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WEBINAR INFORMATION





- 'Chat' box: please use this for general requests and for interactive activities.
- 'Q&A' box: please use this to send questions to the panelists.
 (We will answer these during the discussions)

Please Note: Attendees' microphones are muted. We cannot respond to 'Raise Hand'.



Poll 1

MODERATOR: SIYKA RADILOVA

MODERATOR & SPEAKERS

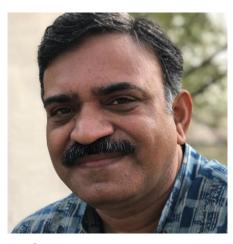




Siyka Radilova, International Water Association, United Kingdom (Moderator)



Mai Flor, WaterLinks, Philippines



Suresh Kumar Rohilla, International Water Association, United Kingdom



Abdullah Al-Muyeed, CWIS-FSM Support cell, Bangladesh



Patrick Lester N. Ty, MWSS Regulatory Office, Philippines

AGENDA

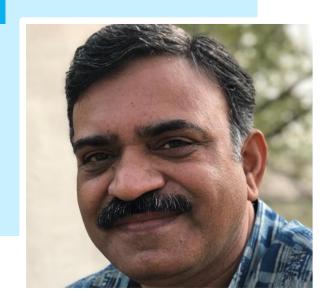


- Welcome, housekeeping rules, introduction, poll Siyka Radilova
- Lessons learnt: Regulating for CWIS
 Suresh Kumar Rohilla
- Towards the Design of Effective Regulatory Arrangements for WASH in South Asia Mai Flor
- Government leadership towards Scaling up CWIS and achieving SDG 6.2 in Bangladesh Abdullah Al-Muyeed
- Regulatory approach towards achieving CWIS in Metro Manila, Philippines
 Patrick Ty
- Q&A DiscussionSpeakers & Moderator
- Poll, Final remarks and conclusion
 Patricia Policar



Lessons learnt: Regulating for CWIS

SURESH KUMAR ROHILLA, IWA



GLOBAL SANITATION AGENDA



- The Citywide Inclusive Sanitation (CWIS) approach is recognized by key international players as the way forward to achieve SDG 6.2.
- Citywide inclusive sanitation is a public service approach to planning and implementing urban sanitation systems to achieve outcomes summarised in Sustainable Development Goal 6: safe, equitable and sustainable sanitation for all, irrespective of where people live within the city or what technologies are used to serve them











R-CWIS INITIATIVE



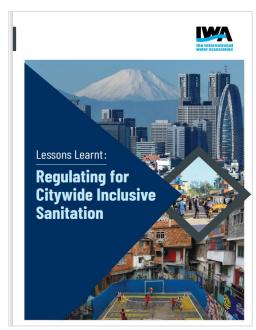
How the project was developed

- Collaboration with its partners, namely representatives from regulators and organisations across the globe.
- This involved setting up a team at IWA Secretariat as well as an Advisory Board & a Task Force.









CASE STUDIES



Starting the CWIS transition

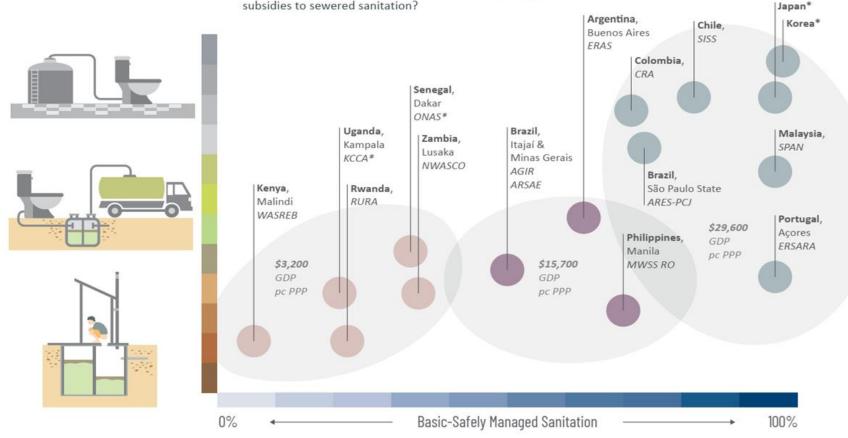
How do the cases deliver through regulating their NSS whilst managing the unfair subsidies to sewered sanitation?

Ensuring CWIS works

How do these cases regulate their transition to sewerage whilst improving their NSS?

Completing the CWIS journey

How do these cases regulate their 'remainder' NSS?



LESSONS LEARNT



- Safe-guarding safe services provision to all requires a review of utility and regulator mandates, especially in fast-growing settlements.
- Data is essential for utilities for their own operations and planning. This is an
 expensive venture and therefore government should provide and incentive.
- Gradual, incremental regulatory measures more feasible than bold moves.
- There is need to rethink the role of the regulator, there has been a dynamic change over the years and the Citywide Inclusive Sanitation approach requires further shifts.

LESSONS LEARNT



- Regulators need to have sufficient 'independence' and always necessarily being aware of the socio-economic-political context.
- Also, as the context evolves, reassessment is needed, in order to enabling the sustainable delivery of sanitation for all.
- Citywide Inclusive Sanitation is relevant in all contexts (not just in Low-Income Countries) and sanitation – especially non-sewered sanitation – needs to be planned and managed to take account of cross-cutting linkages with housing, drainage, and solid waste.

LESSONS LEARNT



Roles and Responsibilities

- Recognise Citywide Inclusive
 Sanitation as the critical first step to the longer-term goal of implementing Integrated Urban Water Management.
- Adjust the license of public water (and/or sewerage) supplier to become a water and sanitation company, with responsibilities to manage sanitation service provision for all.

Regulation and standards

- Harmonise regulatory requirements across sanitation-related sectors to ensure the protection of human health and the environment.
- Prepare Standard Operating
 Procedures to ensure the well-being of sanitation workers.

WHAT IS HAPPENING?



Reshaping the global urban sanitation agenda by focusing on inclusive sanitation service goals--and the service systems required to achieve them - rather than the traditional singular focus on expanding sewer networks and treatment works



WHAT IS HAPPENING?





Inclusive Urban Sanitation



- Engage public, private, academic sector to share their experiences and define global goals and fundamentals of a public sector approach to service outcomes.
- The initiative is being progressed through the SanitAction campaign – IWA's global call to action on inclusive urban sanitation.

WHAT ACTIONS IS IWA PLANNING?



- IWA journal special issues on inclusive urban sanitation and other publications focusing on LMIC including white paper / position papers.
- Webinar series, MOOC and learning sessions including focused trainings.
- Blogs / Stories series including podcasts and documentaries.
- Launch of biennial Innovation Conference to be held in LMIC & Innovation Awards.

