

POLICY BRIEF:

# RECLAIMING COASTAL THROUGH COLLECTIVE PLANNING

IN JAKARTA

# Intro to Coastal Flooding

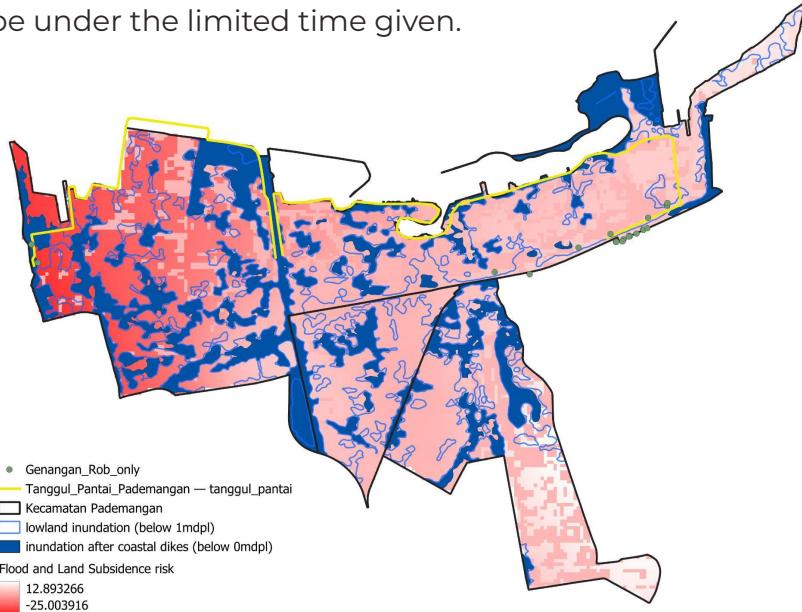
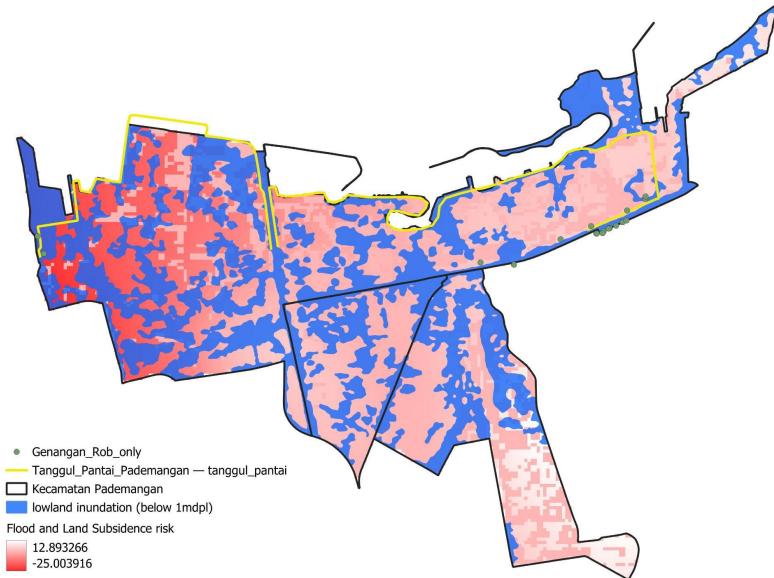
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Jakarta's coastal flooding is a **persistent annual urban challenge**, mainly caused by land subsidence, excessive groundwater extraction, and inadequate ecological protection.

Pemprov DKI Jakarta has undertaken various efforts to mitigate coastal risks, including **constructing coastal dikes** along the coastline.

