

Water-sensitive informal settlement upgrading

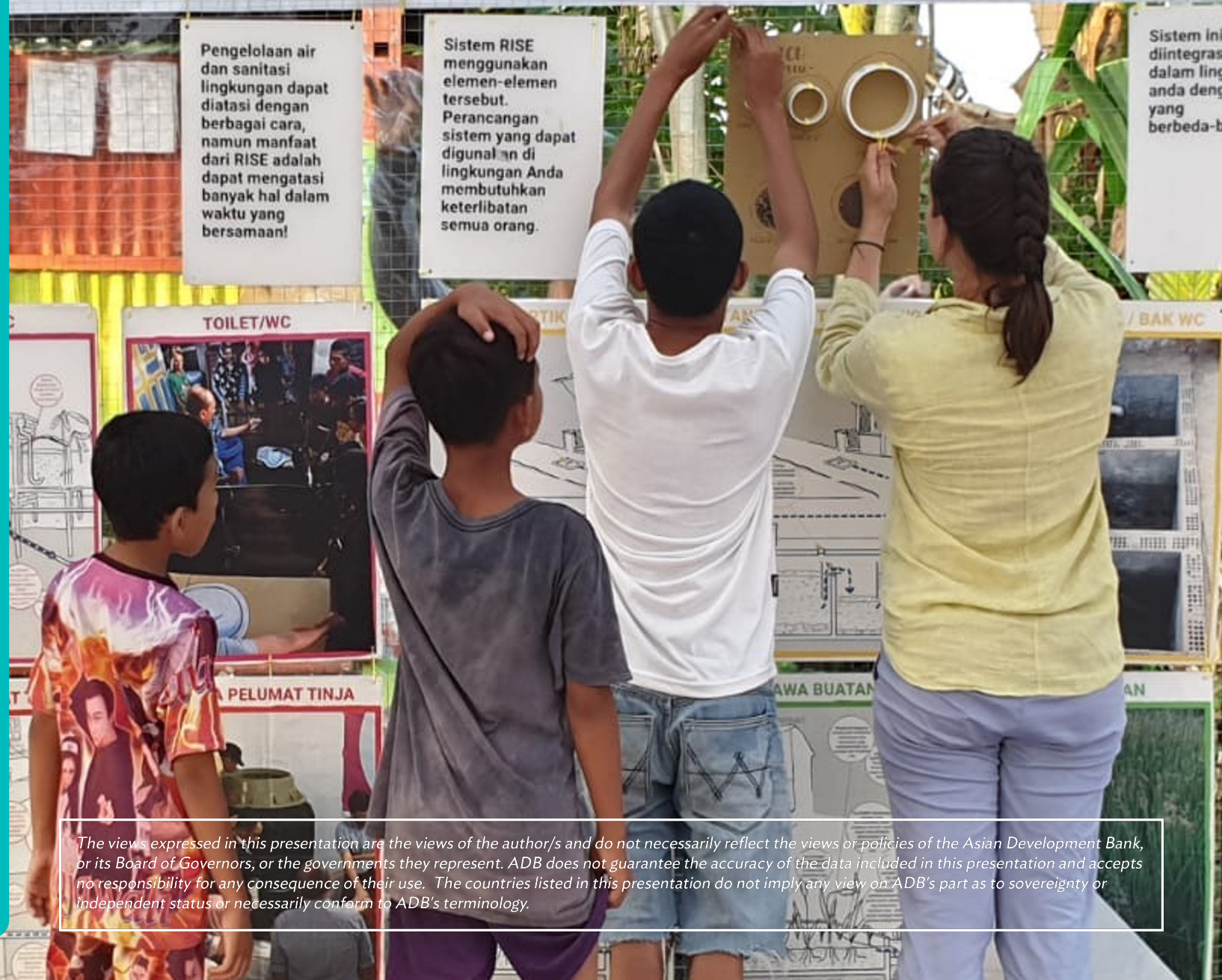
Perbaikan Permukiman Informal yang Peka Air

*Dr Ihsan Latief
Ms Kerrie Burge*

rise REVITALISING INFORMAL
SETTLEMENTS AND
THEIR ENVIRONMENTS

MONASH
University

ADB



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A three-part series

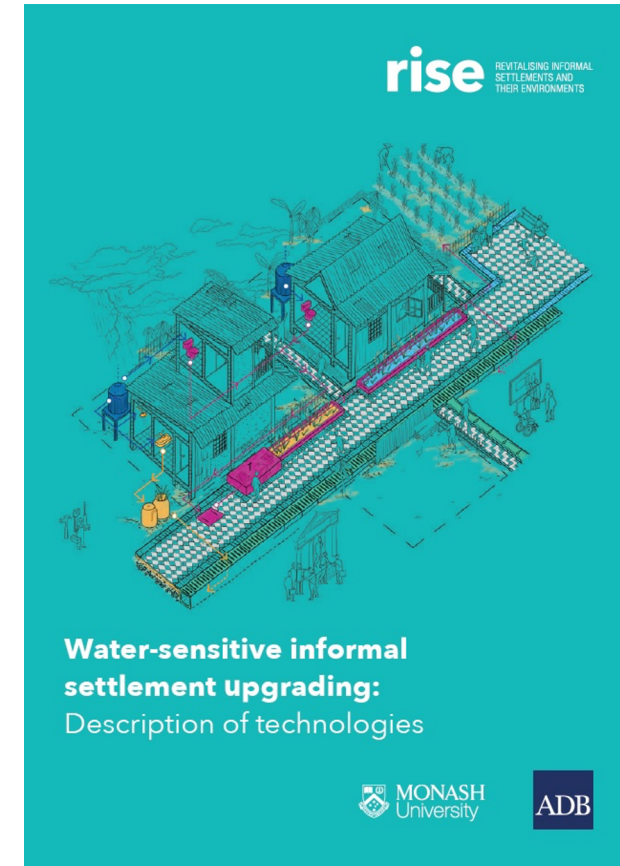
Tiga seri produk pengetahuan



1. Principles and approach
Prinsip dan Pendekatan



2. Co-design
Desain Bersama



3. Technologies
Teknologi



RISE is locally led.

RISE dipimpin secara lokal.

