

ACCELERATING 2030 AGENDA FOR SDG 6.2 TOWARDS RESILIENT AND SUSTAINABLE CITIES

April 11, 2023

Inter-Municipal Cooperation for Resilient and Sustainable Cities

Roshan Shrestha, PhD

Deputy Director

Water, Sanitation Hygiene, Global Growth & Opportunity

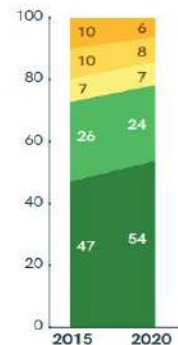
3.6B

people globally lack access to
safely managed sanitation

7%

Increase in proportion of global
population using safely managed
services since 2015

Nearly half the world's population
lacked safely managed sanitation
services in 2020



Global sanitation coverage, 2015-2020
(%)

Safely Managed

Improved and not shared - excreta
safely disposed in situ or off-site¹

Basic

Improved and not shared - excreta
not safely disposed

Limited

Improved (e.g. sewer, septic, VIP
latrines) and shared facilities

Unimproved

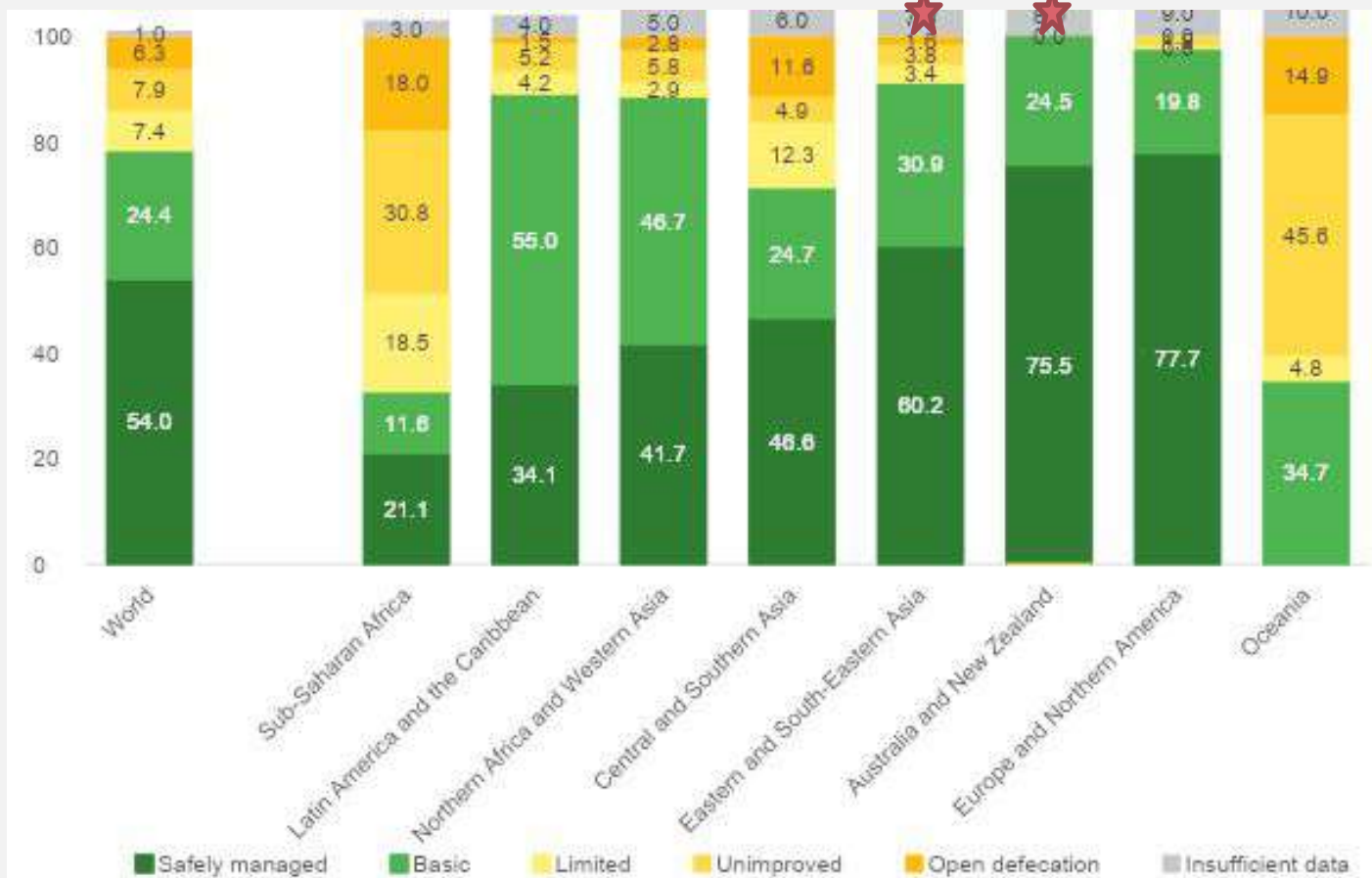
Use of pit latrines without a slab or
platform, hanging and bucket latrines

Open Defecation

Disposal of human faeces in fields, or
other open spaces or with solid waste

**Faster progress required to achieve the SDG goal of
safely managed sanitation by 2030**

1. Transported and treated offsite



ASIA

More than **50%** of the households in India, Bangladesh and Nepal without access to safely managed sanitation.