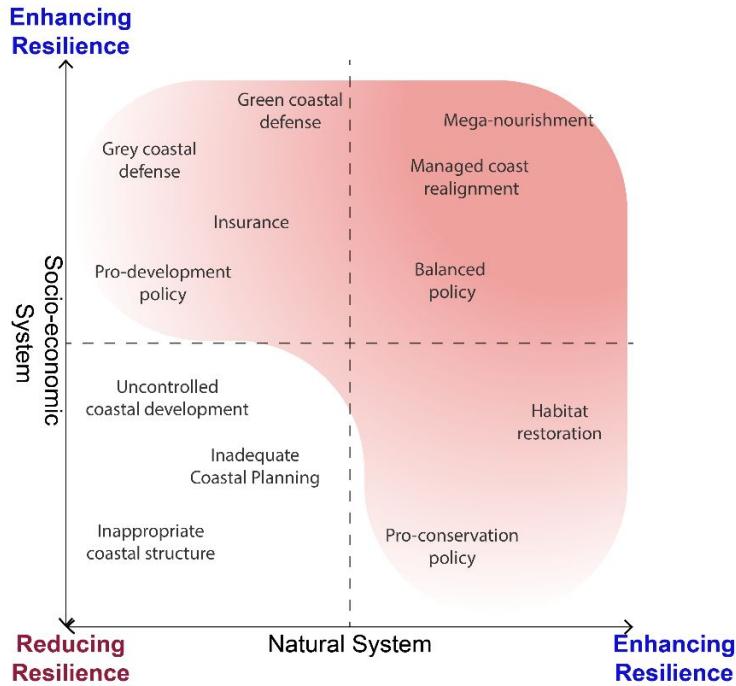
**However**, the current infrastructure plan is inadequate to address persistent inundation caused by rainfall and excess river volume.

We chose Kecamatan Pademangan to narrow the research scope under the limited time given.

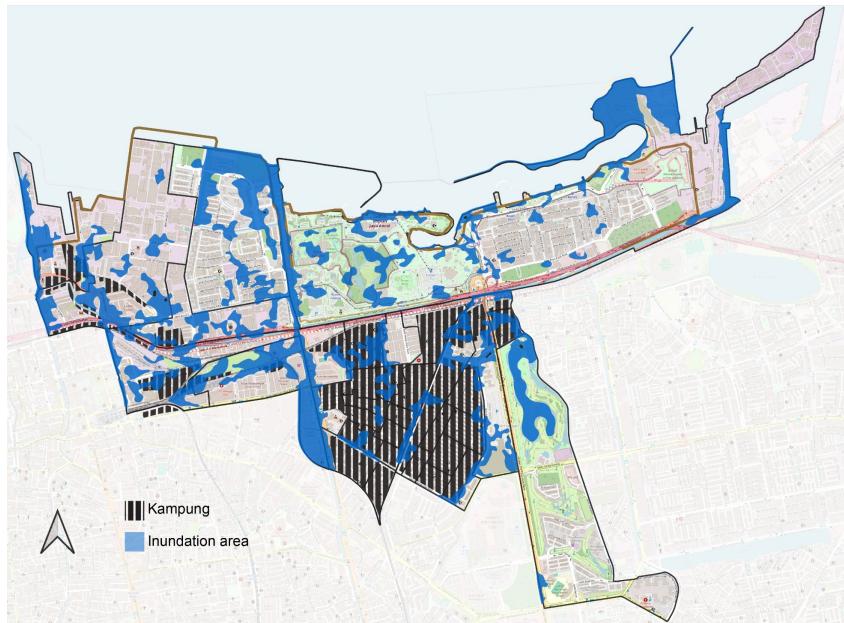


# Balancing Coastal Resilience

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To balance the socio-economic and natural system resilience in Pademangan, one should consider the **significant presence of kampung** in the district and see them as an **equal partner**.