Batua demonstration site

Lokasi percontohan di Batua



September 2017



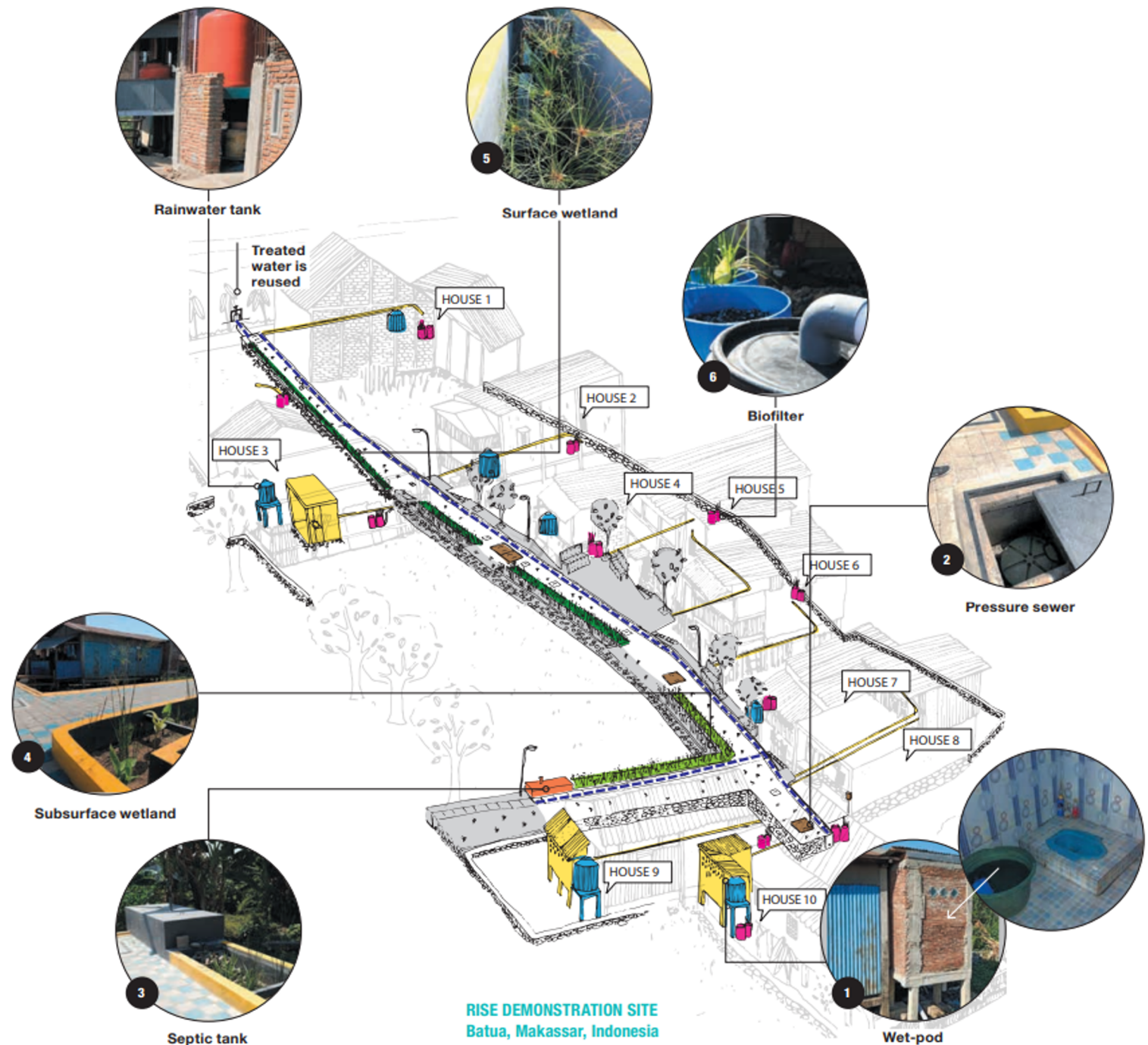
March 2020

Provided valuable lessons on how to deliver in dense urban environments.

Memberikan pelajaran berharga bagaimana menerapkan di lingkungan perkotaan yang padat.

Nature-based solutions deliver basic urban services, and have many co-benefits.

Solusi berbasis alam memberikan layanan perkotaan, dan memiliki banyak manfaat tambahan.





