

INDONESIAN MIX APPROACH ON ACCELERATING SANITATION DEVELOPMENT



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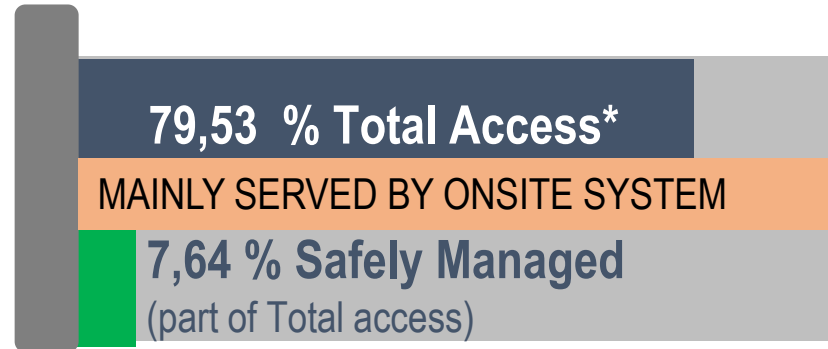
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ACHIEVEMENT TO-DATE ON INDONESIA SANITATION SECTOR

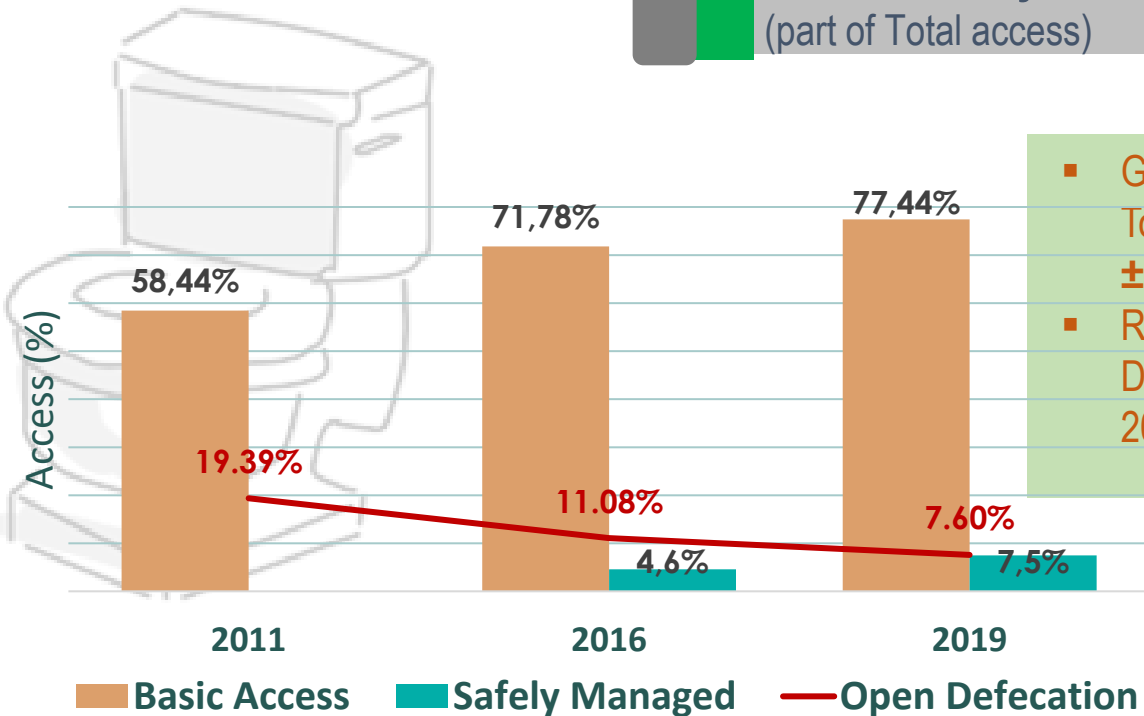
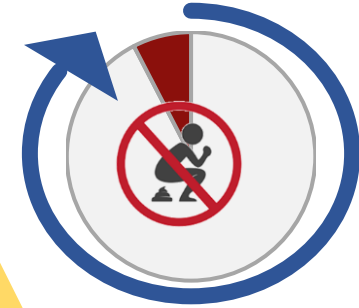
Sanitation (Domestic Wastewater) Access 2020¹

