidies



SAFETY

Services safeguard customers, workers and communities from safety and health risks by reaching everyone with safe sanitation



SUSTAINABILITY

Services are reliably and continually delivered based on effective management of human, financial and natural resources

CORE CWIS FUNCTIONS

RESPONSIBILITY

Authority(s) execute a clear public mandate to ensure safe, equitable and sustainable, sanitation services for all

ACCOUNTABILITY

Authority's(ies') performance against mandate is monitored and managed with data, transparency, and incentives

RESOURCE PLANNING & MANAGEMENT

Resources—human, financial, natural, assets—are effectively managed to support execution of mandate across time/space

WHAT WE'RE LEARNING SO FAR: CWIS CITIES

FUNCTIONS

- **Urban Sanitation Mandates** are sewer-limited, unclear, or decoupled from performance expectations & finance
- **Municipalities are rarely financed or incentivized** to improve service levels, coverage; may not have sufficient autonomy to hire, generate revenue to organize inclusive public sector service
- **Municipal governance reform** may determine limits & opportunities for sanitation system-strengthening
- **Performance Accountability** systems, generally, do not exist for municipalities, are not applied to NSS for utilities, and not backed by measurement systems when applied
- **Civic engagement needs to be built into institutions** to support behavior change, comm engagement, and reinforce transparency
- **Financing** decisions and outcomes still political, opaque, unaligned, inequitable; decision process transparency & clarity requires clear mandates and performance data
- **State/National Systems** that clarify mandates, establish accountability systems, and tie finance to policy priorities, are required if city-level project gains are to be sustained or replicated

OUTCOMES

- **On-site upgrading does not scale or reach the poor** with behavior change and marketing alone. Subsidies are required for safe, inclusive containment & connections
- **Services do not reach LICs** without meaningful and enforced incentives; different private sector engagement approaches are required to reach LICs
- **Formalizing emptying services does not guarantee safe emptying jobs.** Inappropriate/missing PPE gear, manual emptying, manual trash, broken/poorly designed mechanized equipment prevail if workers' labor rights are not actively protected
- **Integrated NSS/SS planning**, service coordination, finances can improve efficiency and accountability
- **Measurement & monitoring approaches** are unharmonized, but often expensive project-based monitoring fills data gaps in lieu of investing in monitoring systems for improved governance
- **Private sector finance** is available if gov't actively structures demand and addresses payment risk; this is required at all stages of 'value chain'

INNOVATIONS

- **City/Utility IMIS** can improve city services; requires training, software integration, time. Success greater if integrated into national accountability/planning requirements (NWASCO/Lusaka, DPHE/Jhenaidah)
- **Decanting stations** for fecal sludge/septage reduce travel, costs, infrastructure redundancies; ease private sector engagement, safety (Trichy/Lusaka)
- **City-scale revenue** using "payment commitment" devices like levies, property taxes, bundled tariffs are necessary for inclusive services, but insufficient for on-site upgrades or services; strengthens municipal incentives but difficult to tie to performance (Wai, Lusaka, Khulna)
- **Hardware is costly** for dense, unplanned, highwater areas, SS or NSS; no escaping long term gov't investment (Kampala, Warangal, Khulna, Dakar)
- **Revenue from reuse** possible but no breakeven opex outside orchestrated projects (all cities)
- **Gender training** req'd across city/utility departments; gender mainstreaming in all service engagements (Khulna, Warangal, Trichy)

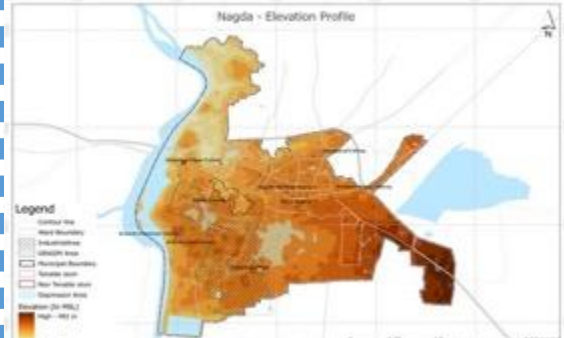
INTEGRATED MUNICIPAL INFORMATION SYSTEM (IMIS) & CWIS

IMIS Landscape

- Municipal GIS-based database and CWIS baseline of the town
- Strategic sanitation planning and decision-making tools for authorities
- Service delivery management
- Municipality's 'regular business process mapping
- Real time monitoring and evaluation – tax payments, service delivery, KPIs
- Link to external databases – health, emergency response
- Plan infrastructure investment