There exist large variations in basic access to hygiene services across South Asia

80% people in Pakistan able to wash their hands with soap and water at home, compared with **58%** in Bangladesh

COVERAGE OF WASH SERVICES AND ACCELERATION REQUIRED TO MEET TARGETS BY 2030

GLOBAL



SOUTH ASIA



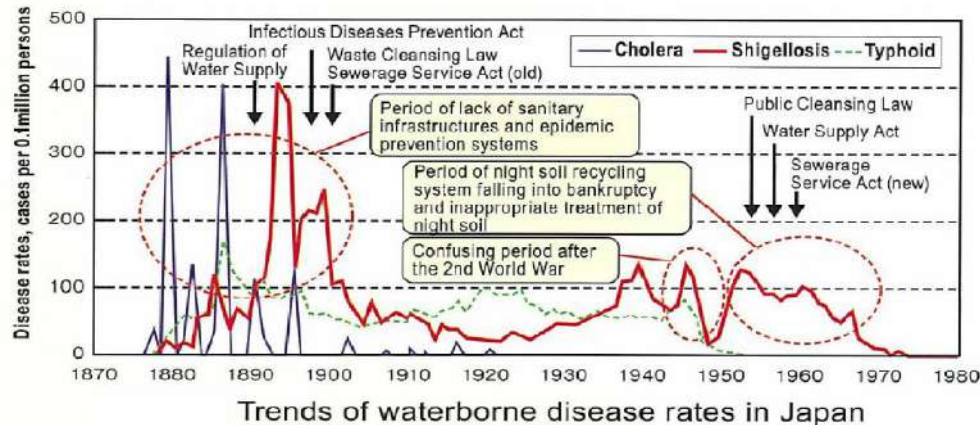
To Achieve the 2030 agenda, with just a little over another half a decade of action at disposal, requires **BOLD & POWERFUL** actions.



HOW MUCH ARE WE OPTIMISTIC ABOUT
ACHIEVING THE SDG 6.2 TARGET?

WE CAN, IF GOVERNMENT AND LEADERS
COMMIT AND CONSIDER IT AS ONE OF THE
PRIMARY AGENDAS FOR THE DEVELOPMENT

JAPAN AND MALAYSIA PASSED THROUGH ALL PROBLEMS



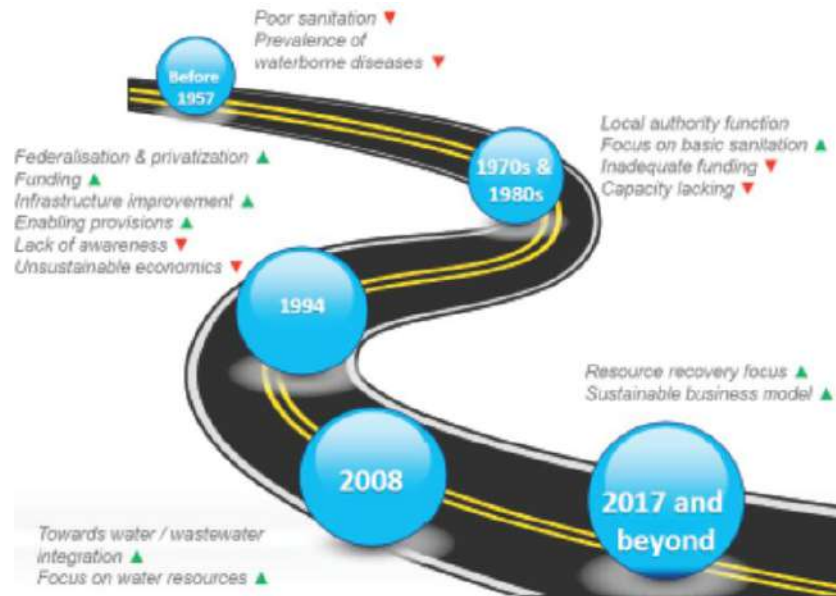
Tokyo Bay



Sumida River



Kanda River



Malaysia Journey

JAPAN'S EXPERIENCES WITH SANITATION MUST BE AN INSTRUMENTAL

Shift from manual to mechanized night soil/sludge collection system

- Night soil was originally carried in wooden buckets by farmers from house to house



- Development of mechanized vacuum vehicles by Kawasaki City and start of operation in 1952 (first use of such vehicles) → 26 000 vehicles today

Evolution of vehicles used for night soil/sludge collection and transport in Japan



A two-wheeled cart in 1950s



The first small vacuum truck in 1960s

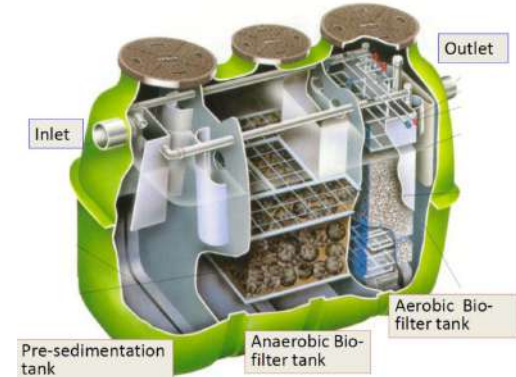


A normal vacuum truck



A vacuum truck with concentrating function

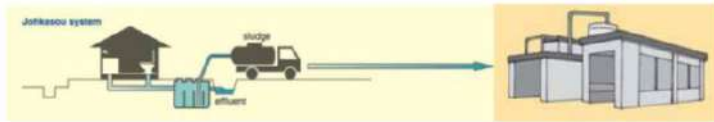
OPERATION & MAINTENANCE OF SMALL-SCALE PAWTP



DEVELOPING WORLD CAN LEARN A LOT FROM JAPAN

Enactment of PAWTP(Johkasou) Act in 1983
- An overhaul of Japan's decentralized wastewater management system -