Household living in a house with access to basic, limited and safely managed sanitation (domestic wastewater)



Households practicing open defecation

6,19 %



- Growth rate on access to Total sanitation 2011-2020: **±2% per year**
- Reduction rate of Open Defecation (OD) practice 2011-2020: **±1,4% per year**

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SDG's 2030 - Target 6.2

Moving from Open Defecation Free (ODF) toward Safely Managed Sanitation

National Medium-Term Development Plan (2020-2024)

Presidential Decree No 18 Year 2020
90% improved access (including 15% safely managed access)

Minimum Service Standard Government Regulation No 2 Year 2018
"Every Citizen has Right to have access to Wastewater Treatment"

(*): Basic, limited, and safely-managed access, as per SDGs sanitation ladder definition

NATIONAL SANITATION POLICY 2020-2024

Achieving Sustainable Sanitation Services (SSS) with the five key elements



Improvement of institutional capacity and governance



High commitment of local key decision makers on sustainable sanitation services



Acceleration on Development of infrastructure and services according to regional characteristics and needs



Strong partnership and Availability of alternative financial sources



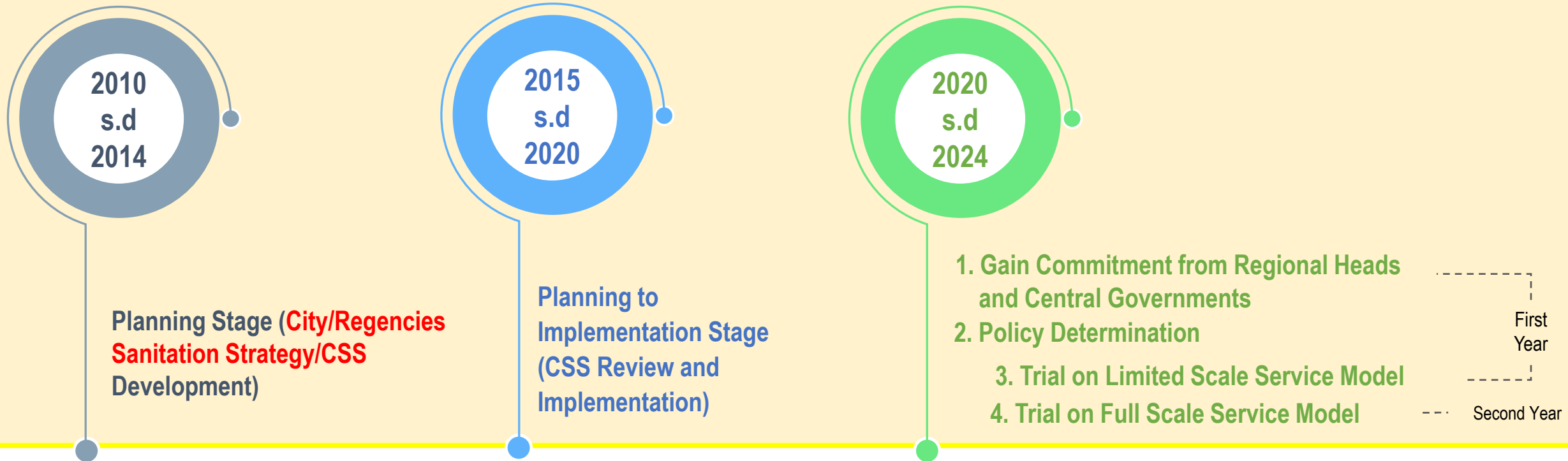
Enhancement of community awareness and participation in achieving sustainable sanitation