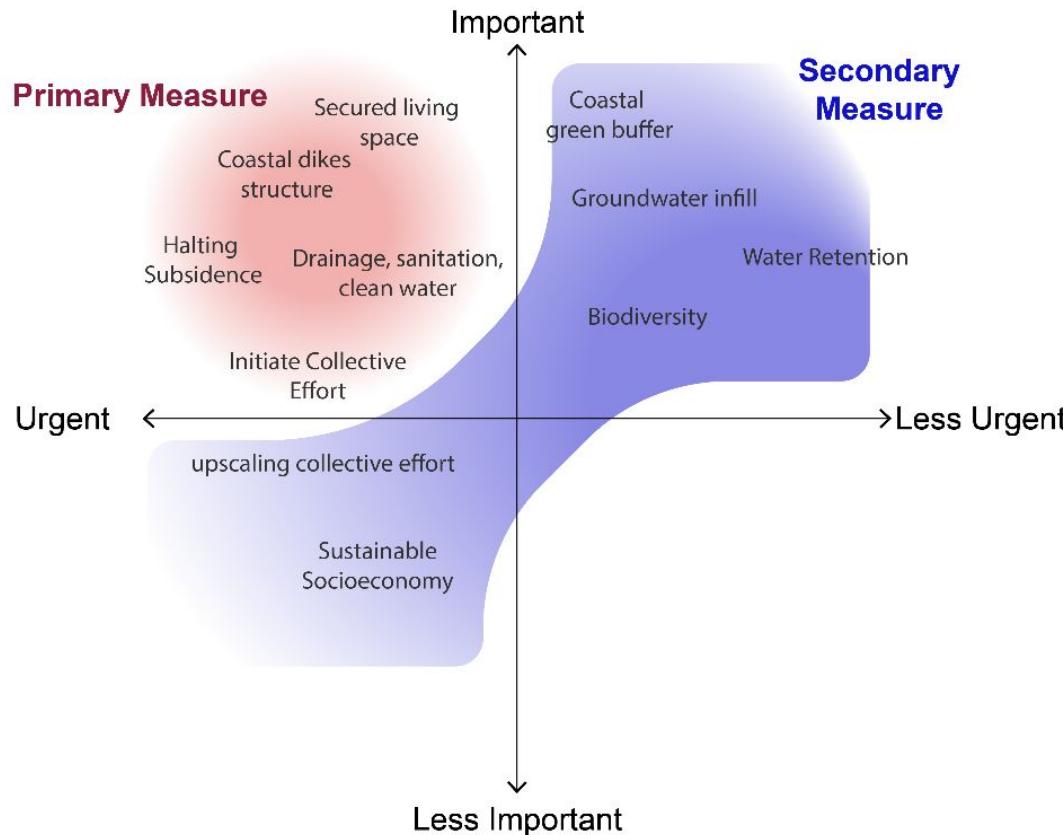


Coastal resilience ideally enhances both the socio-economic system and the natural system resilience<sup>1</sup>. Implementing coastal resilience requires a **balance between socio-economic and natural systems**.

<sup>1</sup>Masselink, G., & Lazarus, E. (2019). Defining Coastal Resilience. *Water*, 11(12), 2587. <https://doi.org/10.3390/w112258>

# Coastal Resilience Measures

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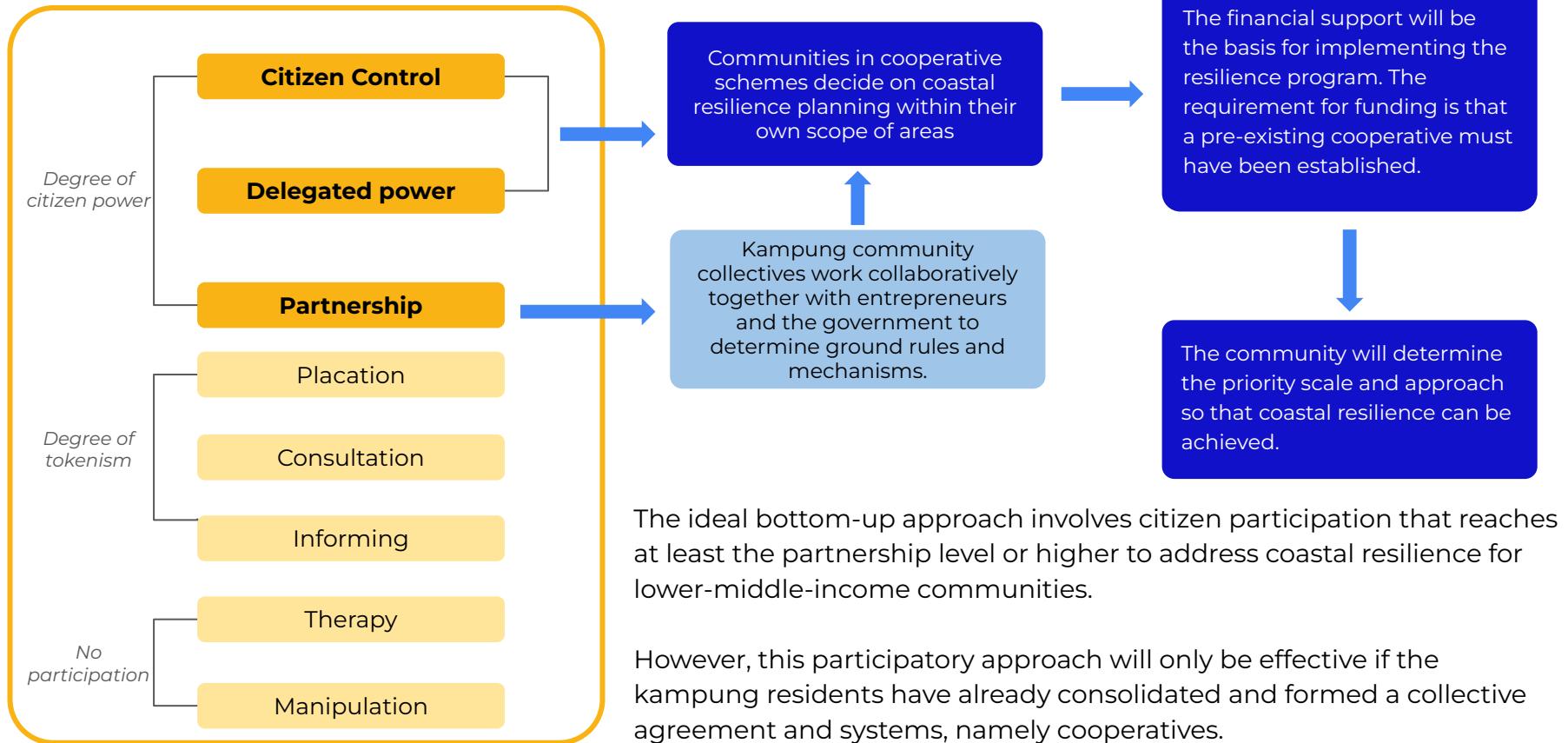