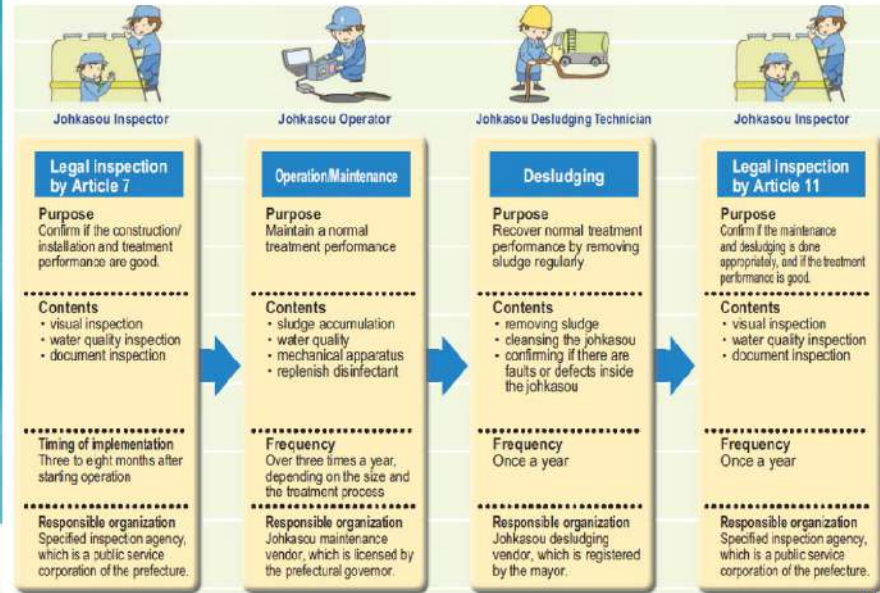
Diffusion of the PAWTPs for both black and grey water.



Establishment of the legal basis for manufacturing, installation, maintenance, desludging and inspection of decentralized wastewater treatment systems.



LEGAL FRAMEWORK FOR NON-SEWERED SANITATION *Inspections, O&M and regular desludging*



THE FOUNDATION HAS PRIORITIZED THE TRANSFORMATION OF SANITATION FOR OVER 10 YEARS



BMGF launches the “Reinvent the Toilet” Challenge, awarding grants to 16 researchers to design a new NSS solution



UN Sustainable Development Goals (SDG) are adopted, incl. 6.2 which prioritizes access to safe sanitation for all



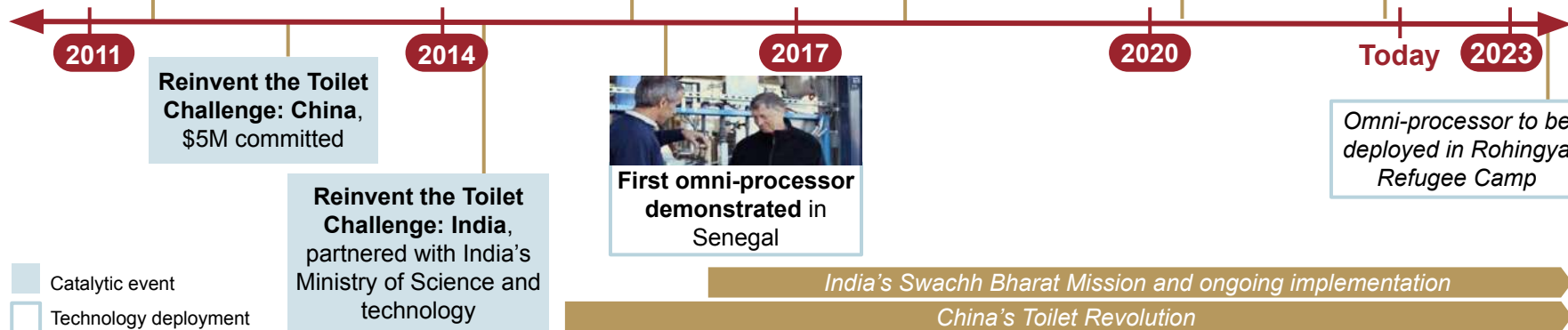
Reinvented Toilet Expo, hosted in Beijing, announces RT products and funding commitments to drive adoption of RTs