MULTI LEVEL GOVERNMENT STAKEHOLDERS on SANITATION

	National	Province	City/ Regency
Planning	National Planning & Development Agency <i>Develop National plan & policy (long term/mid term)</i>	Province Planning & Development Agency <i>Develop plan & policy in province or regional level</i>	City/ Regency Planning & Development Agency <i>Develop plan & policy in city/ regency level</i>
Implementation	Ministry of Public Works and Housing <i>Develop infrastructure, policy, technical assistance (esp. for national strategic program)</i>	Department of Public Works and Spatial Planning <i>Development & Management in regional level</i>	Department of Public Works and Spatial Planning <i>Development & Management in city/ regency</i>
Regulation/ Standard	Ministry of Environment and Forestry <i>Issue environmental protection regulation (effluent standard, environmental permit)</i>	Department of Environment <i>Issue environmental protection regulation i.e. effluent standard (regional/ province level)</i>	Department of Environment <i>Issue effluent standard in City level, environmental monitoring, issue environmental permit</i>
Hygiene Stimulation	Ministry of Health <i>Develop national program for hygiene life, environmental health, community-based sanitation</i>	Department of Health <i>Develop regional/province level program for hygiene</i>	Department of Health <i>Develop city/ regency level program, Socialization of hygiene, air-borne disease protection</i>
Synchronization and Local government coaching	Ministry of Human Affair <i>Initiate Minimum Standard Service, and monitor the compliance, assist institution and regulation formulation</i>		

COORDINATION IS THE KEY → we have SANITATION WORKING GROUP in each layer of government

