

Building Resilient Sanitation Infrastructure to Sea Level Rise

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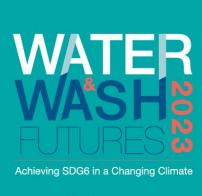
²Institute for Sustainable Futures, University of Technology Sydney, Ultimo NSW 2007

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Presentation Plan

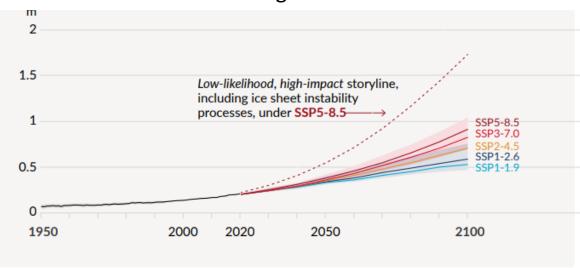
- SLR vs Sanitation: Buried problems
- SLR Resilient Sanitation Planning Framework
- Workshop Activities and Findings
- Moving Forward



Sea levels have already risen and will continue to rise



Global mean seal level change relative to 1900

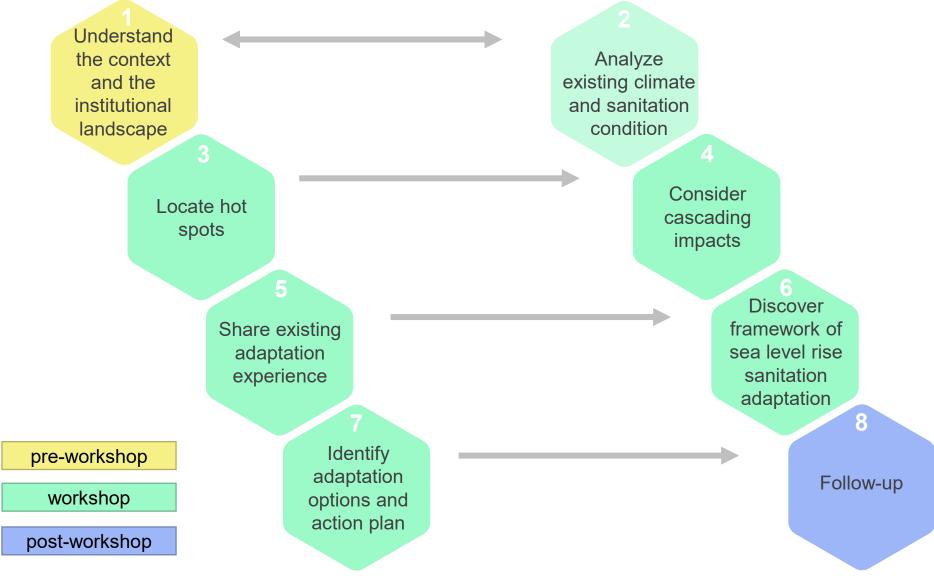


https://www.ipcc.ch/assessment-report/ar6/

Even just a few centimetres of sea level rise can be damaging in low-elevation areas like Banjarmasin and Mataram



Process - details



Overview of Activities

- 2 cities: Mataram and Banjarmasin city chosen because of their coastal location, specific sanitation challenges, future sanitation plans
- 2-3 days pre-workshop visits and meeting
- Workshops conceptualized and organized with and by local stakeholders (academic and government)
- 3 days of workshop





Understand the context and the institutional landscape

Assess the situation on the ground through secondary data and meet with relevant stakeholders.