Ir. H. Moh Ramdhan Pomanto ground breaking ceremony, November 2018



Cipta Karya Jakarta visit, March 2019



Vice President Knowledge Management, opening ceremony, October 2019



BAPPANAS visit, January 2020



Citarum West Java visit, February 2020



ADB President visit, March 2020



Dept. Public Works Makassar City, December 2020



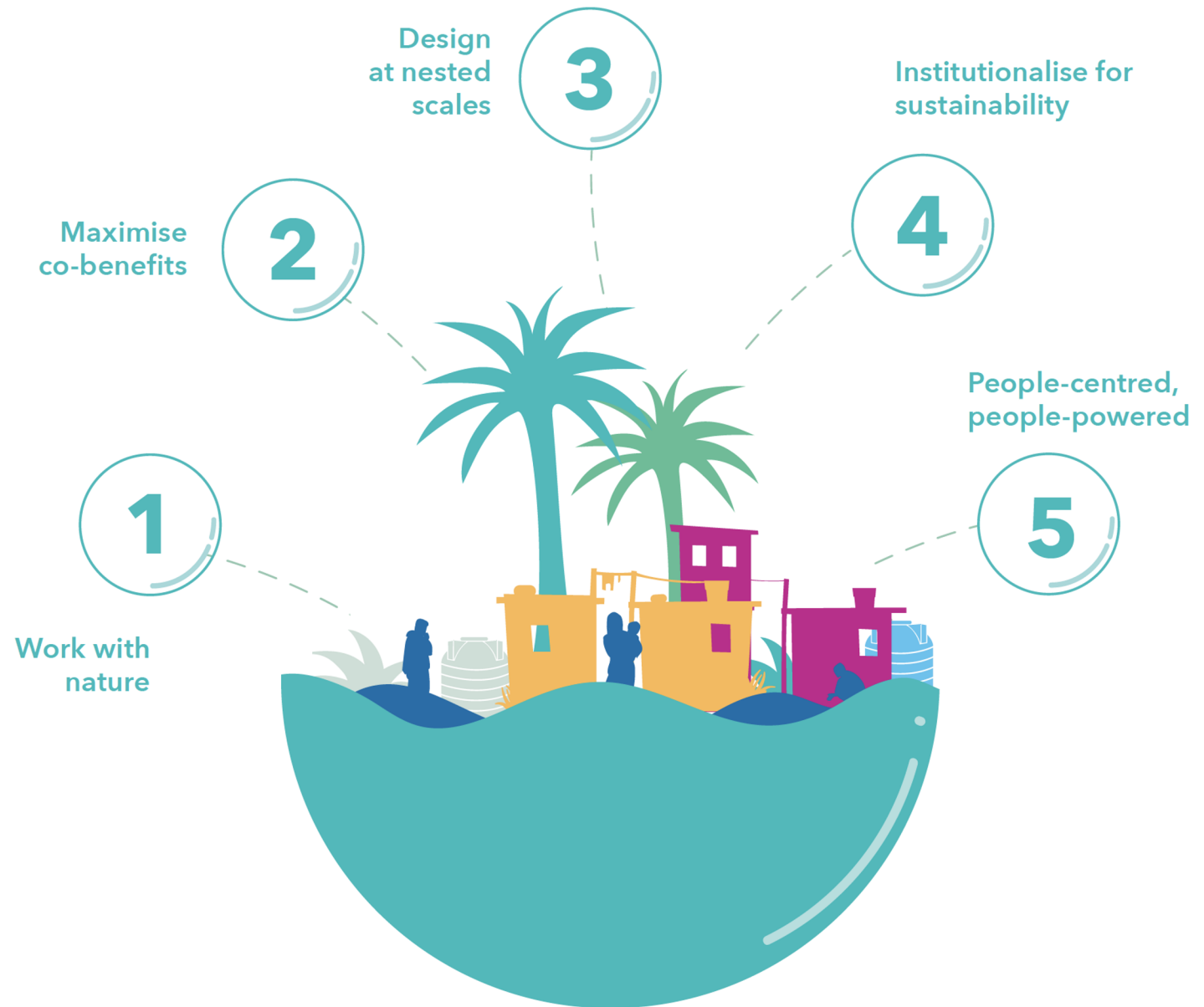
KoTaKu visit, February 2021

This work has been a catalyst for change.

Pekerjaan ini telah menjadi katalisator perubahan.

5 principles underpin the RISE approach

5 prinsip yang mendukung pendekatan RISE



10 parts to water-sensitive informal settlement upgrading
10 komponen untuk perbaikan permukiman informal yang sensitif air

1. Co-design and inclusion *Desain bersama dan inklusi*



10 parts to water-sensitive informal settlement upgrading

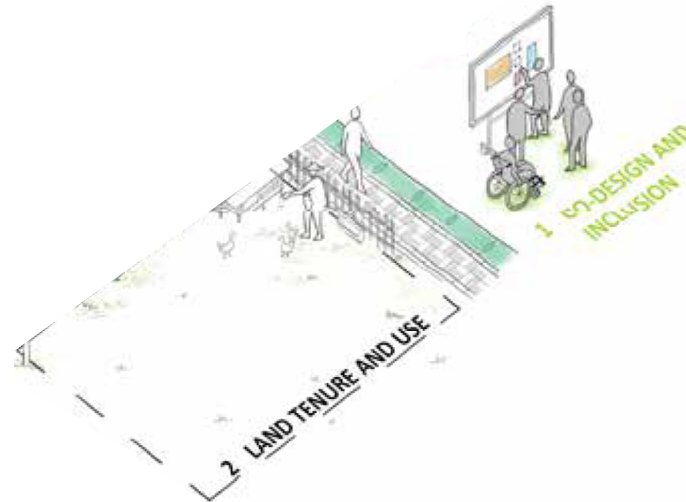
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1. Co-design and inclusion