Milestones on The Acceleration of Sanitation Development In Indonesia



Contents of CSS Book of each City / Regency

Chapter 1

Introduction

Chapter 2

Profile of Existing Sanitation

Chapter 3

Framework of Sanitation Development

Chapter 4

Strategies of Sanitasi Development

Chapter 5

Programs, Activities, and Indication of Funding

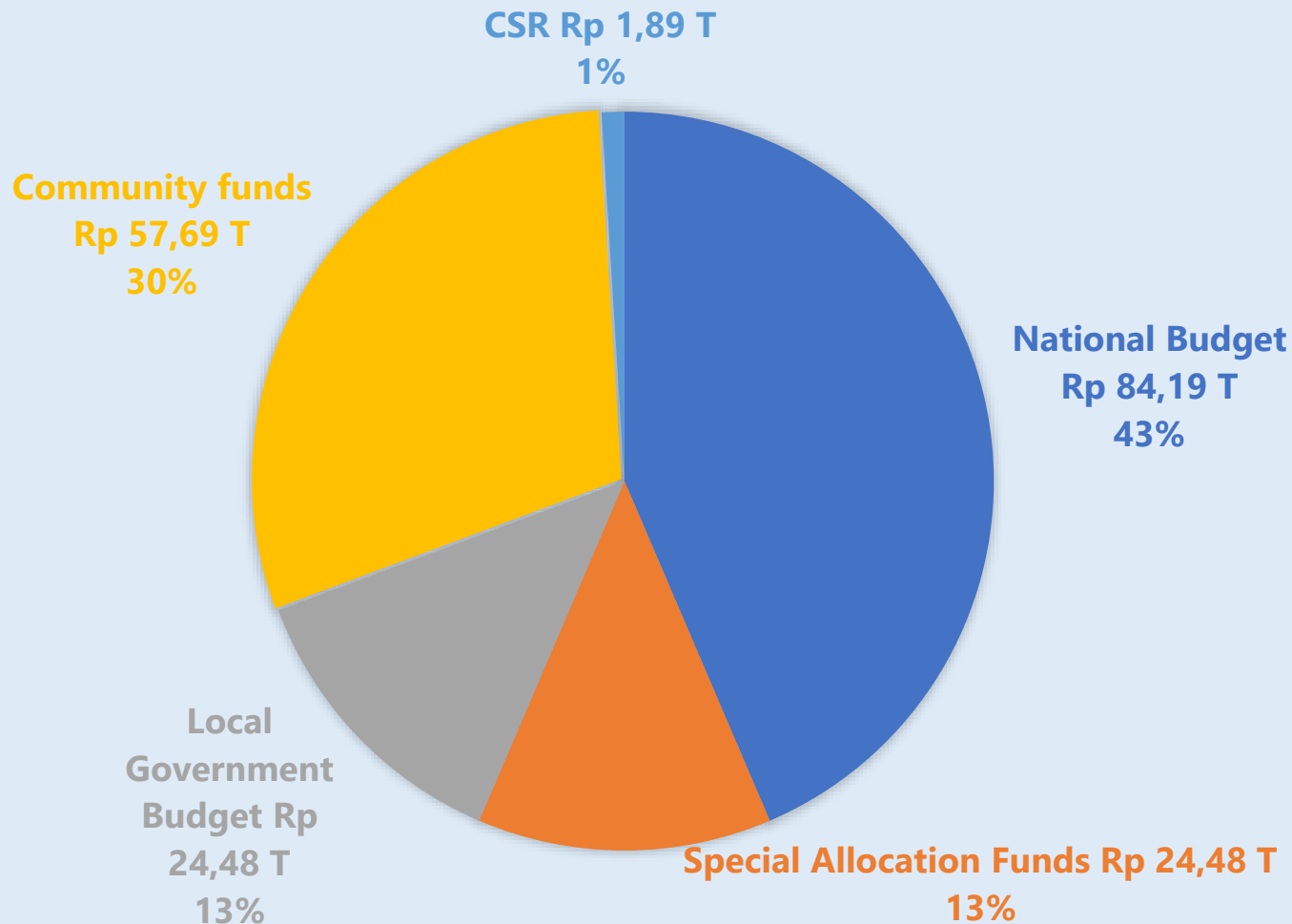
Chapter 6