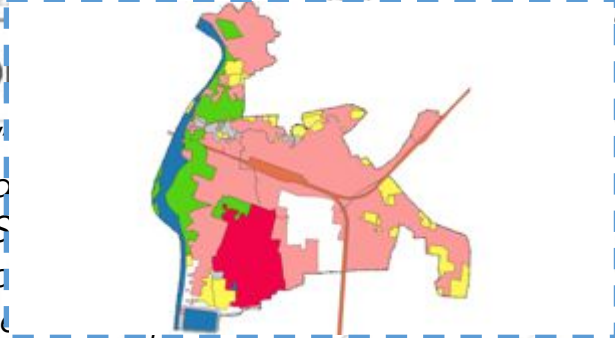
ACCURACY, RELIABILITY, RELEVANCE AND TIMELINESS OF DATA FACILITATED



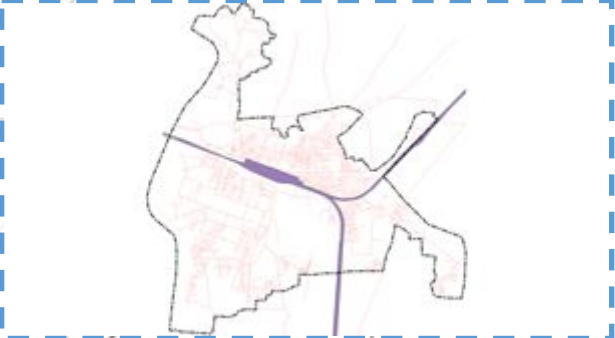
DEM - SRTM Global DEM



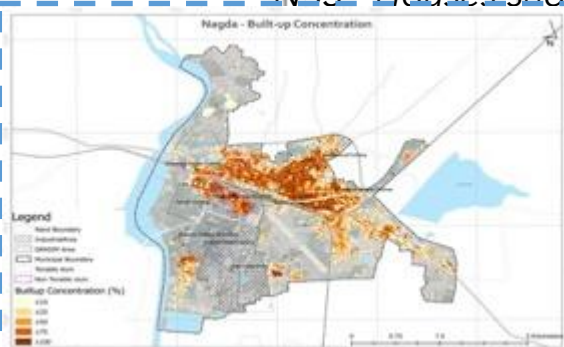
Low Income Settlements, Source: Town



