



# Online **ADB Sanitation Dialogue 2021**

ACCELERATING INCLUSIVE SANITATION

12–22 April 2021

## **Coordination – Cooperation – Collaboration for CWIS and the role of Policy, Institutions and Regulations**

Baguio City Sanitation Improvement Project  
How Policy, Institutional and Regulatory Reforms can Support More  
Inclusive Sanitation

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# Outline

Baguio City: Context

Baguio City Sanitation  
Improvement Project

What we have learned

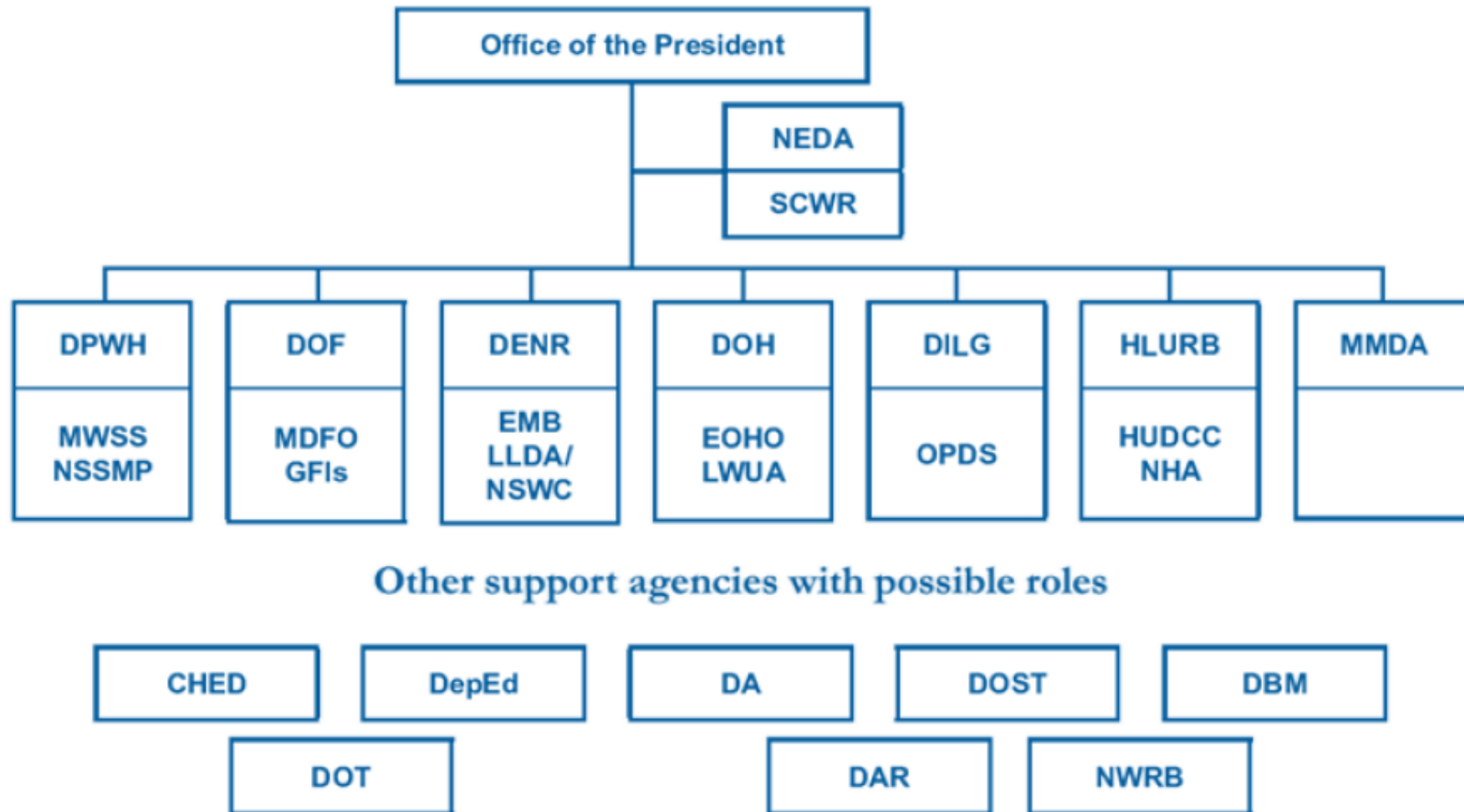
# Baguio City: Context

- Sufficient legislation and guidelines
- Complex institutional arrangements
- Heavy dependence on onsite sanitation
- Key challenges and opportunities