Monitoring and Evaluation

- The CSS Book used as **Guidelines** and shows the **Roadmap on Development Plan on Sanitation** for each City/Regency
- CSS made by the City Sanitation Working Group
- CSS Book usually followed by the establishment of Masterplan , Feasibility Study and Detailed Engineering Design

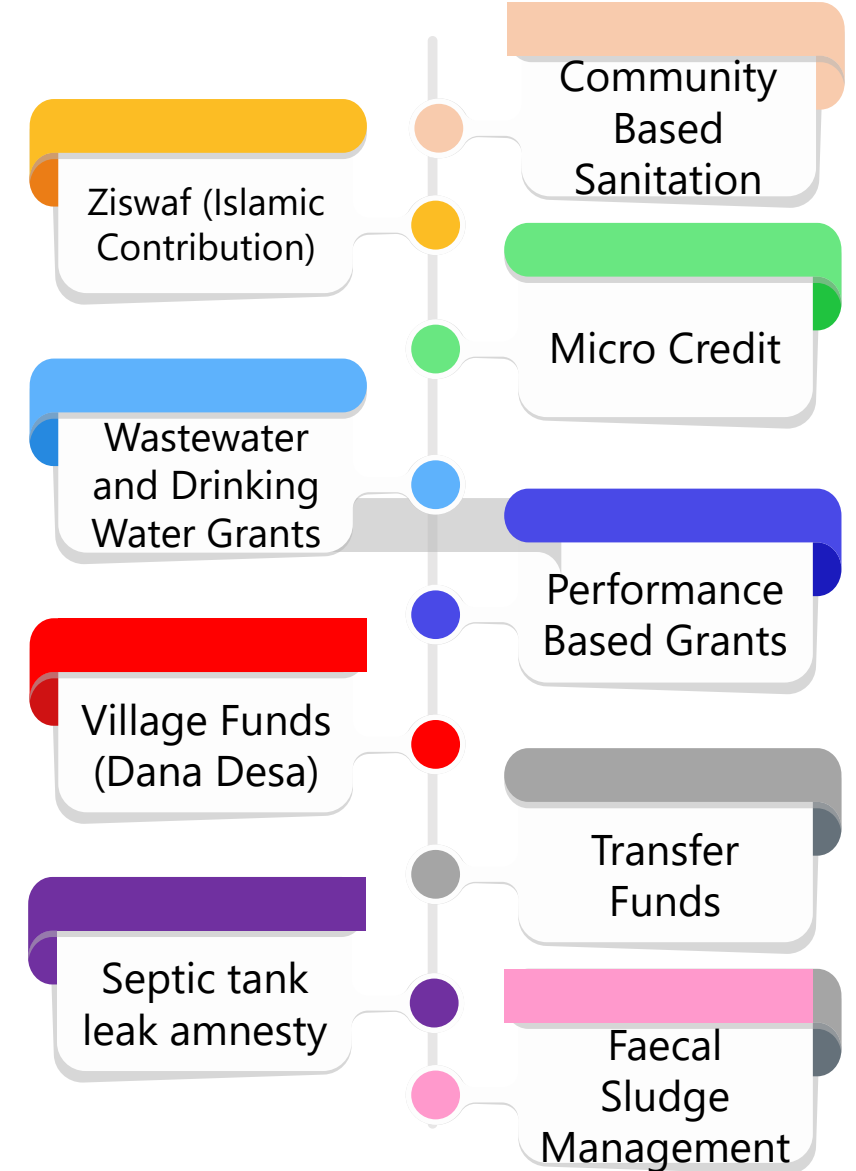
Collaborating Multiple Programs & Sources of Funding