We identify coastal resilience prudence that comprises primary and complementary measures to address coastal flooding more extensively and comprehensively in a constrained budget.

By integrating kampung human resources and their perspectives as important factors on the secondary measure, we will ensure that the primary measure can be sustained in the long run while also promoting equity in North Jakarta.

# Kampung Community Planning

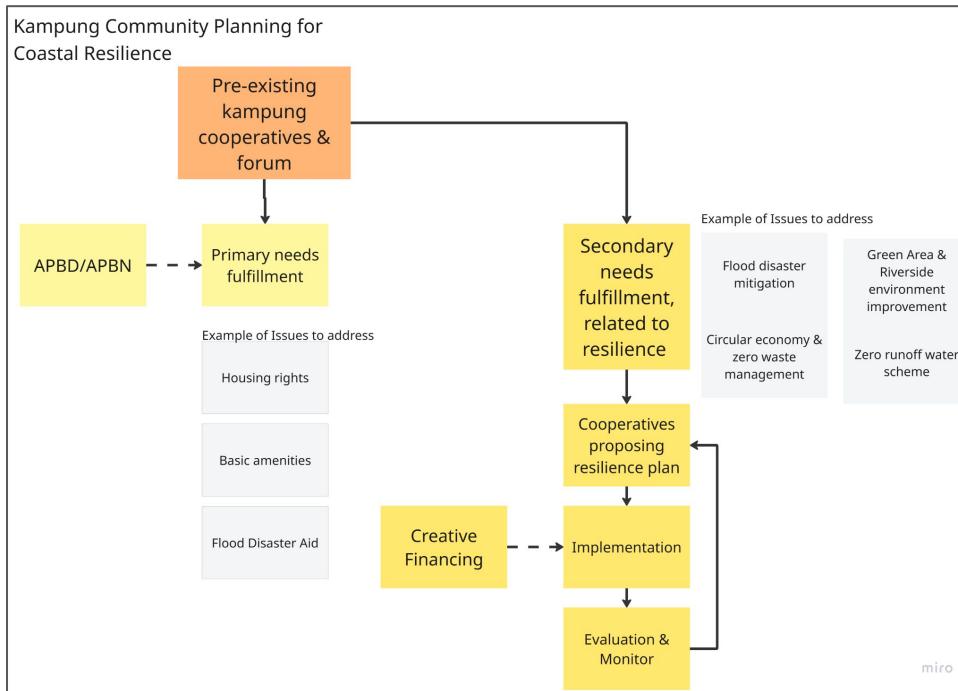
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<sup>1</sup>Arnstein, S. R. (1969). A Ladder Of Citizen Participation. *Journal of the American Institute of Planners*, 35(4), 216–224. <https://doi.org/10.1080/01944366908977225>