# Sufficient Legislation and Guidelines

National	Local
<ul style="list-style-type: none"> <li>• Republic Act 1378, Plumbing Law, 1955 (“Plumbing Code of the Philippines”)</li> <li>• Republic Act 6541, National Building Code of the Philippines, 1972</li> <li>• Republic Act 7160, Local Government Code, 1991, (Environmental Services Section)</li> <li>• Republic Act 9003, Ecological Solid Waste Management Act, 2000</li> <li>• Republic Act 9184, Government Procurement Reform Act, 2003</li> <li>• Republic Act 9275, Clean Water Act, 2004</li> <li>• Presidential Decree 856, Code on Sanitation of the Philippines, 1975,</li> <li>• Presidential Decree 198, Provincial Water Utilities Act, 1973 (Revised 2000)</li> <li>• Presidential Decree 1067, Water Code of the Philippines, 1976</li> <li>• Presidential Decree 1096, National Building Code of the Philippines, 1977</li> <li>• DENR Administrative Order No. 2016, 08, Water Quality Guidelines and General Effluent Standards of 2016</li> <li>• DENR Water Quality Monitoring Manual Volume 1 Ambient Water Quality Monitoring, 2018</li> <li>• DENR Water Quality Monitoring Manual Volume 2 Effluent Quality Monitoring, 2018</li> <li>• DENR EMB Memorandum Circular 2013, 06, Guidelines for Water Quality Management Area Action Planning and LGU’s Compliance Scheme</li> <li>• DNER EMB Memorandum Circular 2016, 13, EMB Approved Methods of Analysis for Water and Wastewater</li> <li>• DENR EMB Memorandum Circular 2020, 04, Clarification on the Reporting Requirements for Specific Parameters Under DENR Administrative Order No. 2016-08 or the Revised Water Quality Guidelines and General Effluent Standards of 2016</li> <li>• DoH Administrative Order 2019, 47, National Standard on the Design, Construction, Operation and Maintenance of Septic Tank Systems, 2019</li> </ul>	<ul style="list-style-type: none"> <li>• City Ordinance 1988, 54, Illegal Disposal of Refuse, Excrement and Egesta</li> <li>• City Ordinance 1995, 98, Compulsory Connection to City Sewerage System</li> <li>• City Ordinance 2016, 18, Environment Code of the City of Baguio</li> <li>• City Ordinance 2020, 36, Septage Management Ordinance of the City of Baguio</li> <li>• BCG Resolution 2020, 50 Creation of a City Wastes Management Office</li> </ul>