Desain bersama dan inklusi

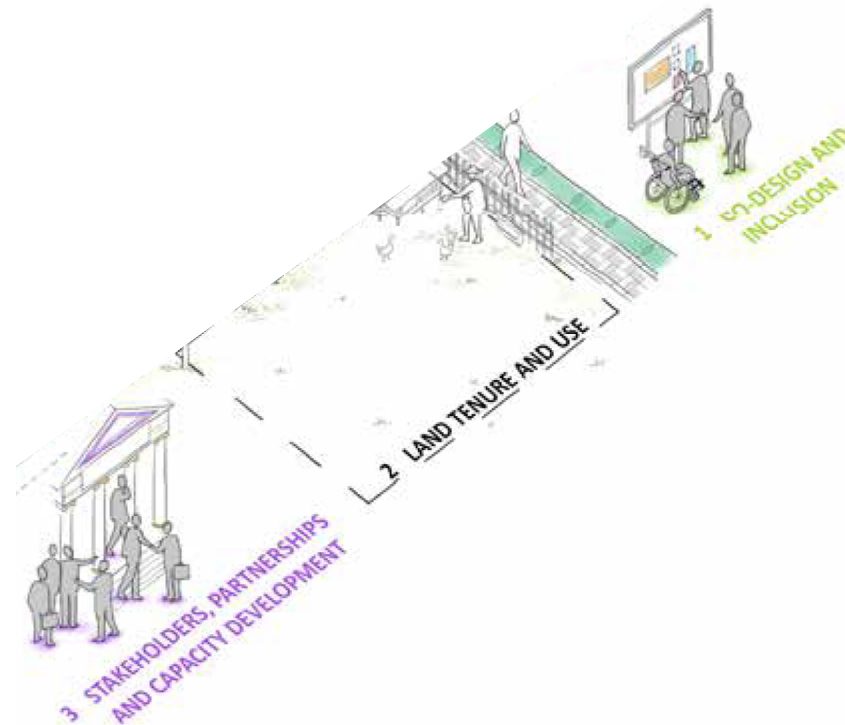
2. Land tenure and use

Kepemilikan dan penggunaan lahan



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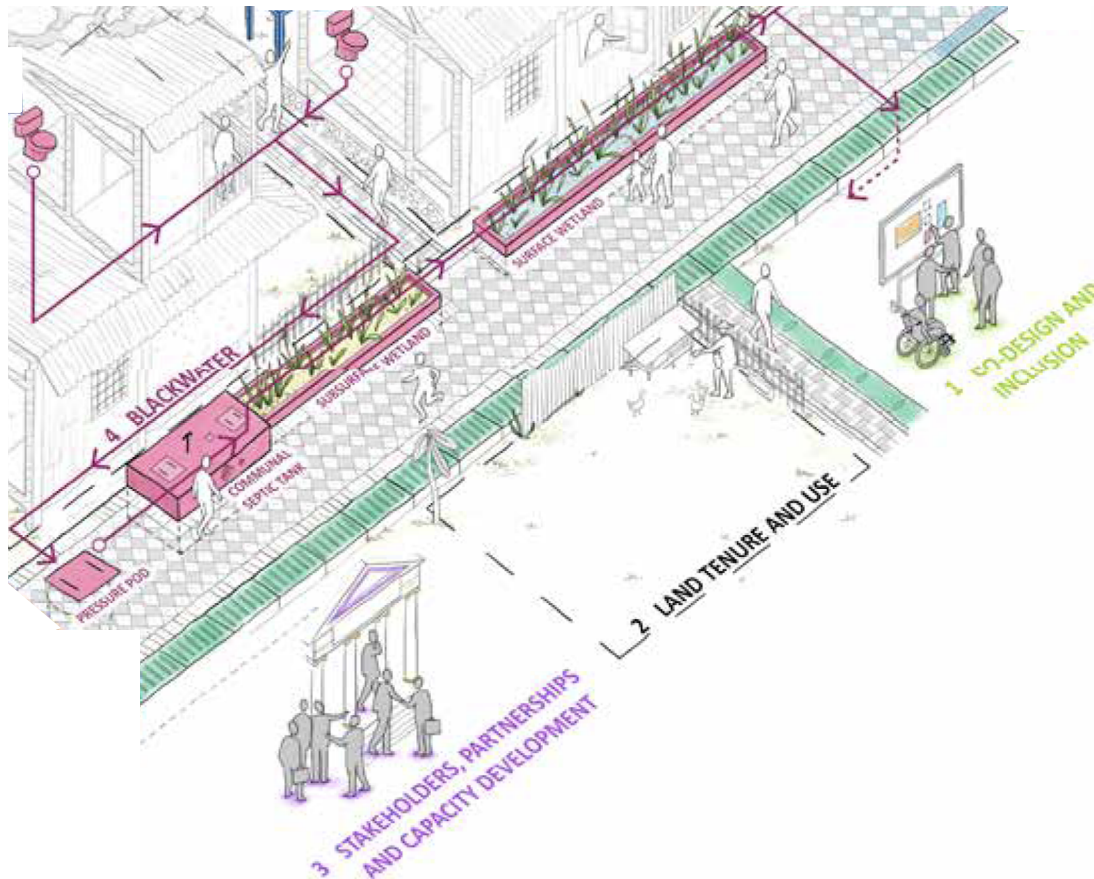
Kepemilikan dan penggunaan lahan

3. Stakeholders, partnerships and capacity development

Pemangku kepentingan, kemitraan dan pengembangan kapasitas

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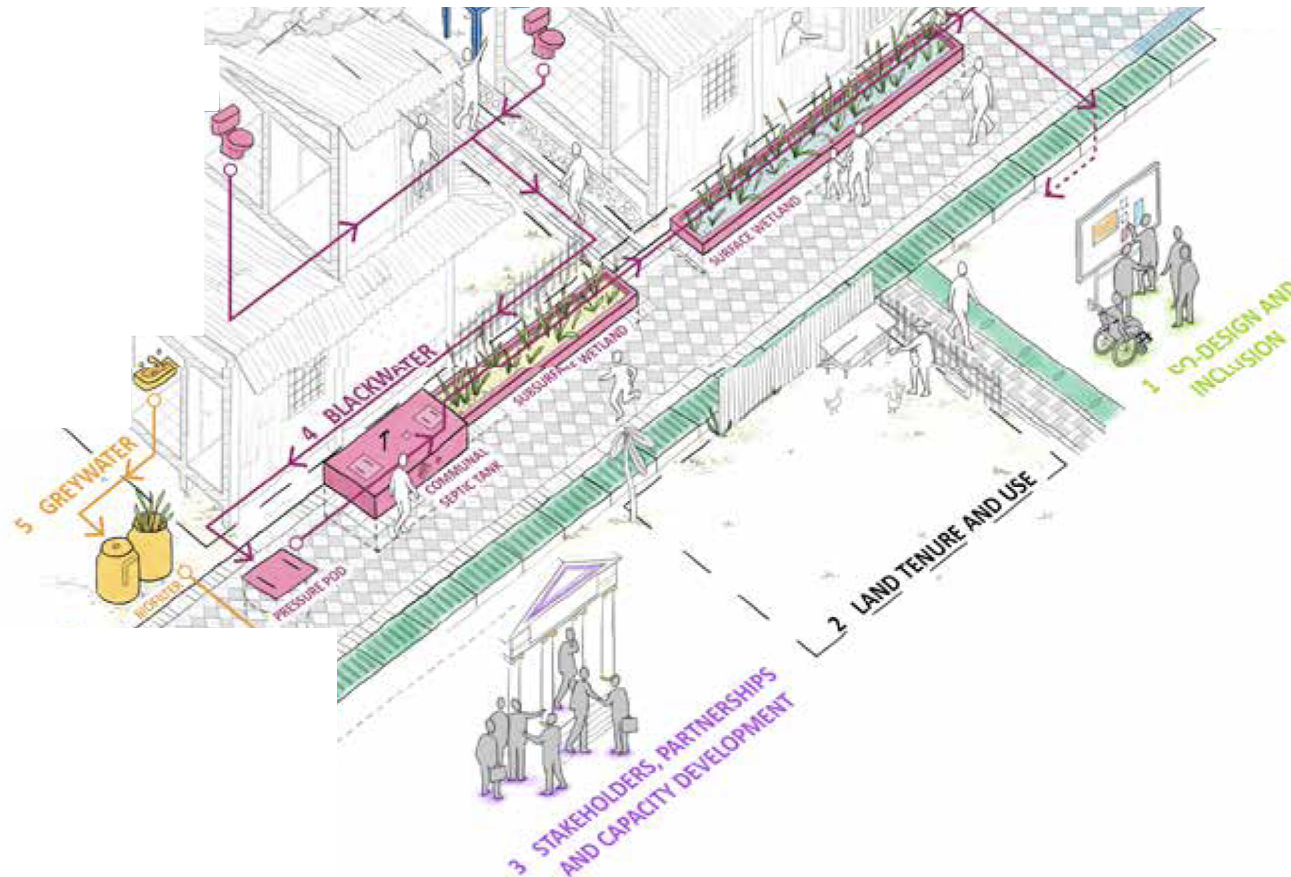
Pemangku kepentingan, kemitraan dan pengembangan kapasitas