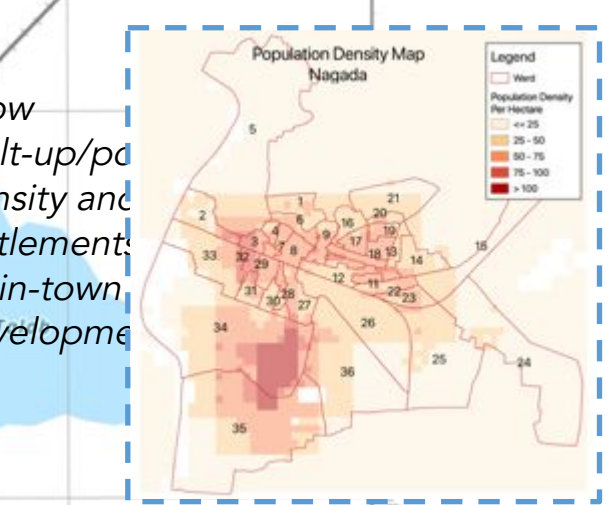
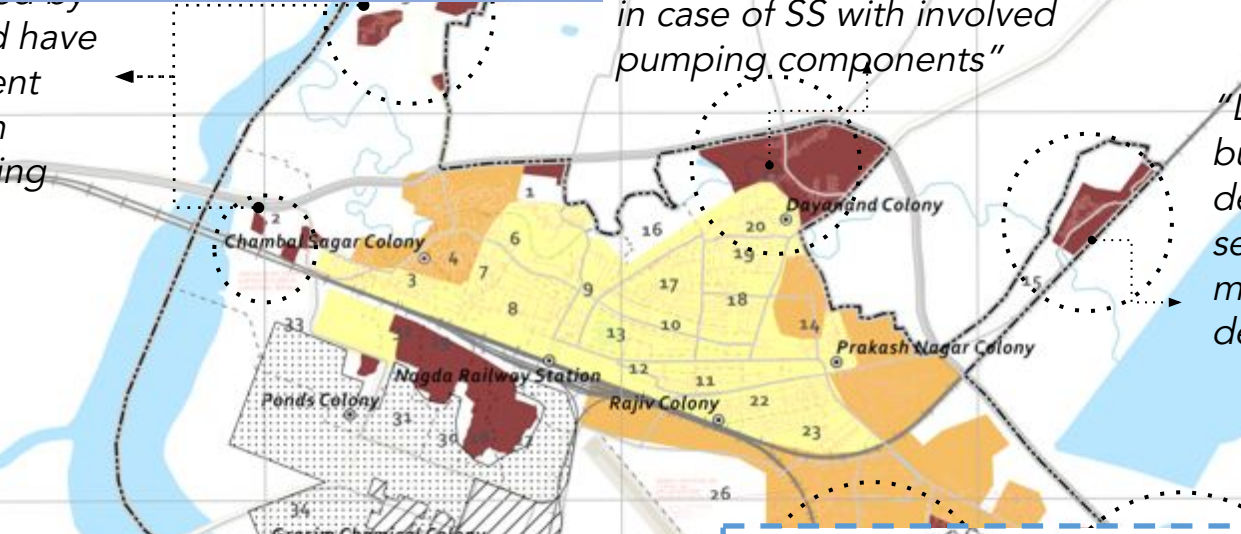
Landuse - Town



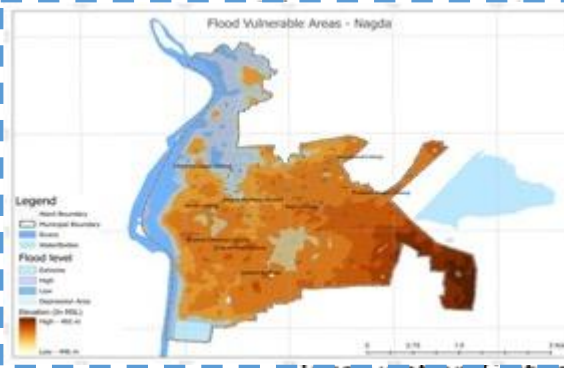
Infrastructure - Town



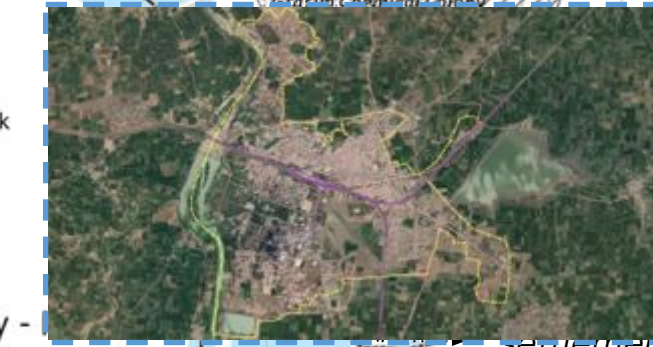
Property Data from Town & Landsat Imagery



