DOMESTIC WASTEWATER MANAGEMENT SECTOR TO ACHIEVE UNIVERSAL ACCESS IN INDONESIA

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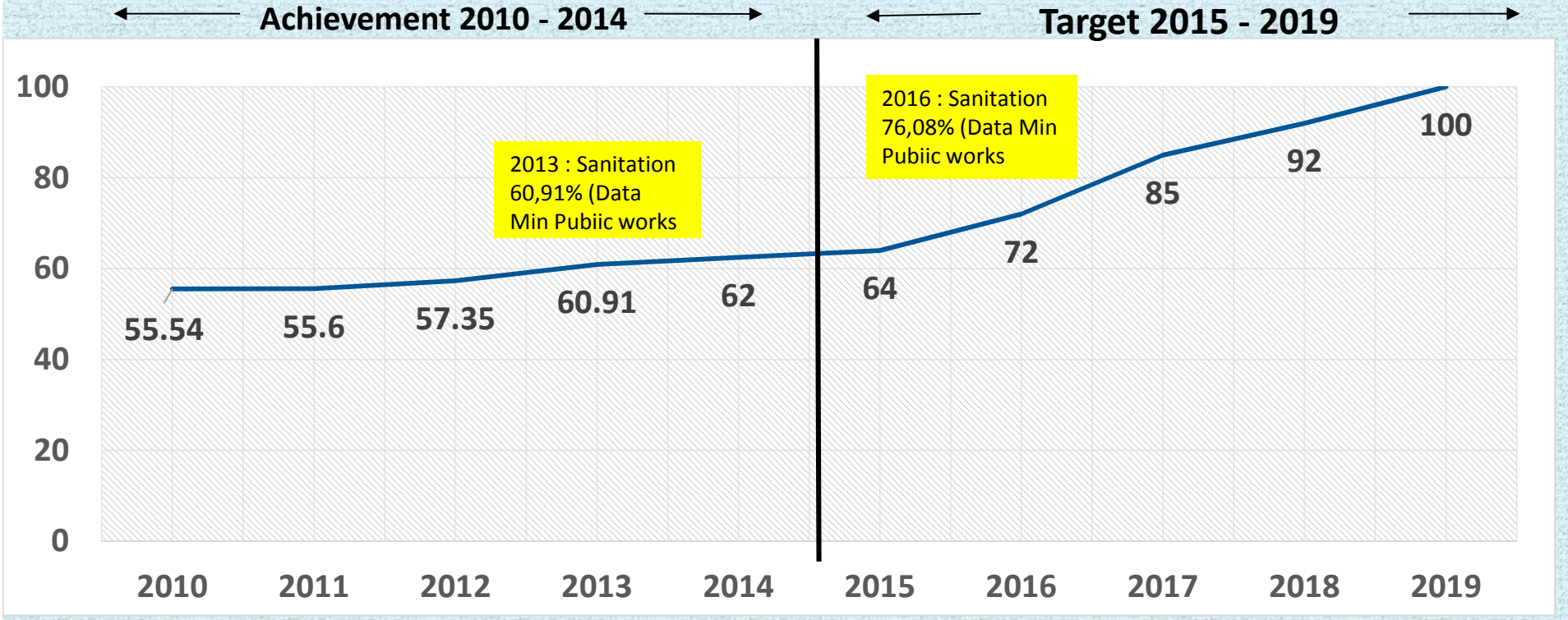
Source of presentation : Directorate for Human Settlements

EXISTING CONDITION →SANITATION ROAD TO 2019

In 2016 Indonesia' access to the sanitation reached 76,08 %, 67,2 % safe access, 8,88% basic sanitation. Off site / centralised wwtp < 3%, mostly area 73% rely on onsite sanitation (individu and communal <10 HH) dan public toilet. Sludge treatment plant access 10%.

On-site sanitation challenge : dense urban areas , permeable soil, often shallow groundwater, 38% urban household use groundwater for drinking water



Sumber: Susenas BPS2010- 2013, RKP 2014, Rancangan Teknokratis RPJMN 2015-2019

WASTEWATER WASTEWATER DEVELOPMENT AND MANAGEMENT SYSTEM

CHALLENGES

ACCESS FOR WASTEWATER MANAGEMENT SERVICES IN 2013

60,91%

Urban	Rural
77,15%	44,74%

On-Site System	Off-Site System
Urban : 74,15% Rural : 44,74%	Urban : < 3%

- Public Awareness for Sanitation & Hygiene
- Local Government Commitment for Wastewater Management
- Institutional for Wastewater Management (operator & regulator)