4. Blackwater

Air limbah dari toilet

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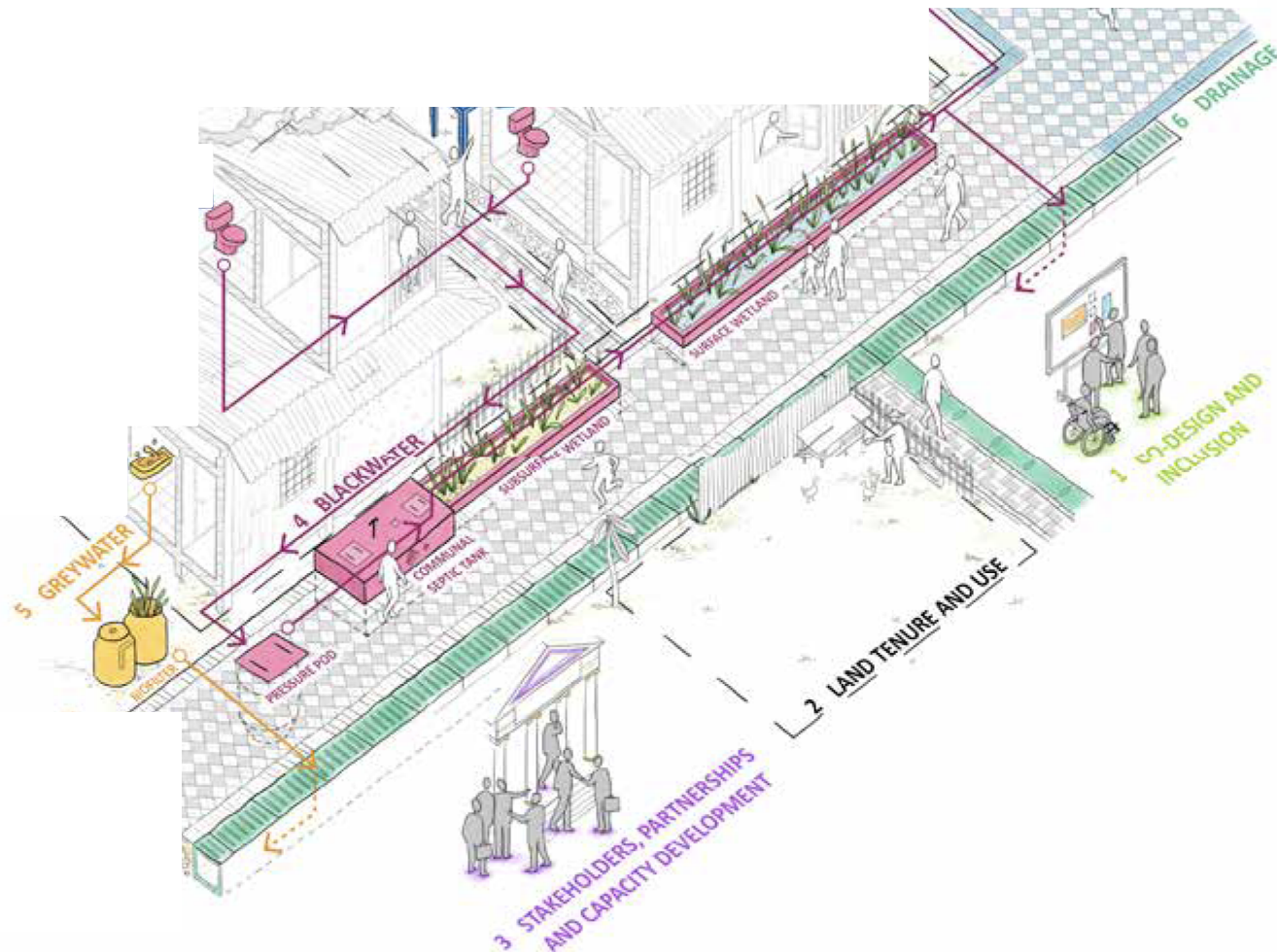
Air limbah dari toilet

5. Greywater

Air limbah rumah tangga

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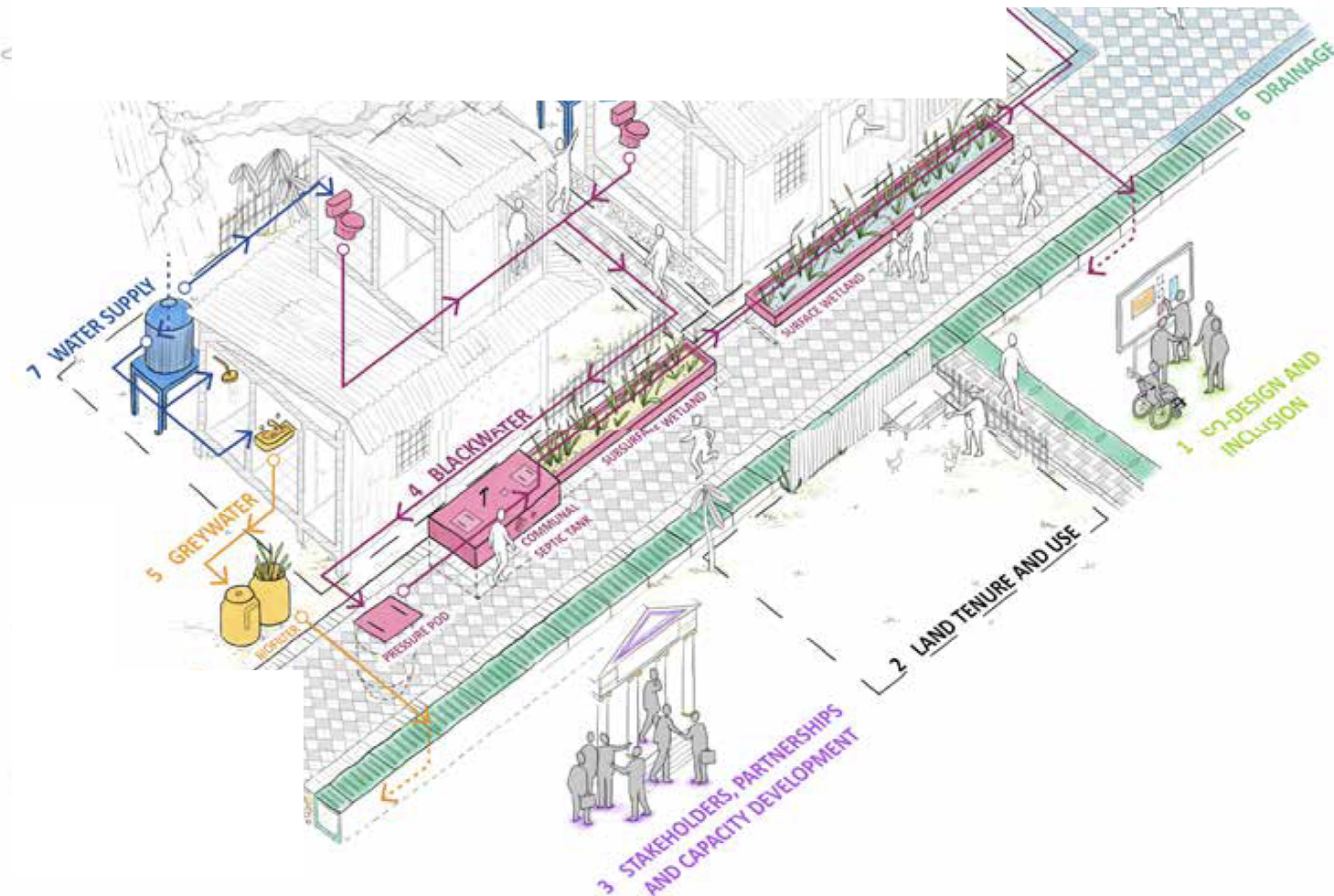
Air limbah rumah tangga