For more information on how you can help to reshape the global agenda on urban sanitation, contact:

Suresh Kumar Rohilla

Programme Lead

suresh.rohilla@iwahq.org

www.iwa-network.org/ projects/ inclusive-sanitation





Towards the Design of Effective Regulatory Arrangements for WASH in South Asia

MAI FLOR, WATERLINKS,



BACKGROUND

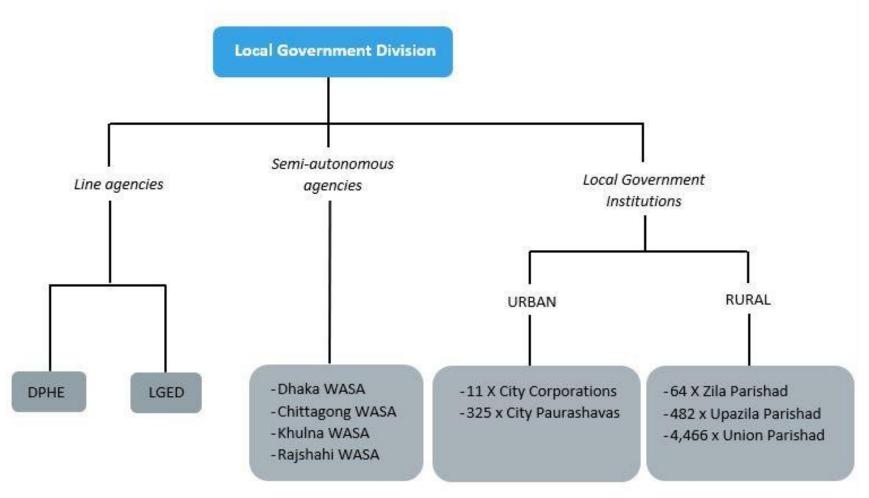


- BMGF supporting a review of current efforts at reform in Bangladesh, India, and Nepal.
- Countries in various states of reform.
- Review of current efforts at reform; understand challenges faced, and assist in arriving at a feasible option.

Models from Africa, Manila, Malaysia will be introduced.

ORGANIZATIONS INVOLVED IN WASH SERVICES (BANGLADESH)



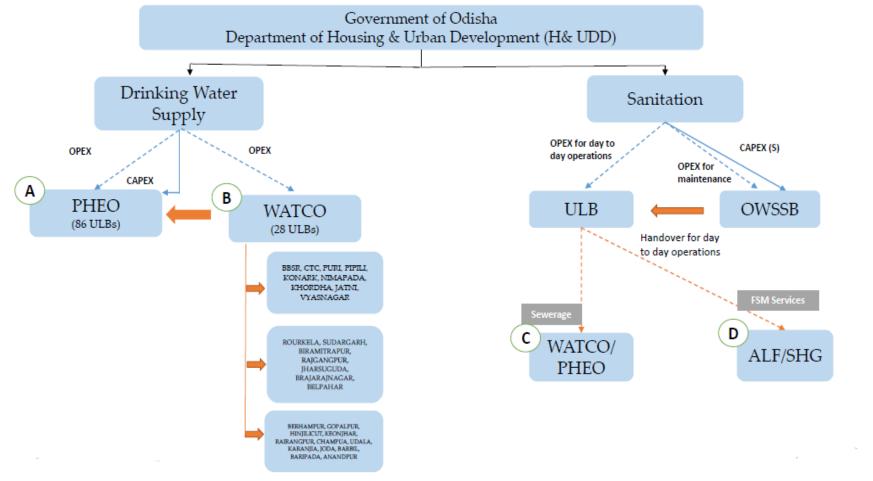


Source: SNV Smart Development Works Review of Policy, Review of Legal and other Governing Factors related to Faecal Sludge Management in Bangladesh, 2014.

Note: WASA responsibility limited to sewerage services; FSM the responsibility of Local Governments

ORGANIZATIONS INVOLVED IN WASH SERVICES (ODISHA, INDIA)



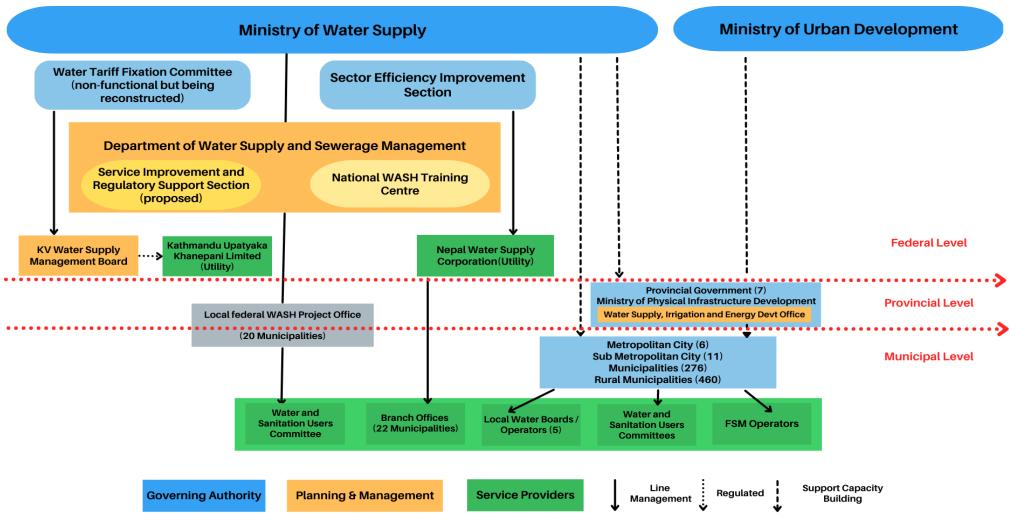


Source: Centre for Policy Research Report, 2022.

 Note: WATCO is a wholly-owned, not-for-profit Company of the Government of Odisha, registered under the Companies Act and incorporated in November 2015

ORGANIZATIONS INVOLVED IN WASH SERVICES (NEPAL)





Source: Adopted from WASHReg, Regulating Water and Sanitation Services in Nepal, 2022.

COUNTRIES IN VARIOUS STAGES OF REFORM (BANGLADESH)



- Previously worked on the creation of a Water Regulatory Commission with support from ADB (2015) - current status is unclear.
- ADB has recently approved further technical assistance support to establish regulatory arrangements for WASH services.
- BMGF, through WaterLinks and UNICEF, and other donors is supporting this effort.
- In parallel, WaterLinks and UNICEF are assisting local governments craft regulations and arrangements to enforce laws prohibiting discharge of untreated waste from septic tanks directly into drainage systems.