Program for Development and Management Wastewater System

STRATEGY FOR IMPLEMENTATION :

- Improve public awareness for sanitation & hygene
- Improve local government awareness & commitment
- Improve institutional & human resources competence
- Improve access for proper sanitation
- Multi sector cooperation and partnerships
- Develop scale of handling
- Improve the quality of wastewater planning

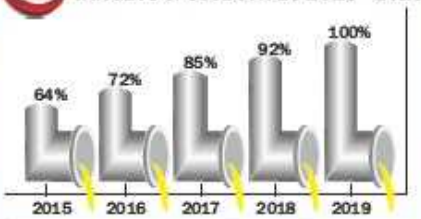
Hardware Program

1. On-Site System :
   - Individual Septic Tank
   - Communal Septic Tank
   - Transportation Equipment
   - Sludge Treatment Plant
2. Off-Site System
   - Communal Scale
   - Region Scale
   - City Scale

Software Program

1. Campaign, education & promotion
2. Advocacy to local government (executive & legislative)
3. Technical support for institutional establisment
4. Facilitation for SSK Review
5. Multisector synchronization (implementation/funding)
6. Improving human resources capacity

TARGETS & OBJECTIVES 2015 - 2019



ACCESS FOR WASTEWATER MANAGEMENT SERVICES

100%

Urban
On site 85%
Off site 15%

Rural on site 100%

- Community Implement Sanitation & Hygiene
- Funding Commitment > 5% of total local budget revenue & expediture
- Every city has the institutional for Wastewater Management

MINISTRY OF PUBLIC WORKS AND HOUSING
DIRECTORAT GENERAL OF HUMAN SETTLEMENTS

Planning of Sanitation Development

Strategy of Sanitation City/Regency (SSK) &

MASTERPLAN/OUTLINE PLAN WW MANAGEMENT

Primary Study

Existing condition

Risk location

Strategy : Program, Activity,

Investation

Implementation - Monev

Sanitation devepment:

on-site, communal, off-site

Acceleration of Sanitation Development

Pattern of Approaches For Waste Water Management System

Approach	Community-Based	Institutional-Based
Scale	Environment Scale	Area and City Scale (city wide) / Regional/National Scale

1 ***Rural***:
Model of Total Society- based sanitation (STBM)
- ➢ Cooperation with Ministry of Health to campaign Hygiene & Sanitation Behavior (PHBS)

2. ***Urban*** :
- ➢ Model of Community Based Infrastructure (SANIMAS)

- ▪ ***Metropolitan & big City*** : Off site /*sewerage system*
- ▪ ***Medium/small city:*** focus on Septage Treatment Plant to improve on site system
- ▪ ***New city/area:***
- ➢ Development of sewerage system for area
- ➢ Encourage the development of sewerage system for new city by private investment.

Regional Waste Water Treatment Plant (WWTP)




ROADMAP WASTEWATER MANAGEMENT 2015-2019

Infrastructure and non infrastructure needed to achieve 100 % access sanitation in 2019

No	Need	Unit	2015	2016	2017	2018	2019	Total
1	Septic tank Individual	Unit	2.440.891	3.254.521	4.881.782	3.254.521	2.440.891	16.272.607
2	Off site-sewerage	City/ regency	7	9	14	9	7	47
3	On site region	region	351	469	703	469	351	2.343
4	communal	com	1.404	1.872	2.809	1.872	1.404	9.362
5	Sludge TP	City/ regency	117	155	233	155	117	777
6	Non infrastructure	City/ regency	509	509	509	509	509	509

CHALLANGES IN SANITATION DEVELOPMENT

From budged aspect

Big gap between the existing achievement and the target of *universal access* 2019

Sanitation is not a priority from local government (average budged allocation <1%