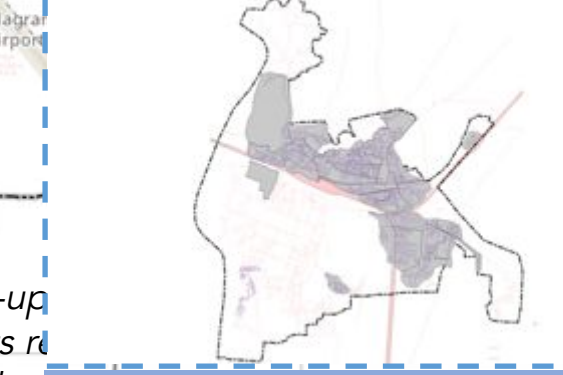
Pop Density, Source: worldpop.org



DEM & Water danger line from Water Resource Department MP



Satellite Image, Source Google



Sewerage Area (AutoCAD) - Proposed by Consultant

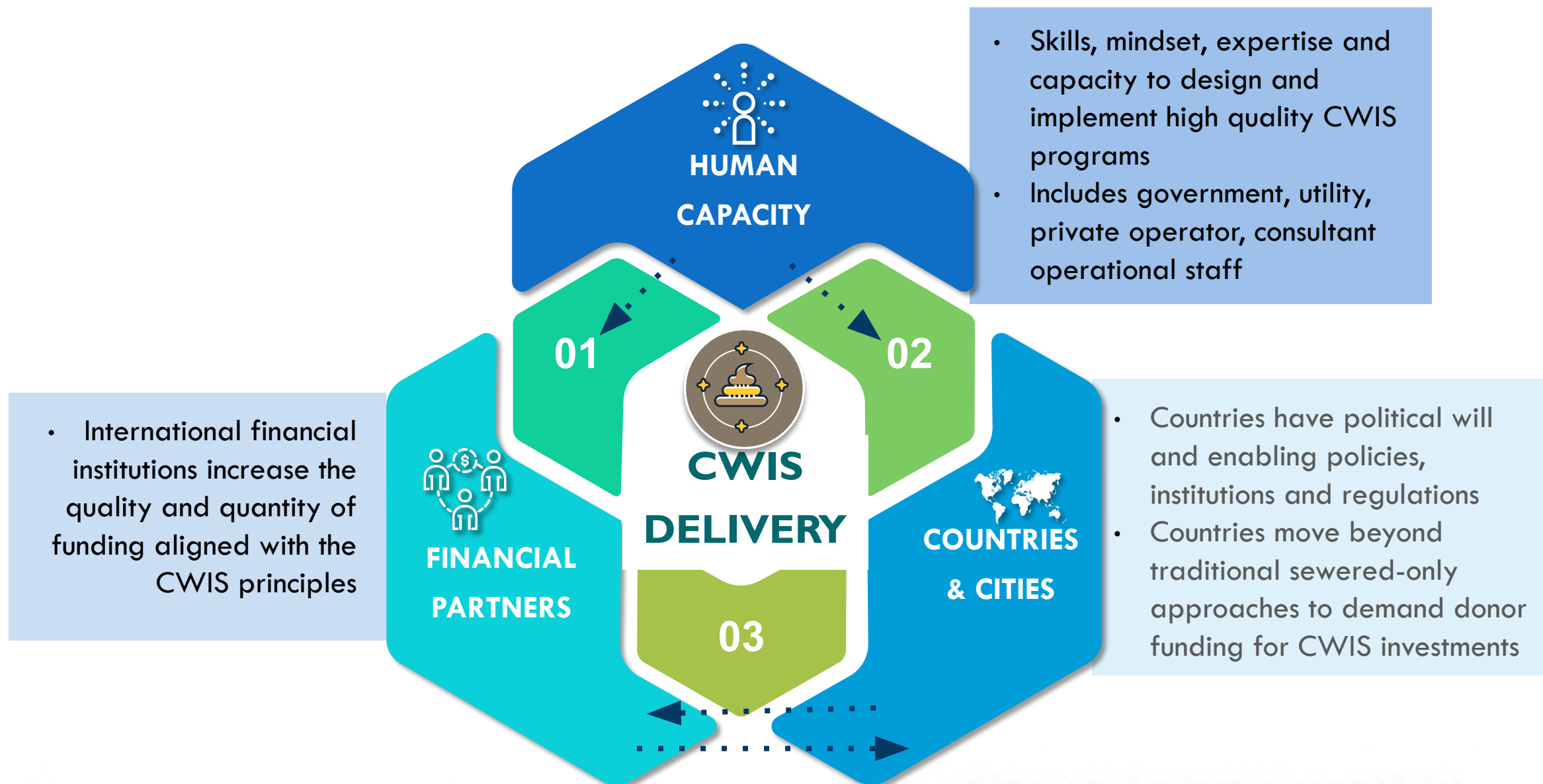
"Low built-up/population density and with organic settlement growth of town, may be covered with SS during 2nd phase of interventions "

ches of SS may be also covered with SS during 2nd phase of interventions "

are some parameters"



WHAT WILL IT TAKE TO SCALE CWIS?



THANK YOU!