SANITATION INVESTMENT NEEDS FOR 2020-2024 ARE APPROXIMATELY RP 192,59 TRILLION



Sanitation investments include physical and non-physical infrastructure for Domestic Wastewater, Solid Waste, and the Elimination of Open Defecation

ALTERNATE SOURCES OF FUNDING & PROGRAMS



Citywide Inclusive Sanitation Development

Example in Indonesia

Main factors:

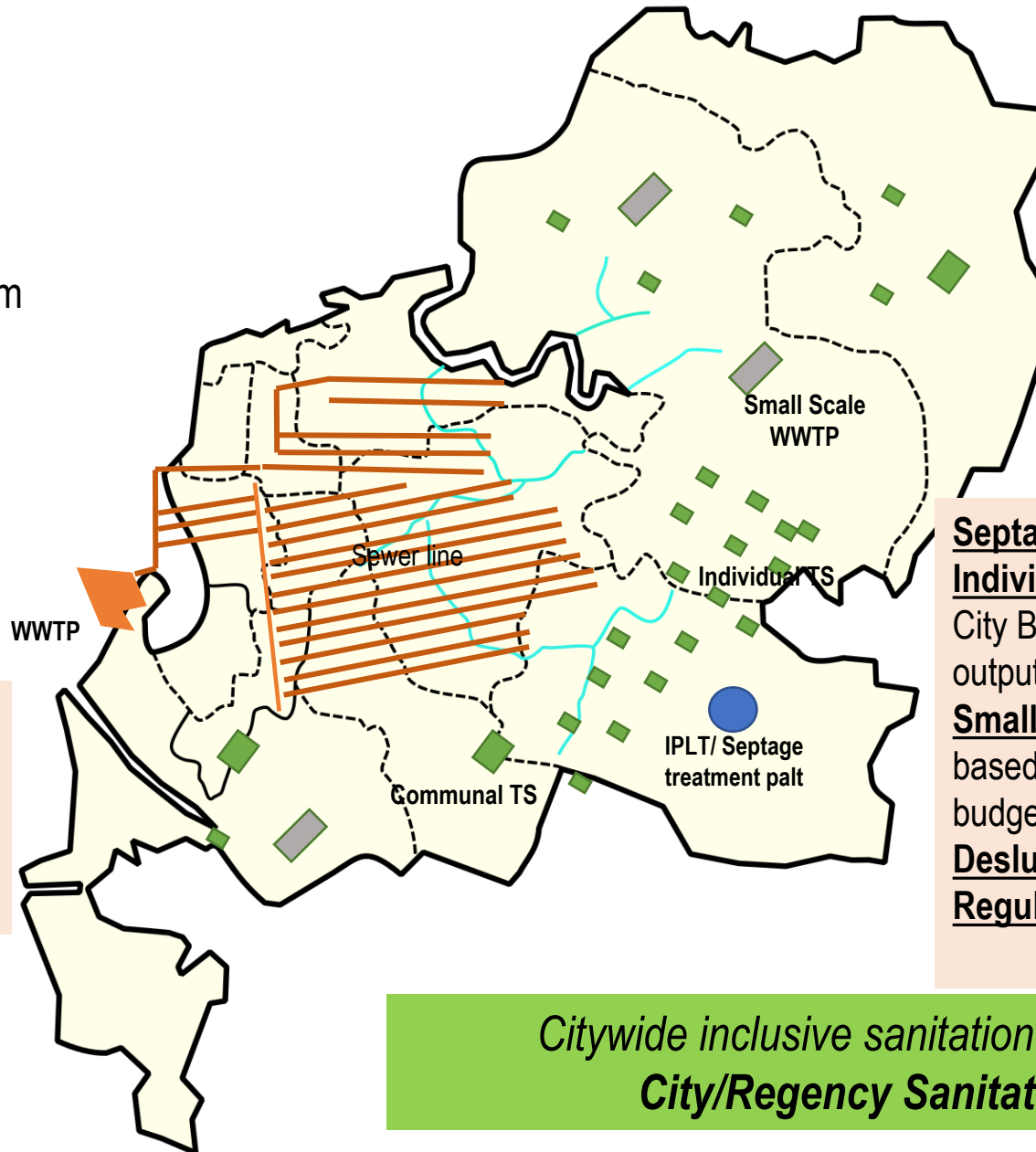
- Stakeholder's collaboration
- Combination of sanitation system
- Regulation, institutional set up
- Multiple funding source
- Inclusivity and sustainability