# Kampung Community Plan: Formulating Resilience Project List

What kind of resilience program output that can be **proposed by kampung cooperatives?**  
**Ways to engage** it with third party facilitators, policy maker, and other related stakeholders



## Project List Examples for Zero Runoff Resilience:

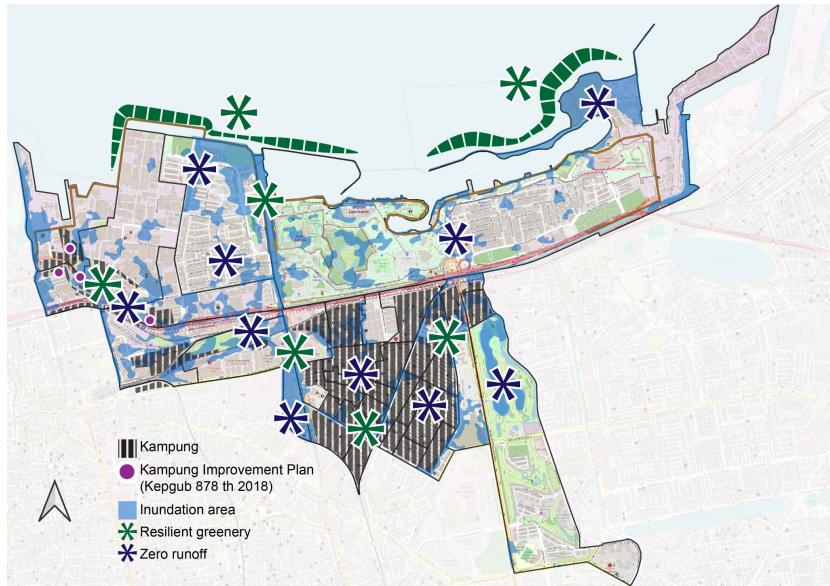
- Water retention on public land and amenities
- Soil infiltration well
- Reservoir
- Cooperatives financing
- Flood mitigation training

## Project List Examples for Resilient Greenery:

- Coastal Wetland
- Ecological park
- Riverside improvement
- Local plant nursery
- Circular green economy

# Kampung Community Plan: Implementing

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Pilot project implementation in a kampung with a pre-existing cooperative scheme.

Resilience participatory planning can be prioritized based on the Kampung listed on the Kampung Improvement Plan based on Kepgub DKI Number 878 Year 2018.<sup>1</sup>