6. Drainage

Drainase

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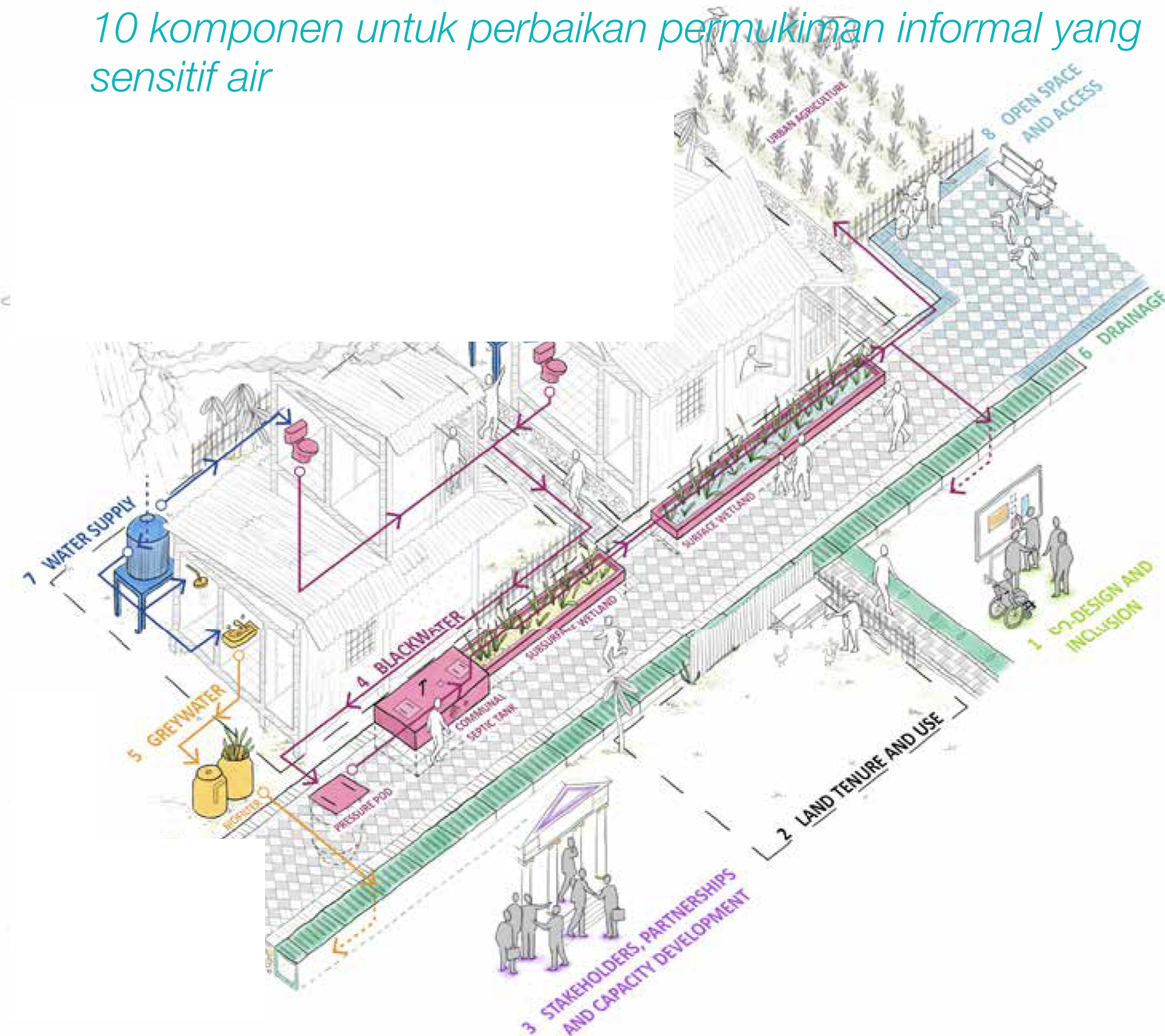
Drainase