CRTs demonstrations live in China and South Africa

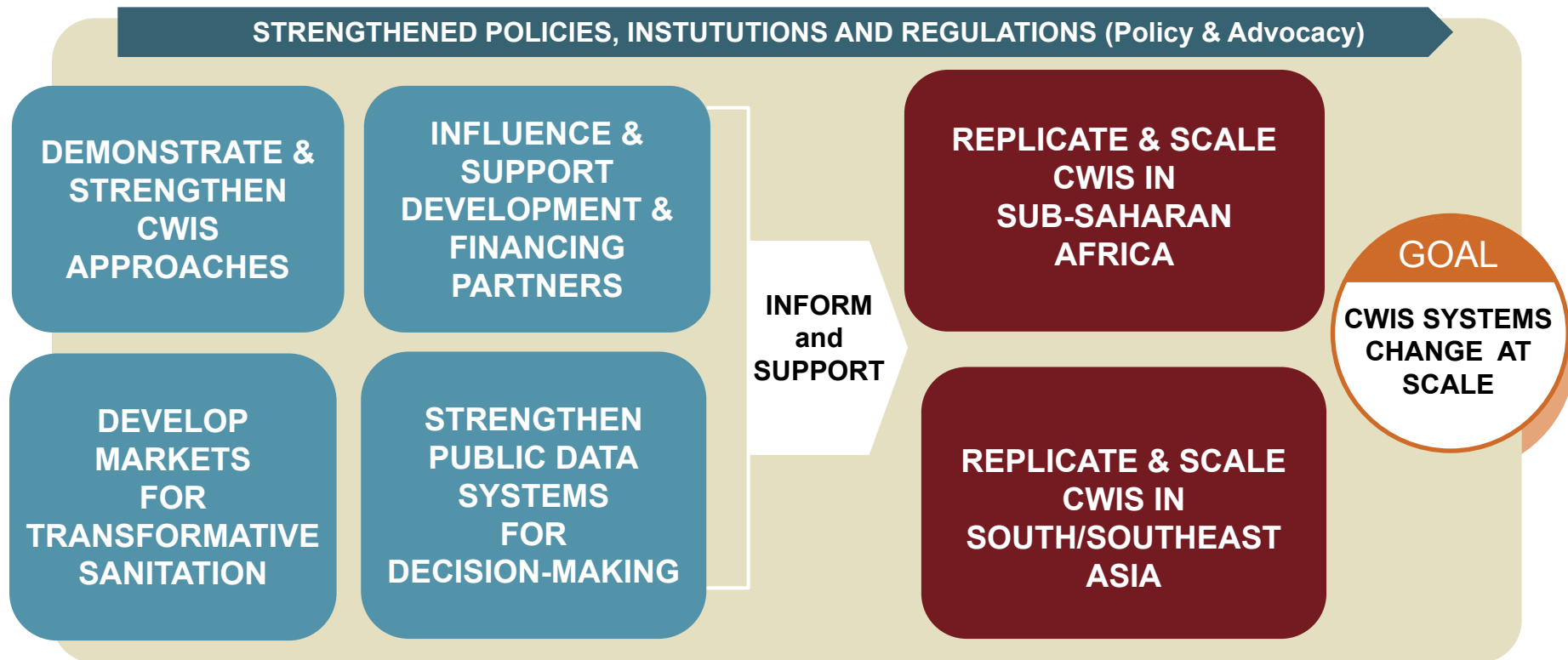


HRT testing units deployed in US, India, France, and South Africa



CITYWIDE INCLUSIVE SANITATION (CWIS) OVERVIEW

The CWIS initiative focuses on transforming public service systems to achieve inclusive urban sanitation at scale



GOVERNMENTS IN SOUTH ASIA: LEADING THE REGIONAL SHIFT TO SAFELY MANAGED SANITATION

INDIA



National Workshop on Urban Sanitation, April 2016



Primer on FSSM released at National Workshop on City's Journey Beyond ODF – FSSM, September 2016

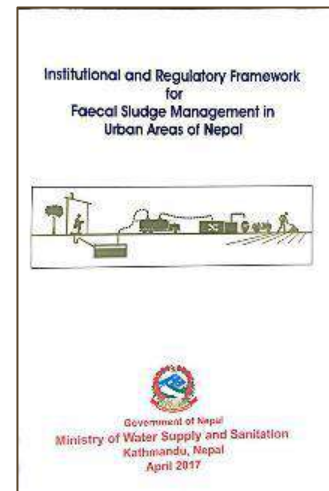


MoUD at FSM4 International Conference, February 2017



National FSSM Policy released at National Workshop on UD, 28th February 2017

BANGLADESH & NEPAL



SINCE 2016, THE ADOPTION OF THE CITY WIDE INCLUSIVE SANITATION MODEL HAS BEEN SCALED IN 6 CHAMPION STATES IN INDIA



Maharashtra (CWIS city Wai):
FSSM Planned in **300+** Towns



Tamil Nadu (CWIS city Trichy):
FSSM Planned in **49** Towns



Odisha: FSSM Planned in **114** Towns



Uttar Pradesh: FSSM
Planned in **31** Towns



Andhra Pradesh (CWIS city Narsapur)
Telangana (CWIS city Warangal): FSSM
Planned in **262** Towns

Best practices that have emerged through CWIS implementation in states and cities supported by NFSSM Alliance partners



Financial Sustainability

- Integrating cost for sanitation in property tax
- Leveraging multiple sources of finance; 15th FC, SBM 2.0, AMRUT
- State investment plans for phase-wise FSM roll-out
- Private sector participation and PPP models for FSSM



Strengthening Service Delivery

- Monitoring tools to track quality desludging services (GPS Monitoring, Sanitab/ Sanitrack)
- Clustering of ULBs to utilize single FSTP infrastructure
- Innovative technology and business models



Institutional Capacity Building

- Establishing sanitation Support Cells in each ULB
- Training for elected councilors and ULB officials for FSSM adoption at scale
- Establishing guidelines and regulations to monitor FSSM



Community Engagement

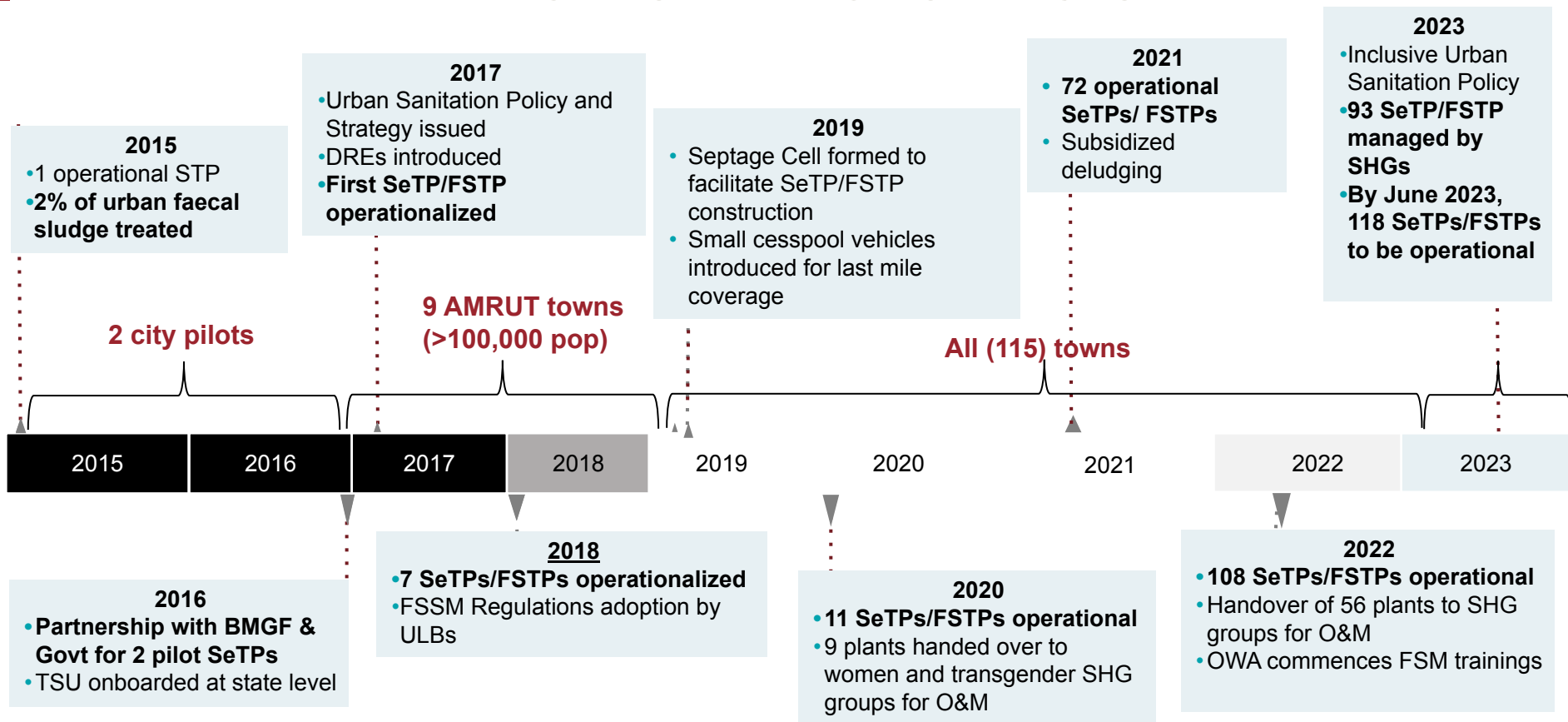
- Contracting women and trans-SHG for FSTP O&M
- Establishing community-led decision making platforms