COUNTRIES IN VARIOUS STAGES OF REFORM (ODISHA, INDIA)



- Excellent achievement by the State Government through the Housing and Urban Development Department.
- Drink from Tap Program resulted in 24/7 water supply and 100% coverage in the capital city of Bhubaneshwar, Cuttack, and Berhampur covering 350,000 people through the state-run water company, WATCO.
- Adopted a decentralised, non-sewered, community-led faecal sludge and septage management program that had the potential for rapid scale-up; sewerage only for large cities.



COUNTRIES IN VARIOUS STAGES OF REFORM (ODISHA, INDIA)



- The only State in India to have provided every urban centre a septage treatment plant; 108 STPs are fully operational across 107 cities (as of Sept 2022) increasing access to safe disposal of faecal waste from 2% (2015) to 98%; 8 more will be completed by March 2023 covering all 114 cities.
- Government wants to create a state-wide regulator to ensure gains are sustained.
- WaterLinks is supporting the Government in this effort.



COUNTRIES IN VARIOUS STAGES OF REFORM (NEPAL)



- In October 2022, Parliament passed the Water and Sanitation Act, a law providing for the creation of the Tariff Fixation Commission (TFC).
- TFC is envisioned to regulate tariffs as well as service performance of service providers.
- WaterLinks and UN-Habitat are providing technical support to the Government to develop appropriate rules and regulations to ensure the effectiveness of the future regulator.





PROSPECTS FOR REGULATION



Bangladesh

- Explore possibility of a combined regulatory system on FSM for both Dhaka South and Dhaka North cities through discussions with Dhaka South City Corporation (DSCC) and Dhaka North City Corporations (DNCC).
- Assist DNCC and DSCC to craft regulations and arrangements to enforce laws prohibiting the discharge of untreated waste from septic tanks into drainage systems.
- Discuss with City Corporations a more robust Citizen's Charter, particularly on the conditions for the provision of services and fixed period for service delivery as mandated by the Local Government (City Corporation) Act 2009.
- Work with DWASA to elaborate the "annual performance agreement with targets" as provided by the Water Supply and Sewerage Authority Act (Dhaka), 1996.
- Support for a Paurashava covered under the ISDB/Foundation/Others Fund to pilot regulatory arrangements in sanitation service delivery and effect the Citizen's Charter.

PROSPECTS FOR REGULATION



Odisha, India

- Government support for the creation of a State-wide regulator for urban water and sanitation services is strong.
- Assistance will be in the development of a comprehensive regulatory framework that would be suitable for Odisha; lessons from Malaysia's SPAN model and some aspects from Manila's Regulatory Office would be considered.

Nepal

 As the Water and Sanitation Act has been passed, support will be for the drafting of regulations detailing the organizational structure, composition, qualifications of commissioners, powers, and functions of the TFC.

FUTURE ACTIVITIES UNDER THE BMGF GRANT



ACTIVITIES FOR THE 3 PROJECT AREAS

BANGLADESH

NEPAL

ODISHA, INDIA

April/May 2023

- Regulatory Conference
- ESAWAS Training on Regulation

February 2023

 Recommend sanitation regulation options to DNCC

March 2023

- Discussions with DNCC on sanitation regulation
- Discuss with 1
 Paurashava
 possibilities of regulating
 sanitation services

February 2023

 Exposure visit to Malaysia and the Philippines

June 2023

 Draft of First Regulation Framework

April/May 2023

 Exposure visit to Malaysia and the Philippines

October 2023

 Draft of First Regulation Framework

IMPORTANT ELEMENTS FOR EFFECTIVE REGULATION



- Independent and autonomous regulator.
- Clear mandate.
- Staffed by competent and well-trained personnel.
- Clear targets for operators to achieve over a specific period (e.g. 3-5 years).
- Tariffs linked to service standards and performance.
- A system of incentives and penalties for operators.
- Consumers at the centre of regulation to ensure affordable tariffs, good services, a process for filing complaints and dispute resolution.



Government leadership towards Scaling up CWIS and achieving SDG 6.2 in Bangladesh

DR. ABDULLAH AL-MUYEED, CWIS-FSM SUPPORT CELL





A turtle's journey towards 2030 Targets









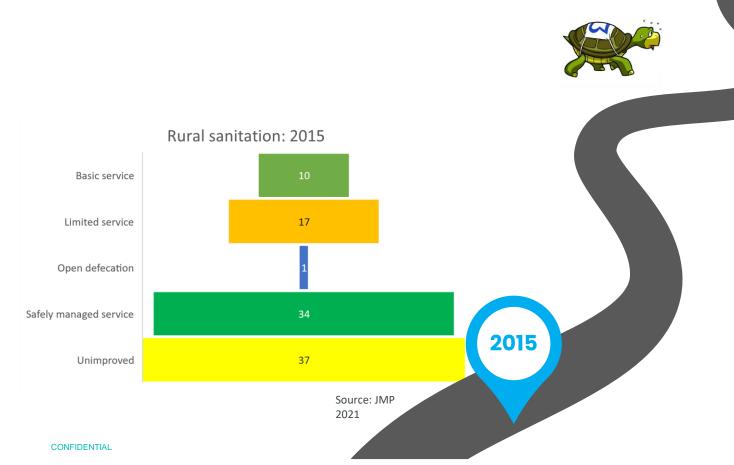
A tired turtle!

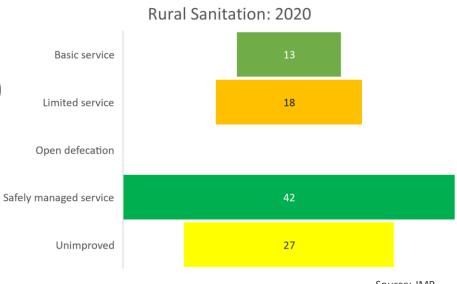
Open defecation was not acute problem

- Shared toilet (Limited service) is the reality
- Poor people (lowest quintal) needs to move to Basic level
- Policy landscaping needs revision: Approach, Technology, Data management







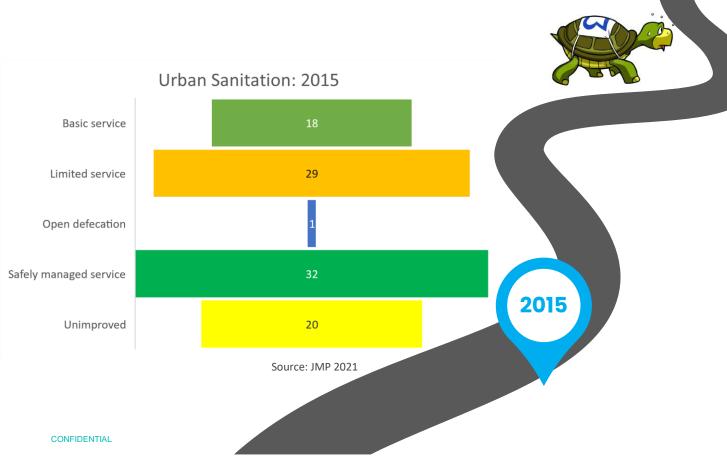


Source: JMP 2021

A tired turtle!