Perumda PAL

UMMAT

Perkim MTR

BPPW NTB

DPUPR NTB

Dinkes MTR

DPUPR MTR KPS

Yayasan Rumah Senja

DAI Kesehatan

UTS

TL-UI

Bappeda MTR

BPBD MTR

DLH MTR





Analyze
existing
climate and
sanitation
condition

Discuss Shit Flow
Diagram, map
sanitation
infrastructure,
flooding, sea level
rise and relevant
socio-economic
indicators



The SFD Promotion Initiative recommends preparation of a report on the city context, the analysis carried out and data sources used to produce this graphic Full details on how to create an SFD Report are available at: sfd.susana.org



Locate hot spots

Overlay existing maps, identify high-impact area

Environment

1 = No proximity to tidal flooding

2 = Tidal flooding can occur in extreme cases

3 = Frequent and extensive tidal flooding occurs

Technology

1 = No or little sanitation infrastructure present

2 = Average amount of sanitation infrastructure present

3 = Important and densely packed sanitation infrastructure present







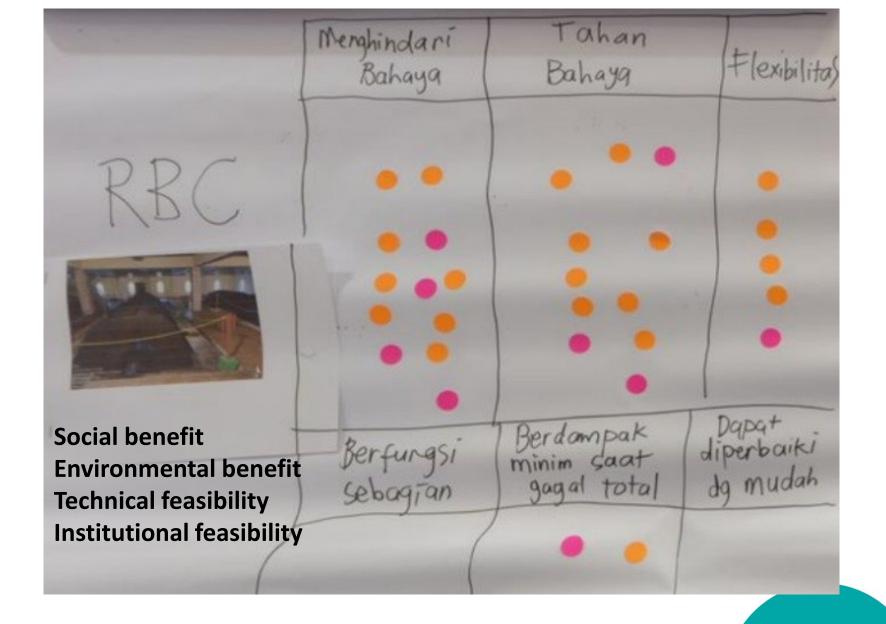
Analyze different state, impact, causes and root causes of sea level rise-impacted sanitation service chain





Sharing Existing Adaptation Experience

Discuss existing sanitation and sealevel rise related adaptation experiences and lessons learned





Discover framework of sea level rise sanitation adaption

Identify adaptation options and action plan

Where is best to act?



Maintaining capacity for continual adaptation through monitoring evaluation and learning

Integrated action on the whole water cycle to protect services, environment and public health

Risk- and vulnerabilityinformed planning and decisionmaking

Climate resilient sanitation system

Clear
institutional
responsibilities
and flexible
management
and service
delivery
arrangements

Sustainable and responsive financing for both preventive measures and disaster response

Creative, strengths-based user engagement and awareness Robust or repairable sanitation infrastructure options



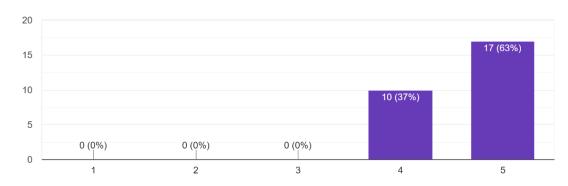
Reflection of Workshop

Strength:

- Novel concept for government
- Participant-centered
 learning, otivated participants
- Can be used for smaller cities/utilities, rural area

Saya termotivasi untuk mengambil aksi untuk mengatasi permasalahan sanitasi yang terdampak perubahan iklim

27 jawaban



Rooms for improvement:

- Compromise between workshop's high level planning process and LG expectation for concrete technical results
- Involve vertical hierarchy from local to central government





Recommendation

- Sanitation Safety Plan/City Sanitation
 Strategy Framework to include climate change risks consideration
- Mainstreaming climate into ALL government activities (from planning to evaluation) is a priority





Thank You

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