Sanitation Worker Safety

- Establishing mandates for PPE usage and availability
- Launching state schemes for san-worker welfare insurance remittances
- Mechanization options

REMARKABLE PROGRESS IN ODISHA FOR INCLUSIVE, SAFELY MANAGED SANITATION SERVICES





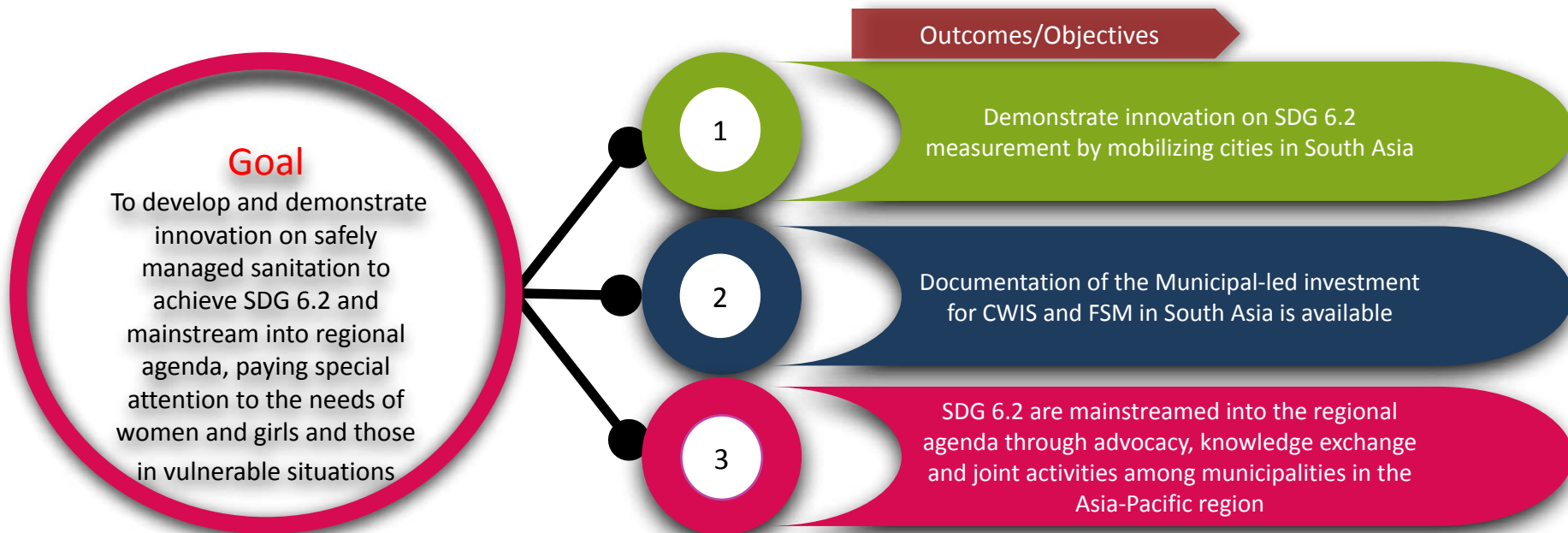
Garima Scheme



Ensuring Sanitation Workers' Safety and Dignity



MUNICIPALITIES NETWORK ADVOCACY ON SANITATION IN SOUTH ASIA (MUNASS)



EXCELLENT EXAMPLE OF MUNICIPAL ASSOCIATION IN NEPAL FOR HIGH-LEVEL ADVOCACY



Rt. Hon. PM KP Sharma Oli
13 March 2019



Rt. Hon. PM Sher Bahadur Deuba,
13 March 2022.



Rt. Hon. PM Pushpa Kamal Dahal,
13 March 2023.



Hon. Minister,
Bina Magar,
8 June 2019



CWIS-FSM SCALING UP IN BANGLADESH

POLICY AND ADVOCACY FOR CWIS/FSM



As per National Action Plan for IRF-FSM, guiding documents for CWIS implementation is developed by the CWIS-FSM Support Cell. These include CWIS service delivery framework, Gender Action Plan, Community Engagement Strategy, Integrated municipal sanitation system and business models. These guidance documents strengthen advocacy efforts in establishing CWIS nationally

BUILD CAPACITY FOR CWIS/FSM IMPLEMENTATION



The guidance documents developed by CWIS-FSM Support Cell aggravate the need of capacity enhancement. The CB hub in Bangladesh (ITN-BUET) develops the training modules based on the guidance. It provides training to a range of targeted stakeholders (Municipalities, DPHE, Private Sectors). So far, 100 cities and associated LGIs are oriented on different modules of CWIS.