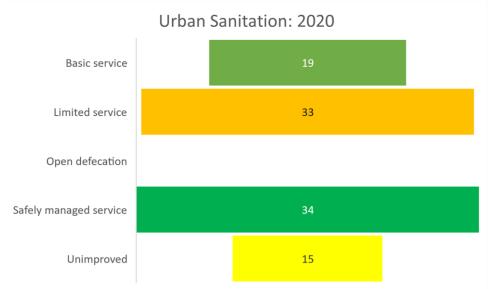
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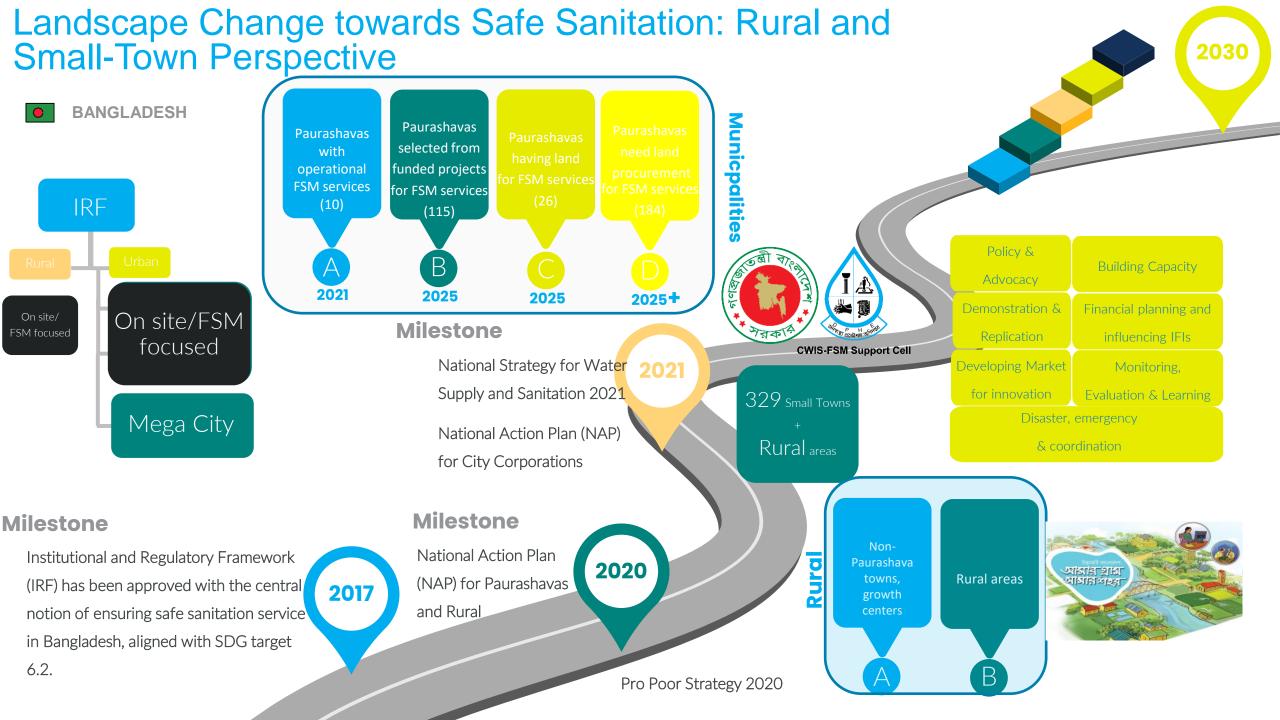








Source: JMP 2021



Turtle is steadily moving!

2025

150+ FSTPs will be in operation

National Dashboard for SDG6.2

Expansion of urban facilities

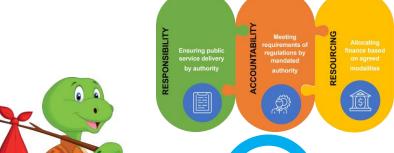
Poor people gets Basic Sanitation

CWIS framework

Integrated Waste Management

National WASH Accounts

Graduation as Middle-Income Country



Resource mobilization

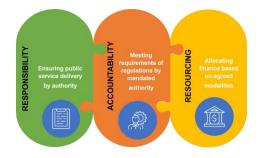
Rural contextual technologies

2021

CONFIDENTIAL

OVERVIEW







Problem:

- Lack of relevant national DOCUMENTS for functional institutional roles towards meeting new WASH challenges by 2030.
- Insufficient data on individual municipalities toward achieving sanitation targets by 2030
- Inadequate Resource allocation for sanitation and waste management
- Lack of Technological innovation and appropriateness
- Lack of CWIS capacity enhancement

Solution

- Establishment of CWIS-FSM Support Cell led by LGD under MoLGRD&C
- Establishment of a national sanitation dashboard (<u>www.sanboard.gov.bd</u>) for individual municipalities
- Tapping essential resources through advocacy with IFIs and with the Government
- Conducting relevant research to identify technological gaps
- Initiating CWIS capacity enhancement initiative based on capacity need assessment

CWIS RESOURCE MOBILIZATION



The strategic support of CWIS-FSM Support Cell strengthens resource mobilization efficiently through advocacy with different development partners like the World Bank, Asian Development Bank, Islamic Development Bank, AIIB, and AFD on sanitation and waste management in the urban setup of Bangladesh. As a result, **300 million USD** has been invested in new projects from 2021-22, and more than **1.5 billion USD** is in the pipeline for further investment in sanitation and waste management.





ESTABLISHED CITY AND NATIONAL LEVEL MEASUREMENT, LEARNING, AND EVALUATION SYSTEM BY CONSIDERING THE CWIS FRAMEWORK WITH APPROPRIATE INDICATORS



The National Dashboard (www.sanboard.gov.bd) is developed with appropriate CWIS indicators including demographic, socio-economic, financial, and technical along with SADDD data. 50 more SFDs are already published by CWIS-FSM Support Cell peer-reviewed by SuSanA the target is to develop about 100 SFDs by 2023.

The advocacy is ongoing with a2i and the BBS triggering recognition of the national dashboard as a contributor to SDG 6.2 data. Moreover, In order to enhance the number of cities for the dashboard and to tap more resources, a proposal is now developing by the technical committee formed by SIR division of DPHE.





NATIONAL LEVEL CWIS CAPACITY BUILDING PLATFORM



Under the CWIS Eco-system, the CWIS-FSM Support Cell works with the ITN-BUET, a national-level capacity-building hub for sanitation and waste management, to develop skills and provide training on the entire value chain of sanitation and waste management conceptualizing the CWIS approach.