7. Water supply

Ketersediaan air

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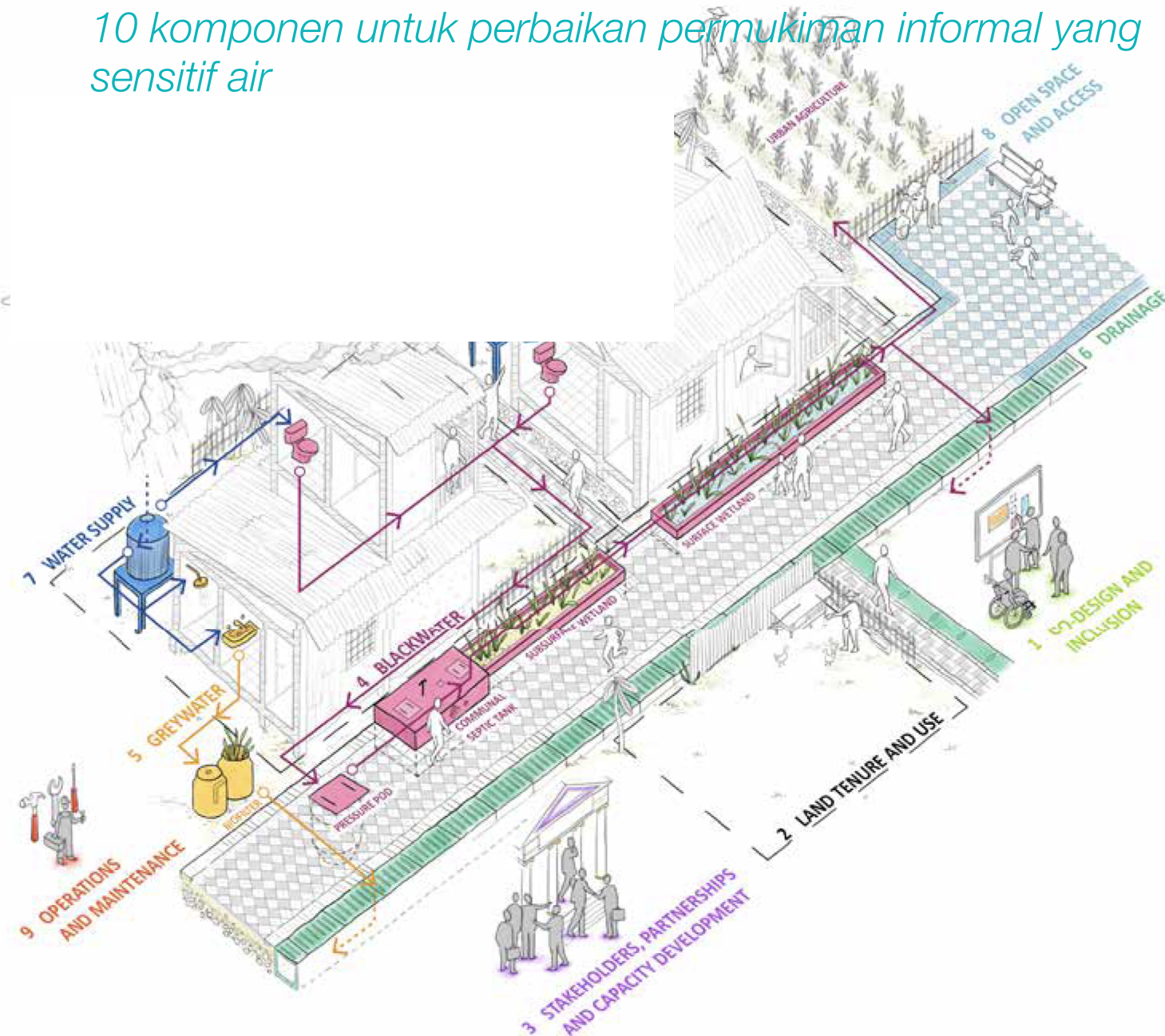
Ketersediaan air

8. Open space and access

Ruang terbuka dan akses

10 parts to water-sensitive informal settlement upgrading

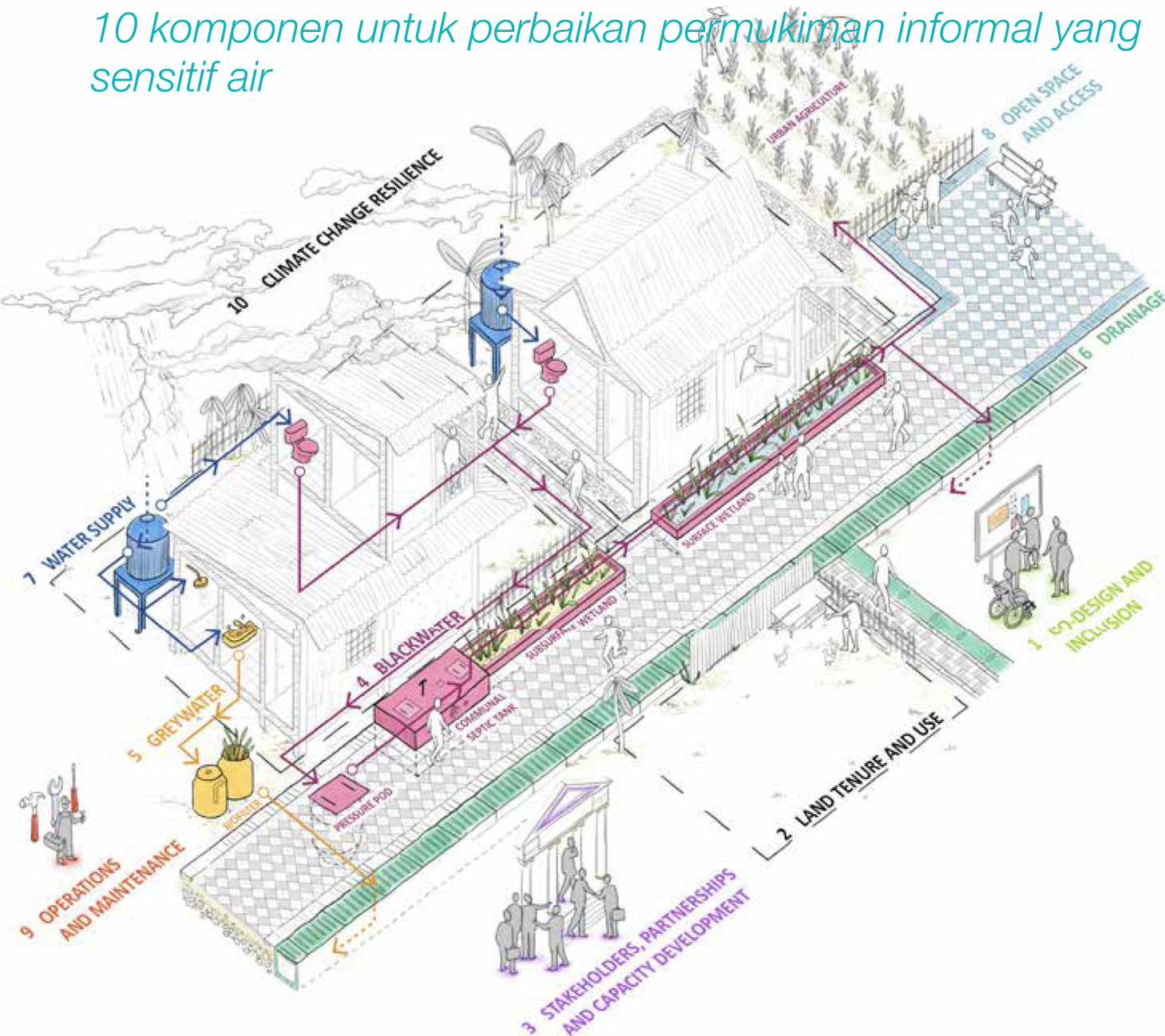
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1. **Co-design and inclusion**
Desain bersama dan inklusi
2. **Land tenure and use**
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8. **Open space and access**
Ruang terbuka dan akses
9. **Ops. and maintenance**
Operasi dan perawatan