EFFECTIVE SANITATION SERVICE DELIVERY SYSTEM



Appropriate CWIS indicators and KPIs in Household level, City level and National level are finalized that will demonstrate CWIS service in different projects of DPHE. In addition, 05 more cities are targeted as CWIS cities for demonstration of effective CWIS service delivery to strengthen advocacy in scaling up CWIS-FSM in Bangladesh.

INFLUENCE URBAN SANITATION FINANCING



Support DPHE in increase of investment on CWIS-FSM by the key DFIs, and GoB. So far, more than 350m USD is invested by DFIs on CWIS-driven projects and more than 500m USD is in pipeline for investment by other DFIs (ADB, AFD etc)

DEVELOP MARKET FOR TRANSFORMATIVE SANITATION PRODUCT & SERVICES



The cell is doing advocacy to create enabling environment to introduce innovative technologies, including RTs and OPs with sustainable service and business models. One OP is installed in Cox'sBazar and the cell is working for operationalizing it in local context.

MEASUREMENT AND DATA SYSTEM



The cell has supported DPHE to establish national sanitation dashboard with SFD as standard monitoring tools for the municipality. The cell is now working in the implementation of IMIS to 2-5 municipalities under DPHE's project triggering standard service delivery, accountability, and financing decisions by the municipalities, and to track citywide progress against SDG 6.2.

EMERGENCY/ DISASTER & CLIMATE CHANGE MANAGEMENT



OCTOPUS online platform is established to facilitate FSM learning sharing in emergency contexts in Cox'sBazar due to the influx of Myanmar nationals to Bangladesh.

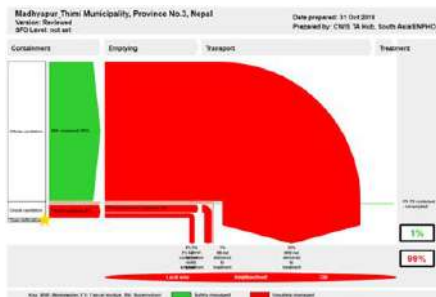
GENDER EQUALITY AND WOMEN EMPOWERMENT



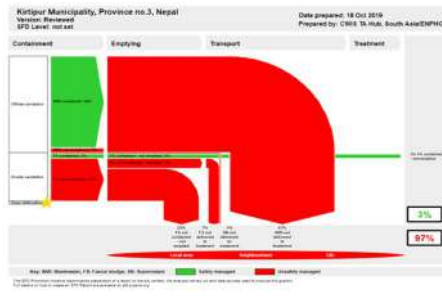
Apart from the different CWIS guidance documents on efforts towards gender mainstreaming in DPHE's projects, a separate project on WISE is conceptualized and developed, triggering gender equality and women empowerment.

RANKING SAFELY MANAGED SANITATION CITIES IN NEPAL

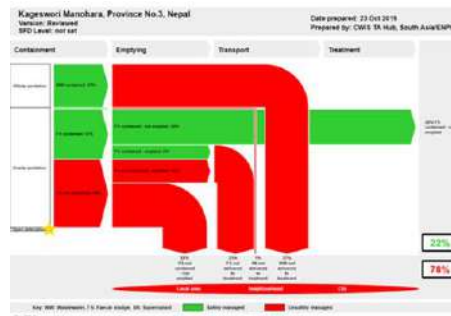
Madhyapur Thimi (1%)



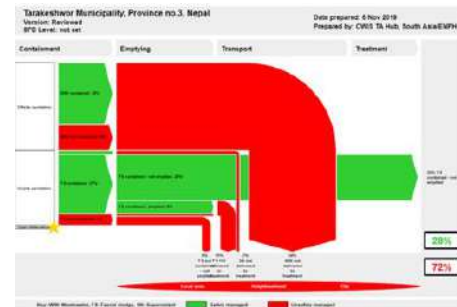
Kirtipur (3%)



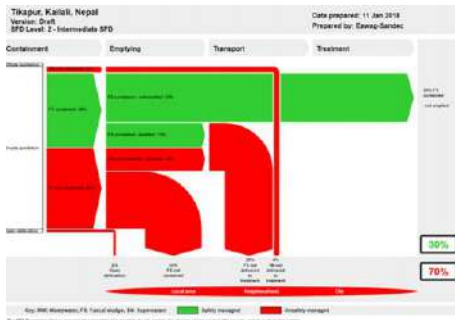
Kageswori (22%)



Tarkeswori (28%)



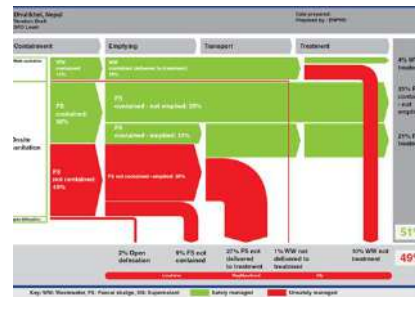
Tikapur (30%)



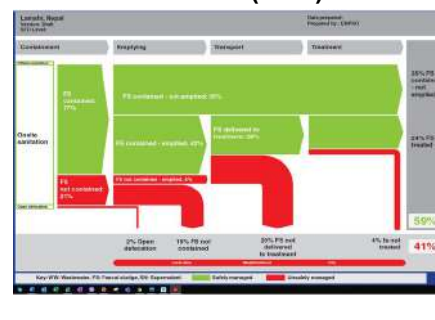
Bheemdatta (49%)



Dhulikhel (51%)



Lamahi (59%)