The developed modules prioritize the health-safety and rights of the waste workers. The strategic advisory and advocacy roles of the CWIS-FSM Support Cell will ensure the standardization of different CWIS modules that are developed by ITN-BUET and the Center of Global Water and Sanitation of the Asian Institute of Technology (AIT), Bangkok, and effectively delivered as built-in components of several projects implemented by the Government of Bangladesh.

- Prioritize the Health and Safety of Waste and Sanitation Workers-Briefing Paper
- Fecal Sludge Management in Municipalities Sustainability Concerns-Briefing Paper





Waste and saintation workers, the vital workforce for maching it at their workplace. country, require maintaining personal hygiene and practinging it at their workplace. They must have access to essential services to prevention in the control of the country o

ENSURE HEALTH AND SAFETY OF WASTE AND SANITATION WORKERS DURING AND BEYOND TH COVID-19 PANDEMIC

COUD-19 ANDEMIC Waste owners reported themselves as extremely vulnerable to infectious diseases extremely vulnerable to infectious diseases like COUD-19 and fatal injuries during service. Half of the respondents have no understanding about communicable diseases, pandemic, around 28% of the workers in the study areas reported observing common symptoms of COUD-19, and 2% of workers to the study areas reported observing common incremental to the study areas reported observing on incremental common to the workers only 5% of the total workers had treatment in addition, osteoporous, hypertension, back-pain and skin disease are prevalent among workers. The municipalities must regularly supply adequate PPE considering the type of work and needs of male and female workers. A rigorous mentioning procedure at the municipalities is among the workers.

essential to follow the Government directives to prioritize the waste and sanitation workers for vaccination against the diseases like COVID-19 and tetanus. BNHANCE CAPACITY OF FRONTLINE WORKERS

ENHANCE CAPACITY OF FRONTLINE WORKERS AND MUNICIPAL AUTHORITY FOR MAINTAINING OCCUPATIONAL HEALTH SAFETY AND SAFE WO ENVIRONMENT

> ianitation and waste workers lack the piportunity to enhance skills to secure their leath and safety during service delivery. He study shows 13% female respondents and 21% male respondents have received occupational health and safety related crupational health and safety related raining which creates opportunity for wider owerage of IPC-OHS training for sanitation and waste workers.

range of practical and specifically targeted aining package including social behaviour ange communication (SBCC) need to be eveloped and provided to ensure their health otection.

The municipal authorities and supervisors should be engaged in the training to ensur the proper use of PPEs. The municipalities need to allocate annual budget for capacity







INSTITUTIONAL ARRANGEMENT THROUGH POLICY INDICATIONS



The Government of Bangladesh adopted necessary changes in policy governance. Subsequently, it approved the Institutional and Regulatory Framework (IRF) for Fecal Sludge Management (FSM) and "National Action Plan (NAP)" for implementation of the IRF-FSM during 2017-2020 to facilitate FSM service delivery by local government institutions (LGIs) aligned with SDG target 6.2. Under the directive of this NAP, 'CWIS-FSM Support Cell' has been set up by the Local Government Division (LGD) under The Ministry of Local Government, Rural Development and Cooperatives (MoLGRD&C) within the Department of Public Health Engineering (DPHE), which acts as the nodal coordinating agency for achieving SDG6.2 nationally.

CWIS Brief of Bangladesh



TECHNOLOGICAL INNOVATION IN PROMOTING CWIS



CWIS-FSM Support Cell advocates for technology that demonstrates a full sanitation value chain and provides citywide sustainable services for both faecal sludge and solid waste. The responsibility of providing sanitation and waste management services lies with the Municipal authority according to the policy of Bangladesh.

The cell is advocating for innovative technologies like Omniprocessor, Gasifier, and/or pyrolysis unit that can treat not only faecal sludge but also appropriate solid waste. Including such innovative technologies requires an appropriate business model for sustainable O&M by the Municipality.

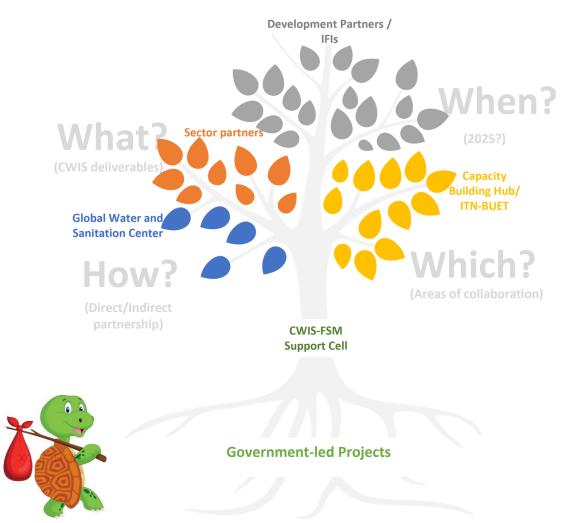
- Market insights for the multi-unit reinvented toilet in Bangladesh
- Market opportunity for the portfolio of Omni Processor technologies in Bangladesh



CREATING CWIS ECOSYSTEM



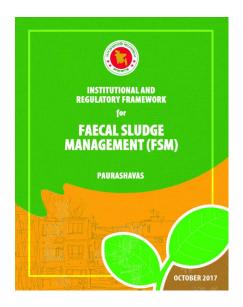
CWIS-FSM Support Cell is working to establish the CWIS ecosystem in Bangladesh through partnership and collaboration. The cell is doing strong advocacy working inside the Government to answer queries and provide strategic guidance to implement CWIS in Bangladesh.





PRO POOR STRATEGY for Water and Sanitation Sector in Bangladesh

























Ensuring public service delivery mandated by authority







Thank you!

CWIS-FSM Support Cell



Supported



Dr Abdullah Al-Muyeed Chief Operating Officer CWIS-FSM Support Cell, DPHE <u>aamuyeed@cwisfsmsupportcell.org</u>



Regulatory approach towards achieving CWIS in Metro Manila, Philippines

PATRICK LESTER N. TY, MWSS REGULATORY OFFICE



METROPOLITAN WATERWORKS AND SEWERAGE SYSTEM REGULATORY OFFICE



MANDATE

- Sets tariff adjustments during the Rate Rebasing
- Monitors the Concession Agreement
- Reviews, monitors, and enforces rates and service standards
- Arranges and reports regular independent audits of the performance of the Concessionaires
- Monitors the infrastructure assets



CONCESSION AREAS



WEST ZONE

- North Quezon City
- North Caloocan
- Valenzuela
- Malabon
- South Caloocan
- Manila
- Pasay
- Makati
- Paranaque
- Parts of Cavite
- Las Pinas
- Muntinlupa