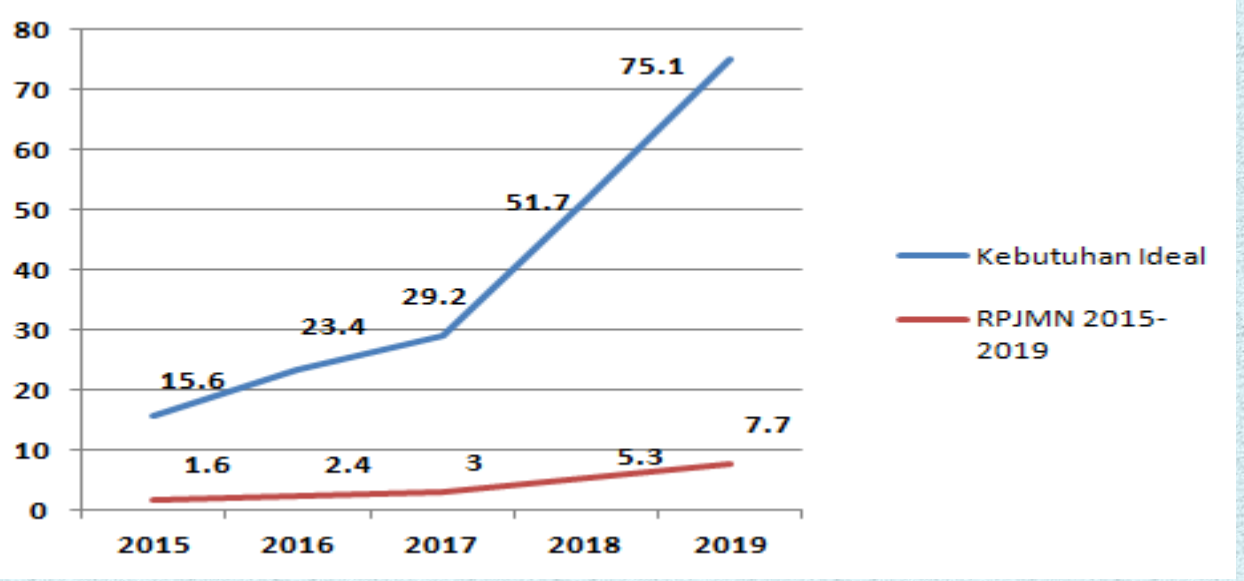
Lack of local government readiness in implementation of sanitation develpment (planning document, land, institutional for management)

Limited of budged from Government and local government in Sanitation development.

Lack of human resources in sanitation in level government, local government and service provider

BUDGED

Budged for sanitation



Description	APBN (RP Triliun)						% CAPAIAN AKSES
	2015	2016	2017	2018	2019	TOTAL	
IDEAL	15,6 T	23,4 T	29,2 T	51,7 T	75,1 T	**202 T**	100%
RPJMN (alocation) 2015-2019	1,6 T	2,4 T	3,0 T	5,3 T	7,7 T	**20,7 T**	68%

PROGRAM OF ACCELERATION FOR SANITATION 2015-2019

National funding 53% Central Gov (ministry : PW, Environment &Forestry, Home Affair , undeveloped area &Trans, Fishery and Marine

City Province 28%, city 5%, private community 19%

Partnership Needed in Sanitation Sector

1. City/Regency Government
2. Provincial Government
3. Central Government (water and sanitation working unit)
   - Ministry of Health
   - Ministry of Home Affairs
   - Ministry of Public Works & Housing
   - Ministry of Environment & Forestry
   - Bappenas
4. Donor Institution (Loan/Grant) : Australia Government (IndII), U.S.A Government (USAID, IUWASH), Netherland Government (USDP), Japan Government, Asian Development Bank (ADB), Japan International Cooperation Agency (JICA), Islamic Development Bank (IDB), World Bank, KOICA, etc
5. Private sector (company cooperation/donation)
6. University/Expert/Researcher
7. Non Government Organization (NGO) : AKKOPSI, AKSANSI, BORDA, LPTP, BALIFOKUS, DIAN DESA, Mercy Corp, dll
8. Society/community

Research Institute for Human Settlements, Ministry of Public Works and Housing

Supporting in waste waster management sector

1. R & D in waste water technology
2. Inspection Body for Waste water management
3. Setting standard and technical guideline
4. Dissemination and cooperative researches
5. Technical advice

Some activities proposed for Establishment of Asia Wastewater Management Partnership (AWaP)

1 Developing effluent standard for septage treatment plant
2 Developing standard for waste water reuse (for agriculture, public purposes (non potable water, flushing, hydran)
3. Develop laboratory for decentralized waste water testing method
4. Developing sanitation technology for spesific areas (tidal areas, coastal area-no gravity flow such as vacum sewerage)
5. Package technology for septage treatment plant


thank you
danke
謝謝
ngiyabonga
teşekkür ederim
gracias
merci
obrigado
спасибо
Баярлалаа
рахмат
bedankt
dziękuję
sukriya
kop khun krap
go raibh maith agat
mochchakkeram
arigatô
dakujem
grazie
terima kasih
감사합니다
ありがとう
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CIPTA KARYA