STRENGTHENING PUBLIC DATA SYSTEMS AND CWIS

NATIONAL SANITATION DASHBOARD - BANGLADESH

Description

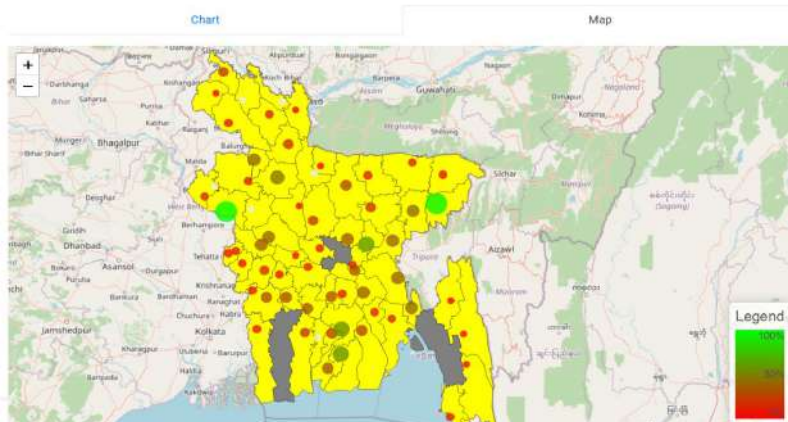
Please choose the indicators from the sections below to view the respective data visualized on the map window.

NB: All the data shown here based on district municipal area only.

CWIS +

Solid Waste Management (SWM) -

- Percentage of waste segregation at source
- Percentage of waste collects by van operated by ULB
- Percentage of waste collects by van operated by other agencies



Design & Developed by Tiller

Chaugacha Paurashava, 2021

Overview

SDO Indicators for Sanitation



General Information



Sanitation Profile



SWM Summary



Chaugacha Municipality, State/province name, Bangladesh
Version: Draft
SFD Level: SFD Lite

Date prepared: 27 Jan 2022
Prepared by: WSUP



STRENGTHENING PUBLIC DATA SYSTEMS AND CWIS

Integrated Municipal Information System [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



IMIS Driving Efficiency, Responsiveness and Accountability of Municipalities

CWISAN

Expert Private Companies

Innovative Solutions
Triangle Solutions
500 B
Eco Concern
TA Hub

Media

A year since CWISAN formed.(December 2021)

- Diverse members (17 Agencies and Experts)
- Secretariat role : UN-Habitat
- One collective vision voice and shared Mission
- Focus on three themes
 - Policy Influence and Monitoring
 - Advocacy
 - Capacity Building



FANSA



EXPERT
INDIVIDUALS



MuAN
Municipal Association of Nepal



UCLG
United Cities
and Local Governments



SNV

UN HABITAT
FOR A BETTER URBAN FUTURE

Network Objectives

- Collaborative Learning
- Policy Influencing & Advocacy for safe and sustainable Faecal Sludge Management in Bangladesh

Our Agenda:

- Establish the dignity for the Sanitation Workers with particular focus on women workers
- Integration of City-Wide Inclusive Sanitation (CWIS)
- Private sector engagement
- Standardization and certification of FSM services and end-products
- Introduce City Sanitation Tax

What we have done so far

- Organised five FSM & Emptiers Convention
- Support in developing the FSM IRF & FSM NAP
- Networking with the sector actors to attend events like international FSM conferences.
- Acknowledging the Sanitation Workers as the frontliner for vaccination by the government during **Covid-19**. Producing knowledge material.
- Website: <https://fsmbd.net>

Plan up to 2024

Strengthening the Governance of the Network | Building Capacity of the Network in collaboration with NFSSM India | Increasing the number of Network members (CSOs, Academia, Researchers, Private Sector, Youth) | Influencing the Policy Makers through organizing different events | Organizing national-international learning visits | Establishing the South Asia Regional Alliance on FSM

Rising for Rights: Strengthening Civil Society Network in South Asia to achieve SDG 6