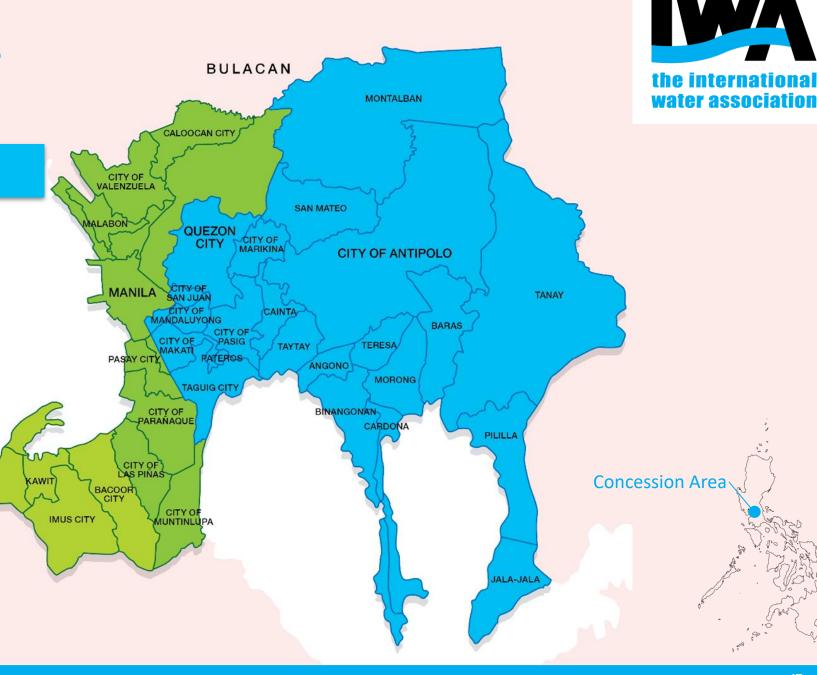
TWO CONCESSION AREAS

Promote competition Benchmarking Flexibility



EAST ZONE

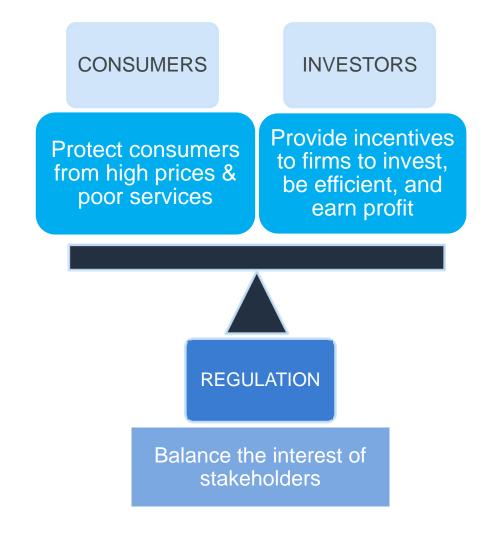
- Parts of Quezon City
- Marikina
- Pasig
- Pateros
- Taguig
- Makati
- Mandaluyong
- San Juan
- Parts of Manila
- Rizal Province





REGULATORY FRAMEWORK





PRE-PRIVATIZATION VS CURRENT CONDITION



DESCRIPTION	PRE-PRIVATIZATION	CURRENT CONDITION (AS OF DECEMBER 2021)
POPULATION SERVED	5.82 M	17.21M
WATER SUPPLY COVERAGE	48%	94%
SEWER COVERAGE	9%	26%
SANITATION COVERAGE	1%	82%

CLEAN WATER ACT OF 2004



• SEC. 8. Domestic Sewage Collection, Treatment and Disposal. - Within five (5) years following the effectivity of this Act, the agency vested to provide water supply and sewerage facilities and/or concessionaires in Metro Manila and other highly urbanized cities (HUCs) as defined in Republic Act No. 7160, in coordination with LGUs, shall be required to connect the existing sewage line found in all subdivisions, condominiums, commercial centers, hotels, sports and recreational facilities, hospitals, market places, public buildings, industrial complex and other similar establishments including households to available sewerage system.

CLEAN WATER ACT OF 2004



SEC 8.4 : Role of MWSS and Water Concessionaires in Metro Manila

In case of Metro Manila and other MWSS franchise areas being serviced by the water concessionaires, sewerage facilities and sewage lines shall be provided by water concessionaires in coordination with the LGUs in accordance with their concession agreements.

CHALLENGES



PROBLEM		SOLUTION
1	High Investment cost and burden of tariff increase to customers	Financial Restructuring
3	Infrastructure footprint versus availability of land Environmental Targets versus construction timeline	Best-fit innovative infrastructure system, and Rewards/Recognition mechanism
	Lack of awareness and low number of customers availing desludging services	Information, Education, and Communication strategies

FINANCIAL RESTRUCTURING



WHEREAS in its rate rebasing submission to the MWSS RO dated in March 2007, MWCI had identified that willingness to pay for sewerage and other services "poses a real, serious threat to the expansion of sewerage services and would need to be re-examined in the 2008 Rate Rebasing".

WHEREAS, the RO determines that there is a need to scale up investments in the sewerage and sanitation sectors to prevent, control and abute pollution on water resources and to determine the appropriate charging schemes for different consumer classifications to address issues on affordability and subsidy,

NOW THEREFORE, for and consideration RESOLVED, AS IT IS HEREBY RESOLVED, to RI Board of Trustees the following:

> The rationalization of sewerage a charges based on the respective s schedule set below;

Charge	2007	200
Environmental Charge		
all customers	10%	129
Separate Sewer Network (for sewered connections only):		
Residential sewer charge	50%	40
Commercial sewer charge	50%	45
Combined Sewer System:		
Residential sewer charge	0%	09
Commercial sewer charge	0%	09

The imposition of the rationalized rates shal adjustment should the performance of the Concession investments as indicated in its Business Plan.

 The rationalized sewerage an charging schemes for different become effective upon approval Trustees on the concessionaires' and compliance with the publicatio of the MWSS Charter.