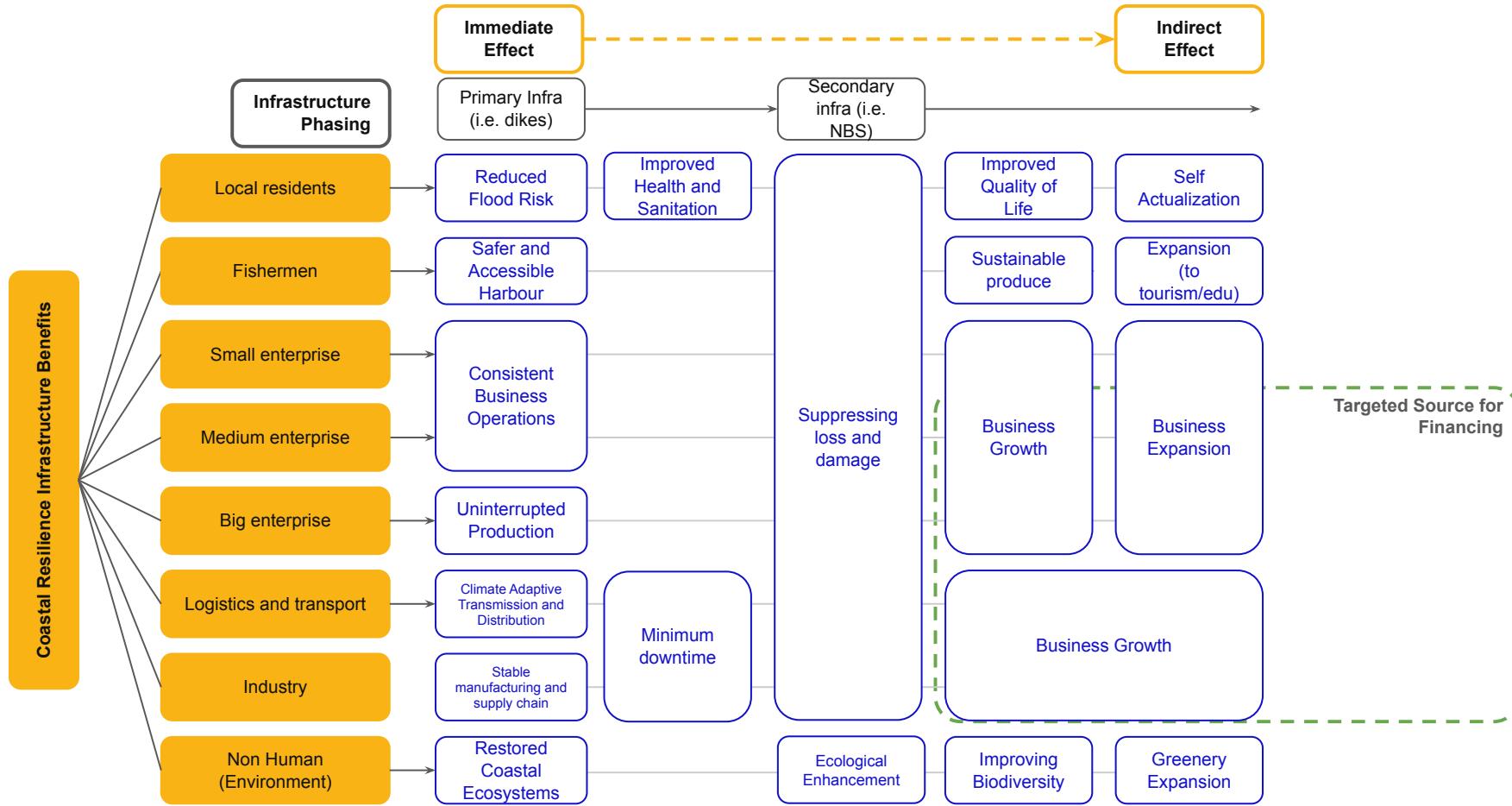
Examples of community action plan in Kampung Tongkol.<sup>2</sup>

<sup>1</sup>Keputusan Gubernur Nomor 878 Tahun 2018 tentang Gugus Tugas Pelaksanaan Penataan Kampung dan Masyarakat

<sup>2</sup>Asian Coalition for Housing Rights. (2019). Kampung Tongkol: Case Studies of Collective Housing in Asian Cities Series. [http://www.achr.net/upload/downloads/file\\_230731123736.pdf](http://www.achr.net/upload/downloads/file_230731123736.pdf)