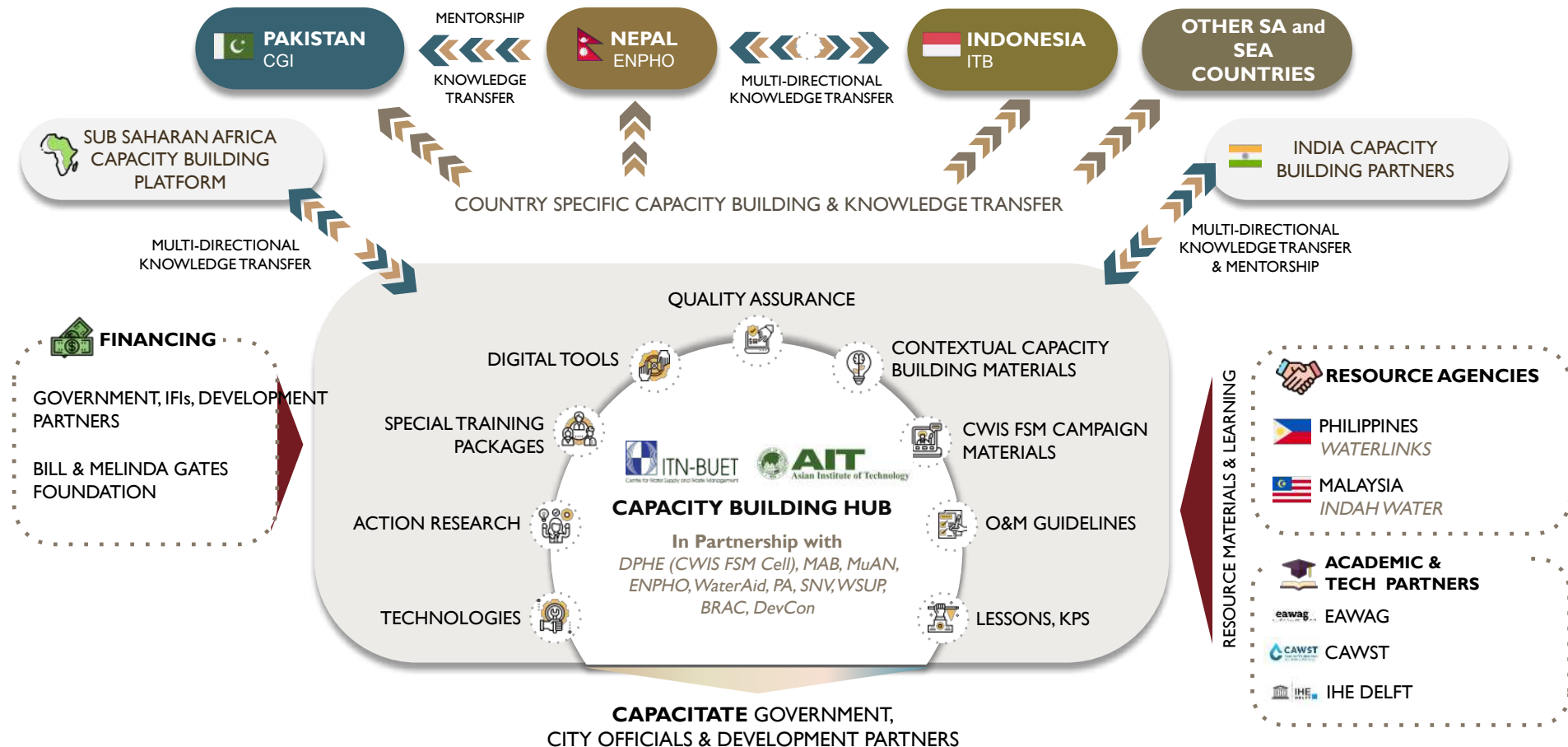


Aim

The program aims to strengthen the capacity of Freshwater Action Network South Asia (FANSA) platform and its coordination mechanisms to scale up participatory citywide inclusive sanitation (CWIS) approach in South Asia (SA) and beyond thereby leading to establishing itself as a vibrant South Asian Network of Civil Society Organizations (CSOs).

WE HAVE BUILT AN ECOSYSTEM TO
ACCELERATE PROGRESS!

SCALING CWIS: REGIONAL CAPACITY BUILDING HUB



GLOBAL WATER AND SANITATION CENTER AS A RESOURCE AGENCY FOR TA



**Integrated Municipal Information System
'IMIS'**



**Research Grant and Support
'RGS'**



Performance & Proficiency Testing 'PPT'
NATS
CERTIFIED BY ISO 17025:2017



**Reinvented Toilet Testing Facility
'RTTF'**
BORDA



Market Survey and Development 'MSD'



AS A CENTER OF EXCELLENCE

**Technical Assistance Hub
'TA Hub'**

Climate Adaptive Sanitation 'CAS'



CLIENTS

BI-LATERAL & MULTI-LATERAL
FINANCING INSTITUTIONS



Targeted
INDUSTRY



Targeted **MARKET**



India Bangladesh Nepal Pakistan Thailand Indonesia

GSGS University PARTNERS



NETWORK OF EXPERTS



AIT

DEPARTMENTS

- COMPUTER SCIENCE AND INFORMATION MANAGEMENT (CSIM)
- REMOTE SENSING AND GIS (RS & GIS)
- URBAN INNOVATION AND SUSTAINABILITY (UIS)
- ENVIRONMENTAL ENGINEERING AND MANAGEMENT (EEM)
- WATER ENGINEERING AND MANAGEMENT (WEM)

- CLIMATE CHANGE ASIA
- ARTIFICIAL INTELLIGENCE CENTER
- GEOINFORMATICS CENTER
- AIT ENTREPRENEURSHIP CENTER
- AIT SOLUTIONS
- AIT EXTENSION



Ambition 2019-2030:

10,000⁺

sanitation professionals educated by

100⁺ academic institutions.

GLOBAL
SANITATION
GRADUATE
SCHOOL

BILL & MELINDA
GATES foundation

FSMA



unicef



UNITY KNOWLEDGE LLP

UTEC

TU Delft

eawag

aquatic research

香港科技大学
THE HONG KONG
UNIVERSITY OF SCIENCE
AND TECHNOLOGY



CEPT
UNIVERSITY



THESE LEARNINGS AND BEST PRACTICES ARE NOW BEING DISSEMINATED TO THE SOUTH ASIA REGION TO SCALE INCLUSIVE SANITATION OBJECTIVES



Disseminating knowledge and learnings from India to South Asia by fostering a **regional collaboration** towards **cross learning and sharing**



**Workshops and
convenings**

Curate **workshops, convenings, working groups** at a South Asia level, aggregate knowledge and share **learnings, case stories, and challenges** on CWIS



**South to South
Exposure Visits**

Curate **exposure visits** that enable stakeholders to learn from and share implementation approaches based on the gaps and thematic area of focus



**Institutional Capacity
Building**

Advisory and mentorship support towards **strengthening the Communities of Practice** to scale CWIS



**Codifying Learnings &
Best Practices**

Support local partners towards curating **knowledge products / media narratives** to build thought leadership and allow replication



Inclusion

Access, equity and empowerment of marginalized groups



Private Sector Engagement

Enhanced participation by developing an enabling ecosystem, via model contracts, ease in payments, etc.



Capacity Building

Training and building curricula for capacitating govt., administrative officials, and other stakeholders



Monitoring & Evaluation

Data collection and tracking for quality assessment & policy creation



Climate Change

Building city resilience by planning and adapting towards climate change



Collaborative Platforms

Building collaborative systems for a holistic approach to service delivery for sector outcomes

Knowledge Dissemination

Thematic areas

Sanitation Tours

LEADERSHIP DEVELOPMENT FOR

CITY-WIDE INCLUSIVE SANITATION

Learning visits for the achievement of
sanitation goals and SDG 6 in South Asia



India



South Asia



World



**IF YOU WANT TO GO FAST,
GO ALONE.**

**IF YOU WANT TO GO FAR,
GO TOGETHER.**

— African proverb