SO ORDERED, Quezon City, 05 December



TIMO

MELCHIOR I. ACOSTA, Jr.
Deputy Administrator for Customer
Service Regulation

10 Dec 07

CH

Republika ng Pilipinas Pangasiwaan ng Tubig at Alkantarilya sa Kalakhang Maynila

Metropolitan Waterworks and Sewerage System REGULATORY OFFICE Katipunan Road, Balara, Quezon City 1105, Philippines

IN RE: RATIONALIZATION OF ENVIRONMENTAL CHARGE (10%) AND SEWERAGE CHARGE (50%)

RO RESOLUTION NO. 07-024-CA

WHEREAS, on 31 May 2007, Manila Water Company, Inc. (MWCI) formally submitted its Rate Rebasing Petition to be implemented on 01 January 2008, pursuant to Section 9.4 (General Rate Setting Policy/Rate Rebasing Determination) of the Concession Agreement (CA):

WHEREAS, Rate Rebasing as defined under Article 9.4 of the CA is essentially a comprehensive review, examination and revalidation of operational expenditures, capital expenditures, revenues, service obligations and the Appropriate Discount Rate (ADR) from a historical and future view points;

WHEREAS, Section 8.4 of the Implementing Rules and Regulations (IRR) of the Philippine Clean Water Act of 2004 (R.A No.9275) provides:

"8.4 Role of MWSS and Water Concessionaires in Metro Manila. In the case of Metro Manila and other MPSS franchised areas being serviced by the water concessionaires, sewerage facilities and sewerage lines shall be provided by the water concessionaires in coordination with the LGUs in accordance with their concession agreements. Prior to connection to the main sewerage line, secondary line should be already be in place coming from pre-treatment facilities or

WHEREAS, Schedule 5 of the CA provides the authorized levels of the environmental charge at 10% of the applicable water charge, while sewerage charge is 50% of the applicable water charge;

WHEREAS, Section 9.2.4 of the Concession Agreement allows adjustments on the application of discounts and surcharges consistent with the Rate Adjustment Limit (RAL) thus:

"In the event the Concessionaire proposes to make a change (other than one which relates solely to the level of Standard Rates in Section 9.3.3.2 above) to the basis of which the Concessionaire makes or calculates any Standard Rates (including a charge in application of discounts and surcharges to Standard Rates), the Concessionaire shall notify the Regulatory Office and submit sufficient supporting information to enable the Regulatory Office to verify the proposal is consistent with the RAI, for that Charging Year.



TARIFF STRUCTURE FOR SEWERAGE AND SANITATION

Charge	2007	2008	2009	2010	2011	2012
Environmental Charge all customers	10%	12%	14%	16%	18%	20%
Separate Sewer Network (for sewered connections only): Residential sewer charge Commercial sewer charge	50% 50%	40% 45%	30% 40%	20% 35%	10% 30%	0% 30%
Combined Sewer System: Residential sewer charge Commercial sewer charge	0% 0%	0% 0%	0% 0%	0% 0%	0% 0%	0% 0%

FINANCIAL RESTRUCTURING



FINANCIAL INCENTIVE

SEWERAGE INFRASTRUCTURE & SERVICES

Tariff adjustment on
Environmental Charge
APPROVED in the recently
concluded Fifth Rate Rebasing
Exercise in 2022

REVENUE Granting of Service **Obligations** 20-30% **Environmental Targets** Achieved Charge

BEST-FIT INNOVATIVE INFRASTRUCTURE





Separate System

- Ideal system for wastewater management
- Requires higher investment cost (extensive sewer system)
- Can be challenging to construct (permitting issues, political issues, etc.)



Combined System

- Utilizes existing drainage system
- Expeditious solution to pollution reduction
- Can easily be upgraded to separate system for future plans

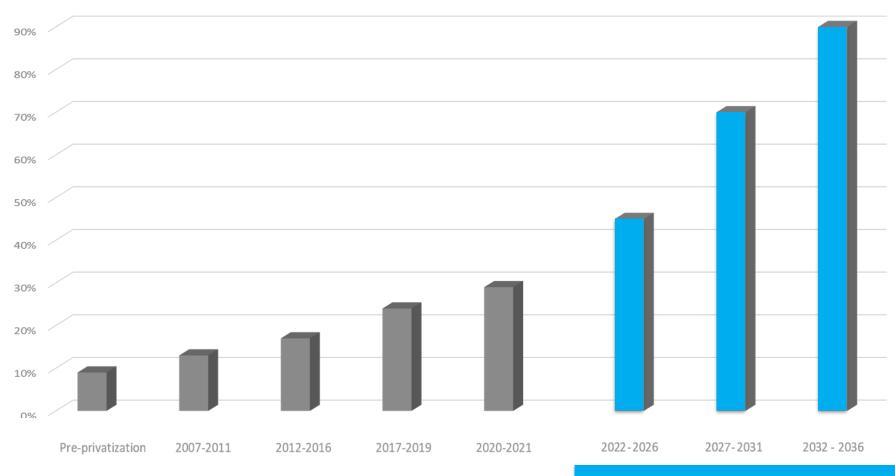


Desludging Services

- Septic tanks desludging every 5-7 years
- Sludge is treated in septage treatment plants

SEWERAGE COVERAGE

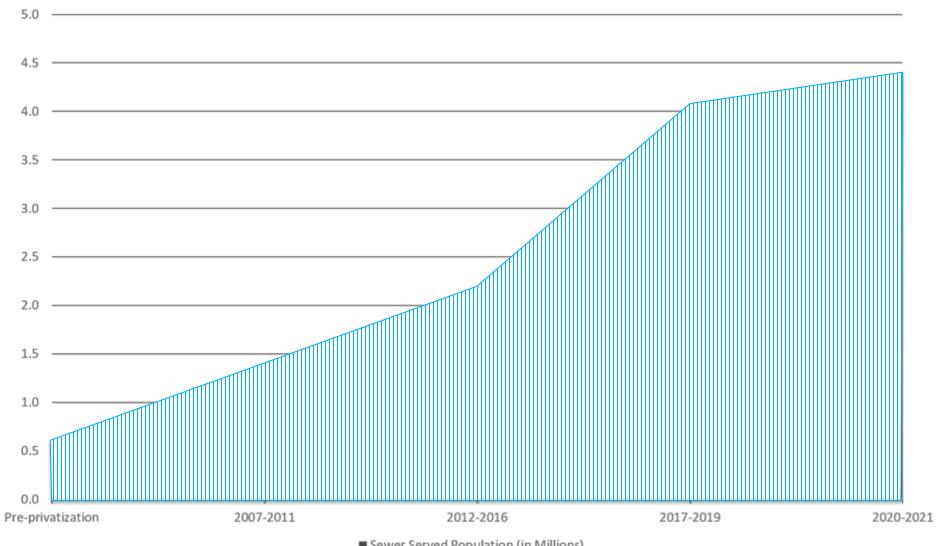




TARGET SEWERAGE COVERAGE

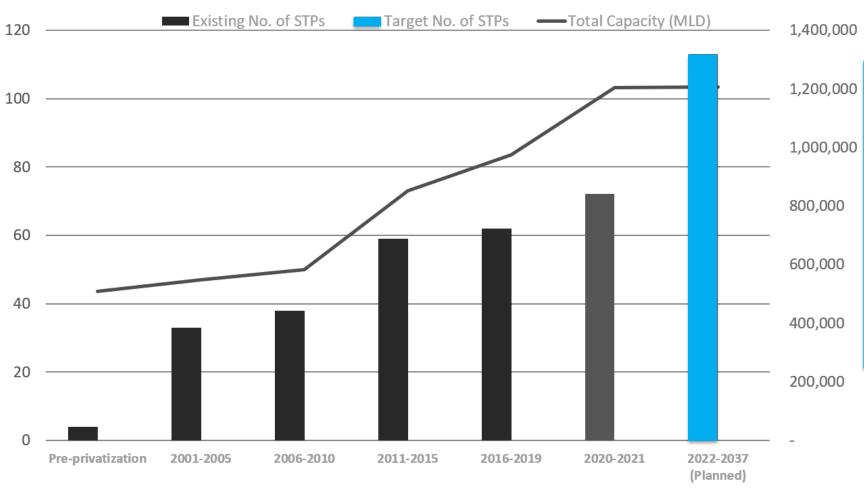
SEWER SERVED POPULATION





SEWAGE TREATMENT PLANTS (STP)