WWTP: national budget

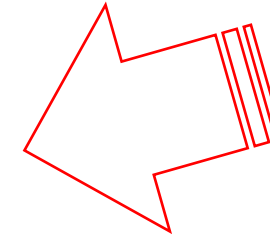
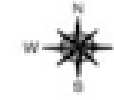
Sewer line:

Main trunk, lateral, service pipe :
national budget

House connection: local (city) budget



MAKASSAR



Septage Treatment Plant: national budget

Individual Septic Tanks:

City Budget, DAK (special allocation fund), or
output based grant, or self funded by households

Small Scale WWTP: national budget (community
based/SANIMAS or institutional based), city
budget

Desludging truck: city budget

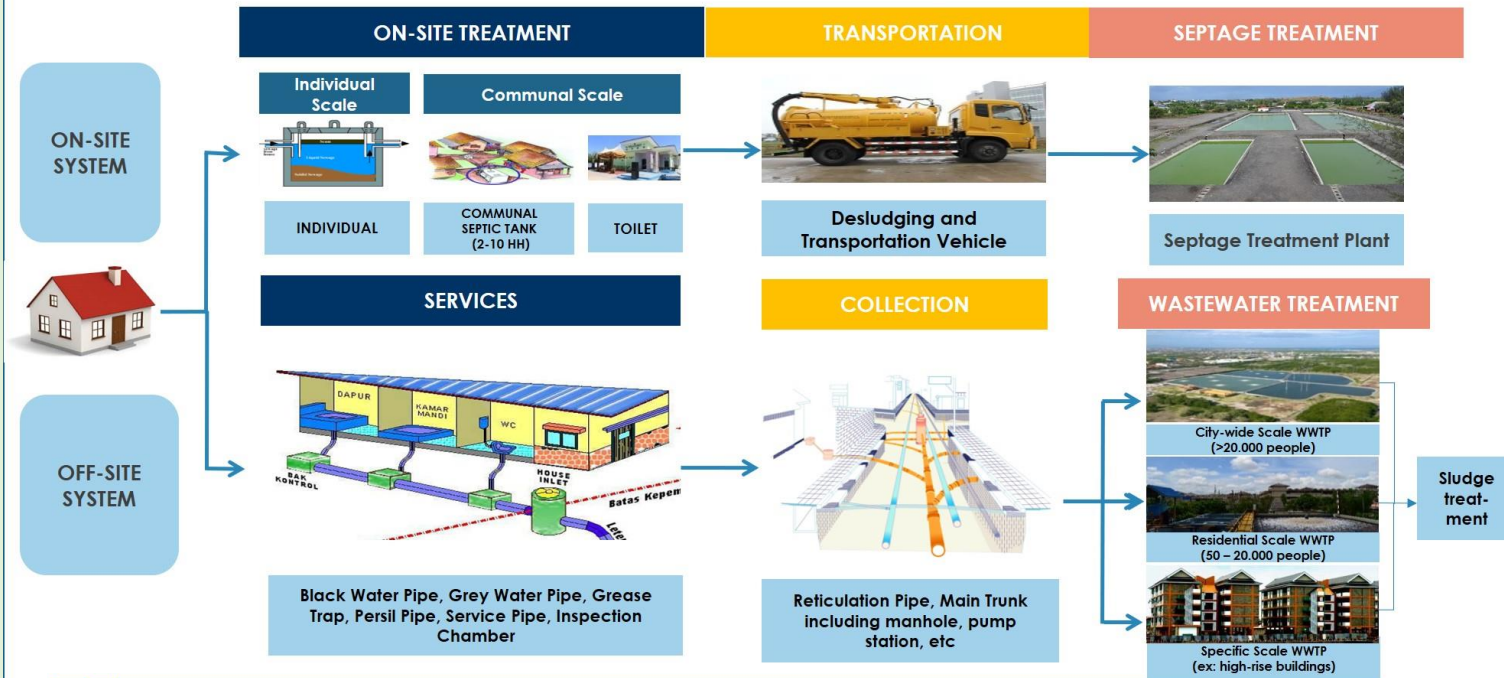
Regular Desludging : City Budget

Citywide inclusive sanitation development done based on :
City/Regency Sanitation Strategy CSS Book

Considerations of Technology Selection for domestic wastewater/septage treatment

- 1 Required area, land characteristics and population density
- 2 Investment feasibility (Capex)
- 3 Operational requirements (Opex)
- 4 Capability to allocate the O&M cost
- 5 Capability of the technology to comply with the required standard
- 6 Environmental feasibility and the compliance with spatial/ regional plan
- 7 Availability and capability of institution and human resources
- 8 Beneficiaries' ability and willingness to pay