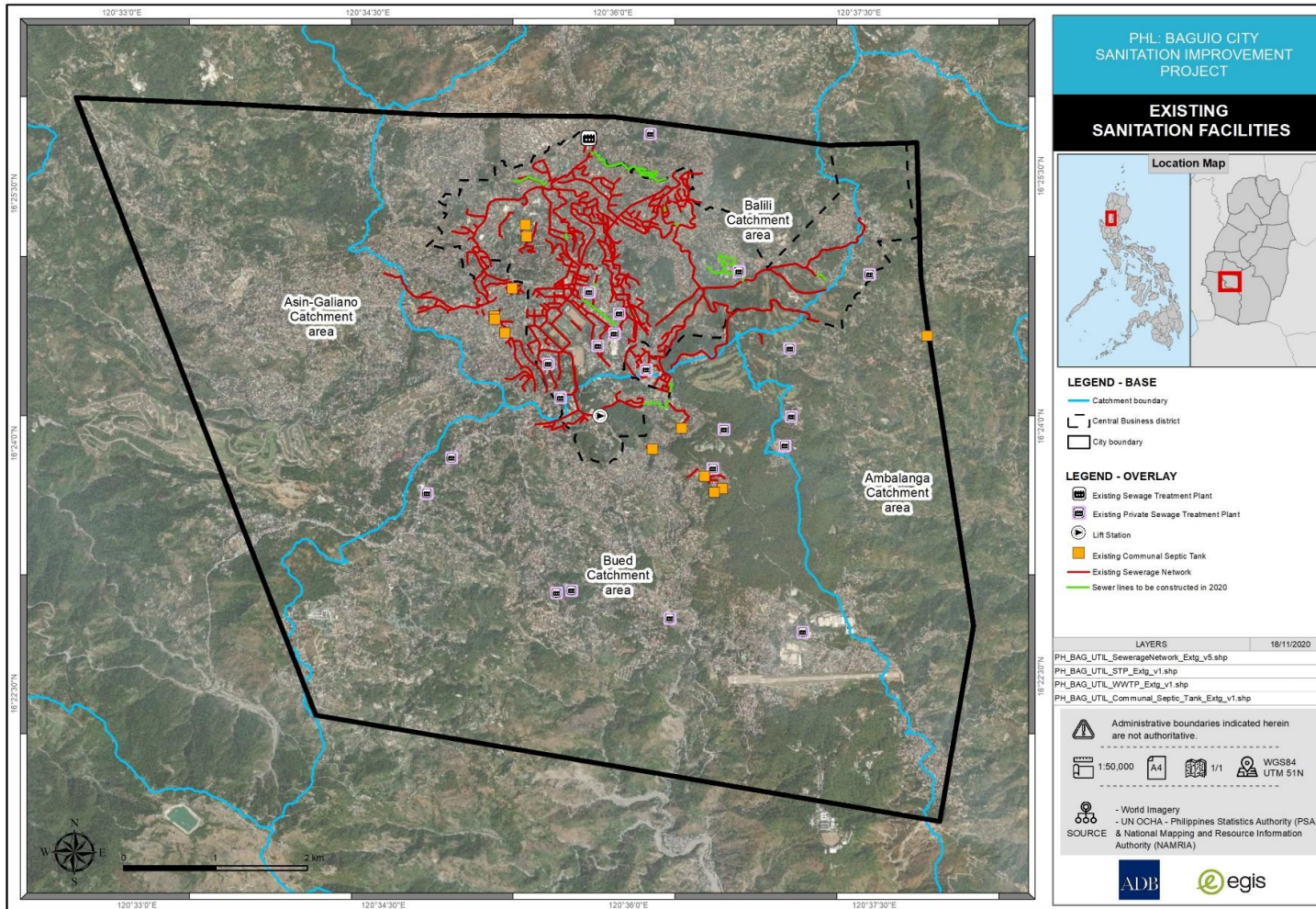
# Complex institutional arrangements



Source: NEDA, Water Supply and Sanitation Master Plan (draft), 2020

# Dependence on onsite sanitation

Source: Egis 2020

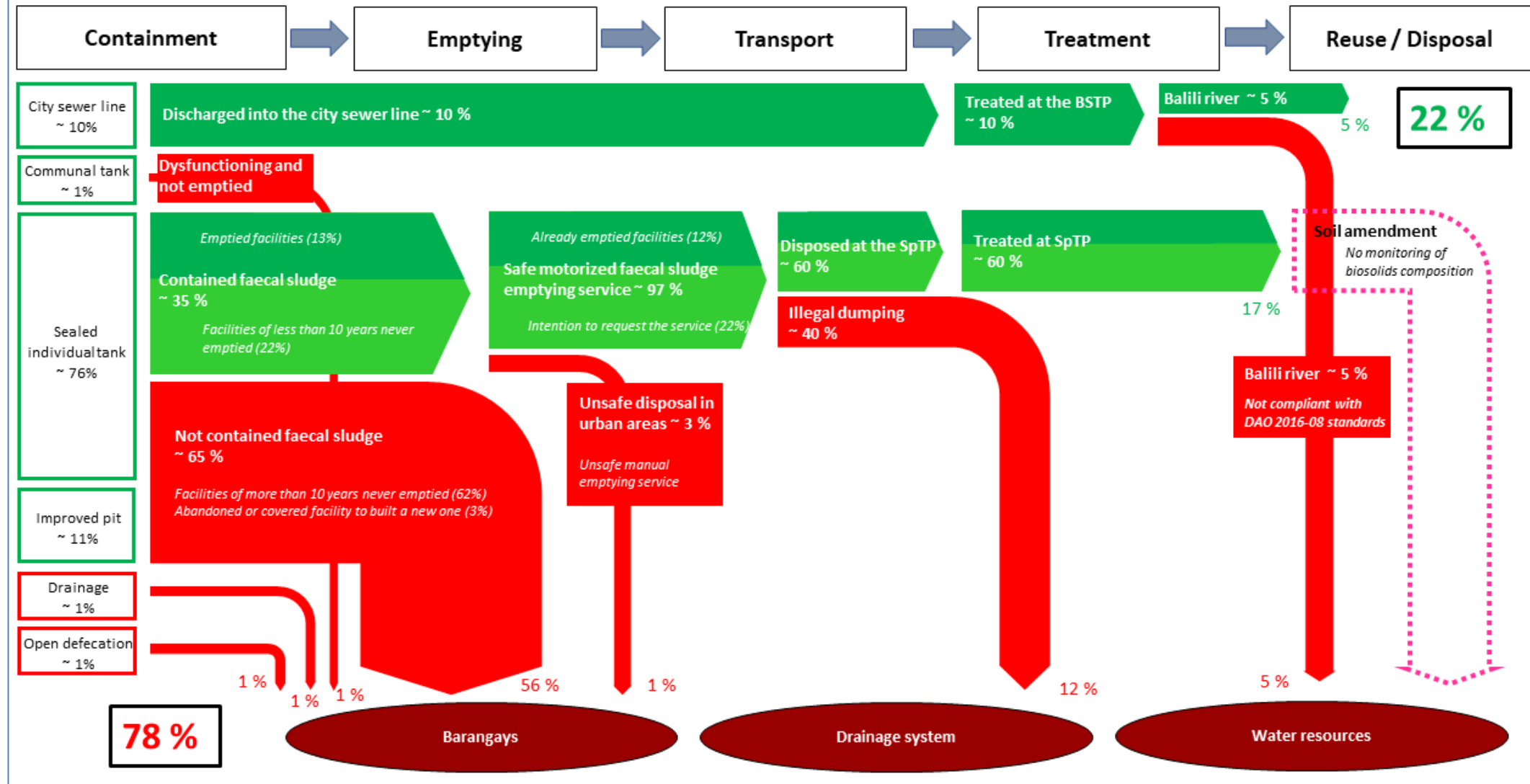


- 10% sewerage service
- Population: 370,870 (2020) to 460,000 (2035)
- Rivers heavily polluted
- 2/3 access to BWD water supply system → high volume of wastewater/ faecal sludge to be managed
- 1/3 rely on tanker trucks, wells and unsafe sources → which sanitation technologies for those households?

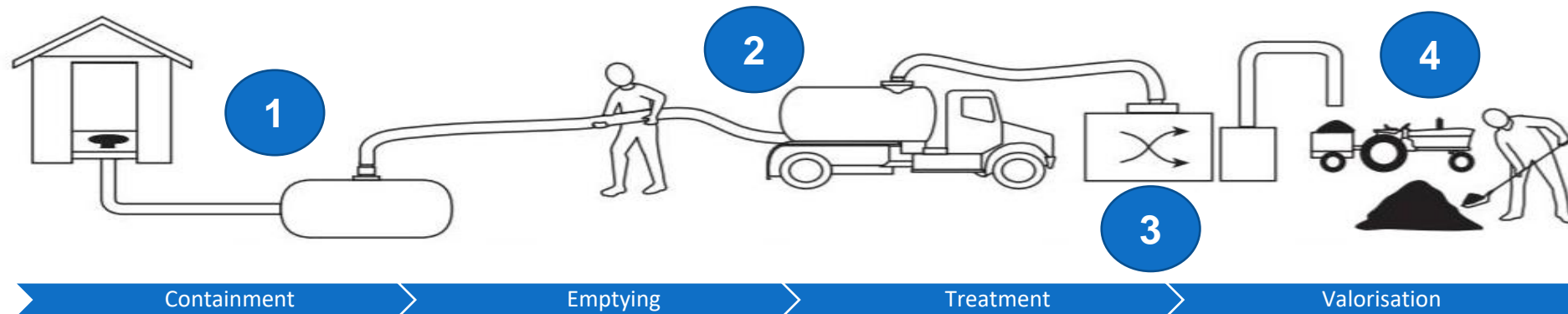


Onsite sanitation will remain the main sanitation service at household level at medium and likely long term

## Baguio 2020 – Faecal Sludge Flow Diagram (SFD)



# Key challenges and opportunities



1

- ✓ Enforcement of the emptying periodicity
- ✓ Management of commune septic tanks

2

- ✓ Efficient enforcement to reduce illegal dumping
- ✓ Develop a « social » desludging program to service the poorest households
- ✓ Revise and harmonize service tariff to ensure equity between service users (sewerage vs. onsite)

3

- ✓ Extended opening hours of the Septage Treatment Plant
- ✓ Secure and provide additional treatment sites to respond to future demand

4

- ✓ Valorisation program of biosolids

# Baguio City Sanitation Improvement Project

## “Soft” interventions

1. **Sanitation master plan:**
  - a. Socially and gender inclusive
  - b. Climate and disaster resilient
  - c. Covering entire service chain
  - d. Greater Baguio area
2. Strengthen and consolidate **sanitation functions** in Local Government Unit
3. **Capacity building** for Local Government Unit:
  - a. Compliance manual
  - b. Asset management
  - c. Management information system
  - d. O&M of treatment plant – potential engagement with private sector
4. Strengthen **financial position** while ensuring equity: tariff reforms, tariff collection mechanism
5. **Communication** strategy
6. **Position tracking system** for compliance enforcement and planning
7. **Scheduled desludging service**

# What we have learned

- Enabling environment (policy, regulatory and institutional aspects) most important factors to consider for successful delivery of CWIS project
- But also the most challenging
  - Sufficient legislation but sometimes contradictory and difficult to find
  - Overlapping mandates between local government unit and water district
  - Need support in skills and resources, and time
- Financial sustainability and equity
- Private sector's resources (skills, efficiency, finance) can be mobilized but only with
  - enforcement of regulations
  - communication strategy and awareness raising
  - policy on tariff

# Thank you

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