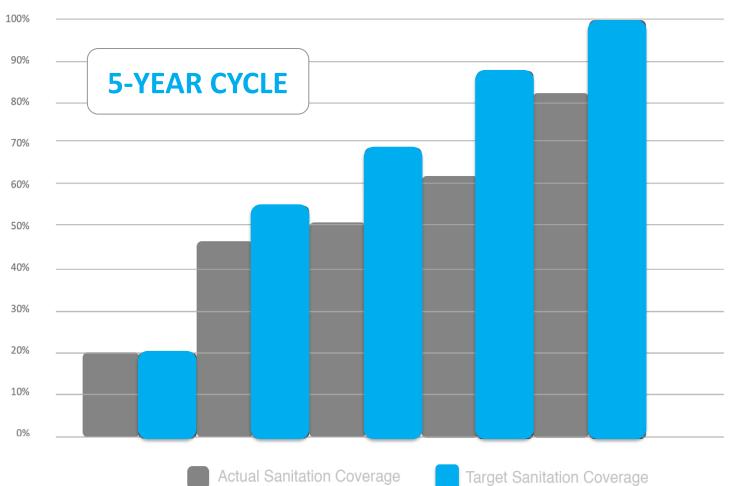






SANITATION COVERAGE







Target Sanitation Coverage

BEST-FIT INNOVATIVE INFRASTRUCTURE



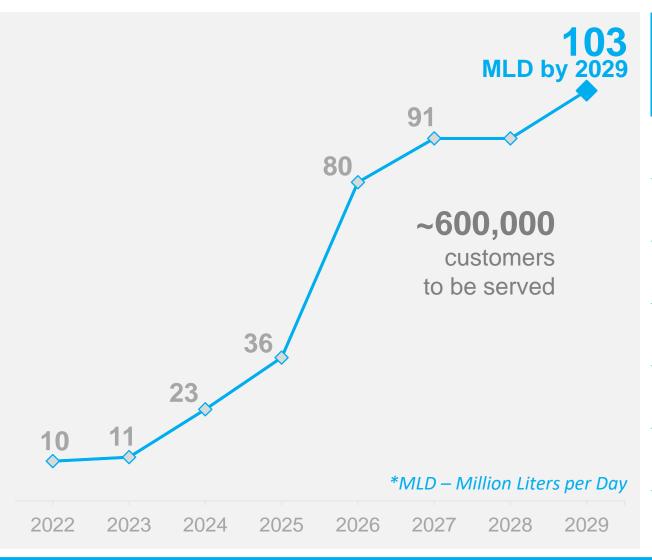


"NEW WATER"

- The "first drinkable reused water" in the Philippines
- A potable by-product of used water from households that underwent rigorous wastewater and water treatment processes
- Converting used water is globally-accepted
- ✓ Countries, such as Namibia and United States, have been implementing direct potable reuse
- ✓ The Philippines will be the first in Asia to adopt direct potable reuse through "New Water"

BEST-FIT INNOVATIVE INFRASTRUCTURE





New Water Sites	Target Capacity (MLD*)	Target Completion Year	Population
Parañaque	Ph1 – 10 Ph2 – 10	Ph1 – 2022 Ph2 – 2025	168,500 (4 Barangays)
Valenzuela	Ph1 – 1 Ph2 – 14	Ph1 – 2023 Ph2 – 2026	45,000 (3 Barangays)
Pasay	Ph1 – 12 Ph2 – 6	Ph1 – 2024 Ph2 - 2027	70,150 (1 Barangay)
Alabang	3	2025	11,200 (1 Barangay)
Cupang	30	2026	200,000 (6 Barangays)
Tunasan	5	2027	23,500 (1 Barangay)
CAMANA	12	2029	79,000 (6 Barangays)

INFORMATION, EDUCATION, AND COMMUNICATION

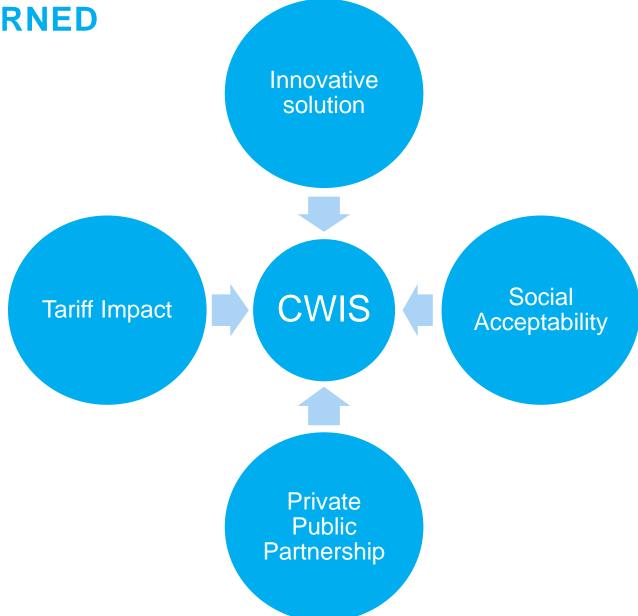


- Recognized Local Government Units (LGUs) in expanding and improving the sanitation and sewerage coverage among their stakeholders
- Social Media Campaigns on Sewerage and sanitation
- Campus Awareness Drive on Water, Sewerage and Sanitation











THANK YOU.



Q&A Discussion

MODERATOR & SPEAKERS



Final remarks & Conclusion

MODERATOR

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IWA AT AFWA CONGRESS AND EXHIBITION



ABIDJAN - CÔTE D'IVOIRE

Event	Title	When	Time
Technical Sessions	Regulating Inclusive Urban Sanitation – Lessons Learnt	21st February 2023	13.30 - 15.00
	Sanitation – an integrated element of urban water management	22 nd February 2023	15:30 - 17.00
Workshop	Scaling up Inclusive Sanitation	22 nd February 2023	10:30 - 12:00





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