# Stakeholder mapping

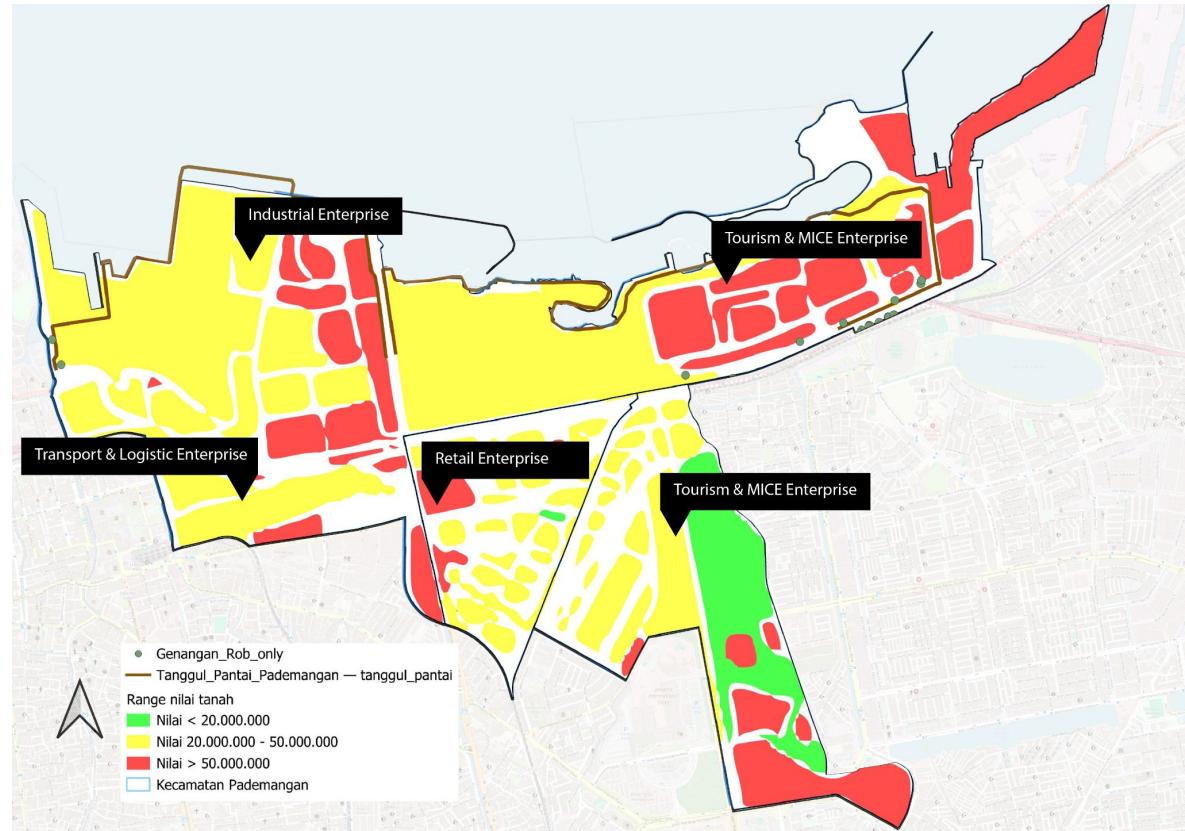
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# Stakeholder mapping

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Mapping the stakeholders will help to identify the target enterprise for financing and their potential gain from the resilience primary and secondary measures.



# Cost-Benefit Analysis Reference

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- To **attract** targeted private sectors stakeholders and **encourage** their contribution, a Cost-Benefit Analysis (CBA) should be presented alongside the project list.
- Kampung cooperatives will need to have the capacity, and/or receive facilitation, to produce this CBA.

## CBA Reference

$$NPV = PV(B) - PV(C)$$



Direct Benefit =  
Avoided Expected Annual  
Damage (EAD)

$$EAD_{Baseline} - EAD_{Scenarios}$$

- NPV > 0 → The project is feasible, as the benefits exceed the costs.  
NPV < 0 → The project is not feasible, as the costs outweigh the benefits.  
NPV = 0 → The project breaks even.

<sup>1</sup>Amadio et al.(2022). Cost–benefit analysis of coastal flood defence measures in the North Adriatic Sea.

<sup>2</sup>Ruangpan, L, et al. (2024). Economic assessment of nature-based solutions to reduce flood risk and enhance co-benefits.

## Options for Financing Sources

### Private Sector

Corporate  
Social  
Responsibility

Land Value  
Capture

### Public Sector

Through  
Musrenbang

The documents will enable CSR contributions to be appropriately targeted, ensuring company funds directly address community and environmental priorities.

With support of the documents, enterprises can clearly see and experience the benefits of their contributions, as investments are linked to tangible improvements in the surrounding area.

To secure public funding, the documents will be channeled via Musrenbang (from RT/RW to sub-district level) to be formally included in regional planning instruments such as RKPD and/or RPJMD.

# Conclusion & What's Next?

## Problem Statement

- In order to reach a more sustainable coastal resilience, **socio-economic system and natural system** needed to be mutually enhanced.
- Thus, a **bottom-up approach** through Kampung Cooperatives is important to complement primary measures.