CONCEPT OF WASTEWATER MANAGEMENT IN INDONESIA



WASTEWATER EFFLUENT STANDARD IN INDONESIA

Previous Regulation:
Minister of Environmental Regulation
No. 5/2014

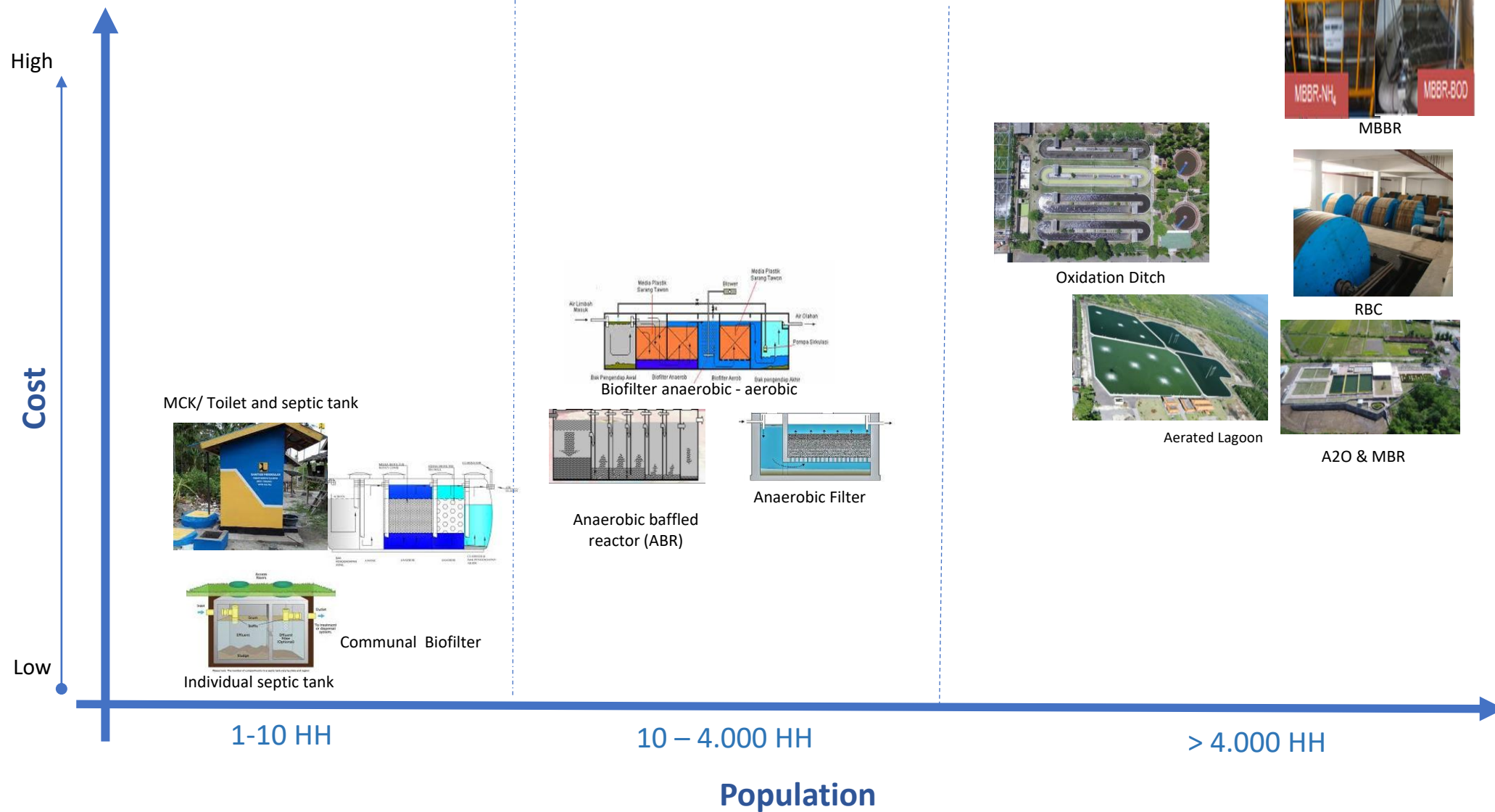
Parameter	Standard
pH	6-9
BOD	100 mg/L
TSS	100 mg/L
Oil and Grease	10 mg/L

Current Regulation:
Minister of Environmental and Forestry
Regulation No. 68 Year 2016

Parameter	Standard
pH	6-9
BOD	30 mg/L
COD	100 mg/L
TSS	30 mg/L
Oil and Grease	5 mg/L
Ammonia	10 mg/L
Total Coliform	3000 /100 mL

We have Operational Challenge in complying the new effluent standards

Stepwise Approach on Technology Selections



Capability on Providing sufficient O&M Funds is a crucial point on sustainability of sanitation infrastructure

7 Key Lessons Learnt by Indonesia in Improving & Accelerating The Development of Sanitation Access

1

Continuous and Intensive advocacy at all level of governments on why and how to maintain the commitments to achieve the sanitation targets and achieve minimum service standards on sanitation

2

Create **strong coordination** between different institutions in sanitation sector through **Working Groups** or forum

3

Technical assistance to local governments, including:

- Strategic planning on sanitation sector (in Indonesia: City/Regency Sanitation Strategy)
- Local regulations and institutional settings on sanitation management

4

Link and collaborate multiple programs (e.g sanitation strategy is part of requirement to get transfer of funds/Special Allocation Funds)

5

Encourage innovations in funding mechanisms:

Special Allocation Fund, ZISWAF (Islamic religious contribution), micro-credit, Wastewater and Drinking Water Grants, Output-Based Grants, Village Funds, Provincial Fund Transfer

6

Promote behavior change of people to better understand and implement proper WASH activities through constant promotion

7

Develop community-based sanitation systems as labor intensive projects is one of the step wise solution which could also support local economy recovery (e.g community-based sanitation system, improvement of septic tanks)

THANK YOU
TERIMA KASIH