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Ruang terbuka dan akses
- 9. Ops. and maintenance**
Operasi dan perawatan
- 10. Climate change resilience**
Ketahanan terhadap perubahan iklim



Residents are partners in planning and decision-making.

Warga adalah mitra dalam perencanaan dan pengambilan keputusan.



The RISE co-design process empowers residents to make informed choices.

Proses desain bersama program RISE memberdayakan warga untuk memilih berdasarkan informasi.

POOR
SANITATION



ILL HEALTH



VECTOR
HABITATS



LOW LEVELS OF
EDUCATION
& EMPLOYMENT



Grey +

Green +

Smart

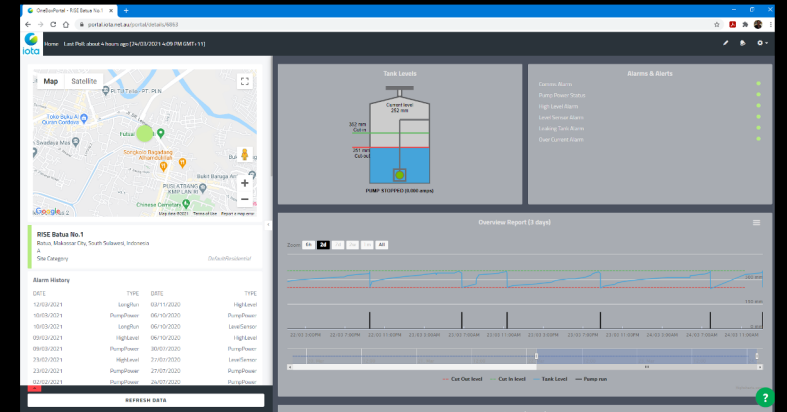
Infrastruktur abu-abu



Infrastruktur hijau



Infrastruktur cerdas



Together, they provide real opportunities to achieve liveable cities.

Bersama-sama, mereka memberi peluang nyata untuk mencapai kota layak huni.

The water-sensitive upgrading approach builds climate resilience.

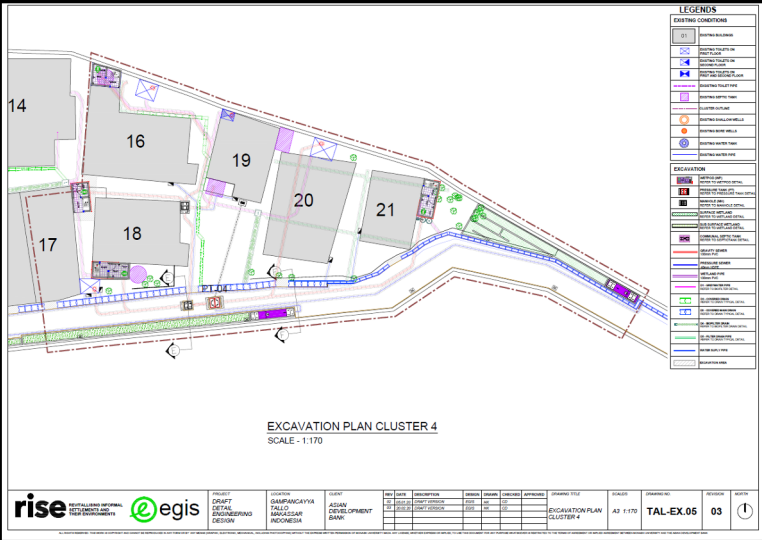
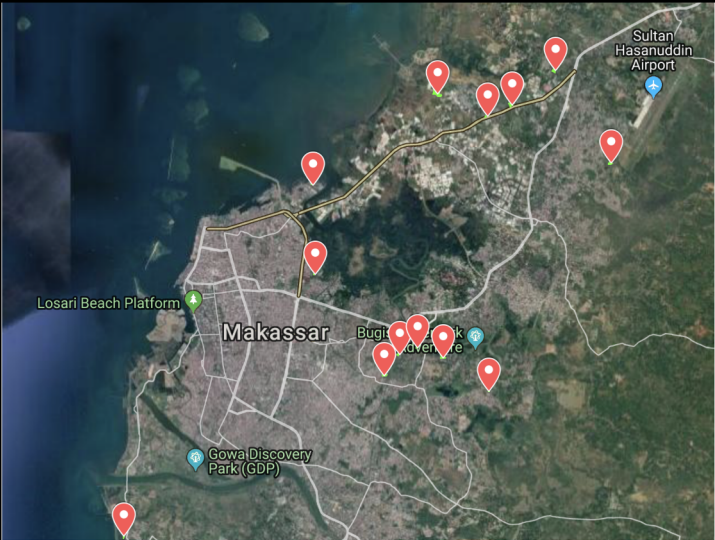
Pendekatan peningkatan peka air membangun ketahanan terhadap iklim.



The demonstration projects have provided the lessons that are now being implemented in the next phase of RISE.

Proyek percontohan telah memberikan pembelajaran yang sekarang sedang diimplementasikan untuk fase RISE berikutnya.

RISE
Makassar
next six
sites



RISE Makassar Detailed
Engineering Designs

New Zealand
Prime Minister,
Jacinda Ardern
visit Fiji
demonstration site



UNHAS RISE
laboratory

Thank you
Terima kasih