## Proposed Scheme

- Facilitating and engaging Kampung Cooperatives to produce a **Resilient Project List** alongside its **Cost Benefit Analysis (CBA)**
- The Resilient Project List and CBA is a **planning document collectively produced by the local**, and will be used to engage both private and public sector to contribute through various financing means.

## Potential Next Steps

- Monitoring & Evaluation scheme needed to be developed.
- Bridging Kampung Cooperatives and Neighborhood Administrative System (RT/RW).

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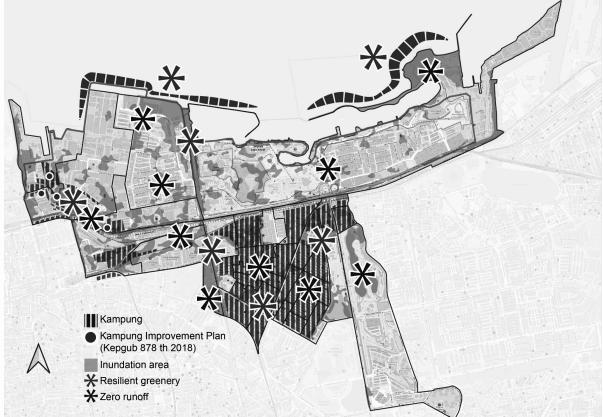
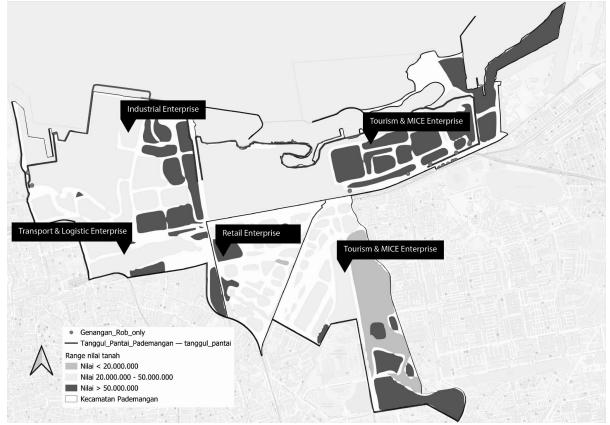
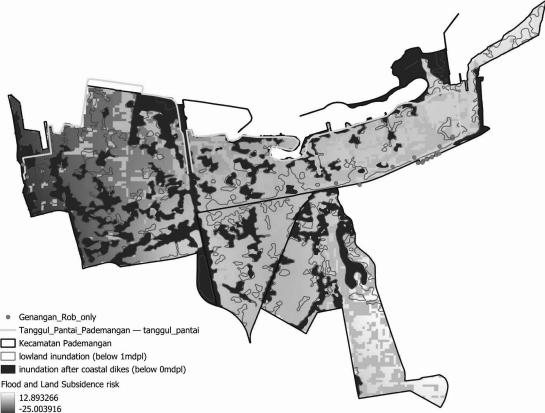
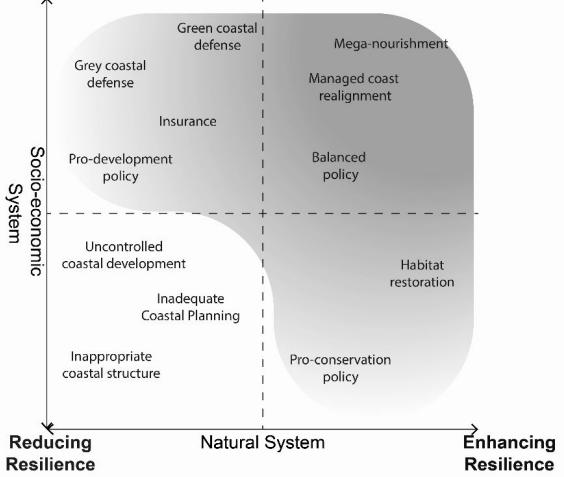
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Asian Coalition for Housing Rights. (2019). Kampung Tongkol: Case Studies of Collective Housing in Asian Cities Series. [http://www.achr.net/upload/downloads/file\\_230731123736.pdf](http://www.achr.net/upload/downloads/file_230731123736.pdf)

# RECLAIMING COASTAL RESOURCE COLLECTIVE PLANN

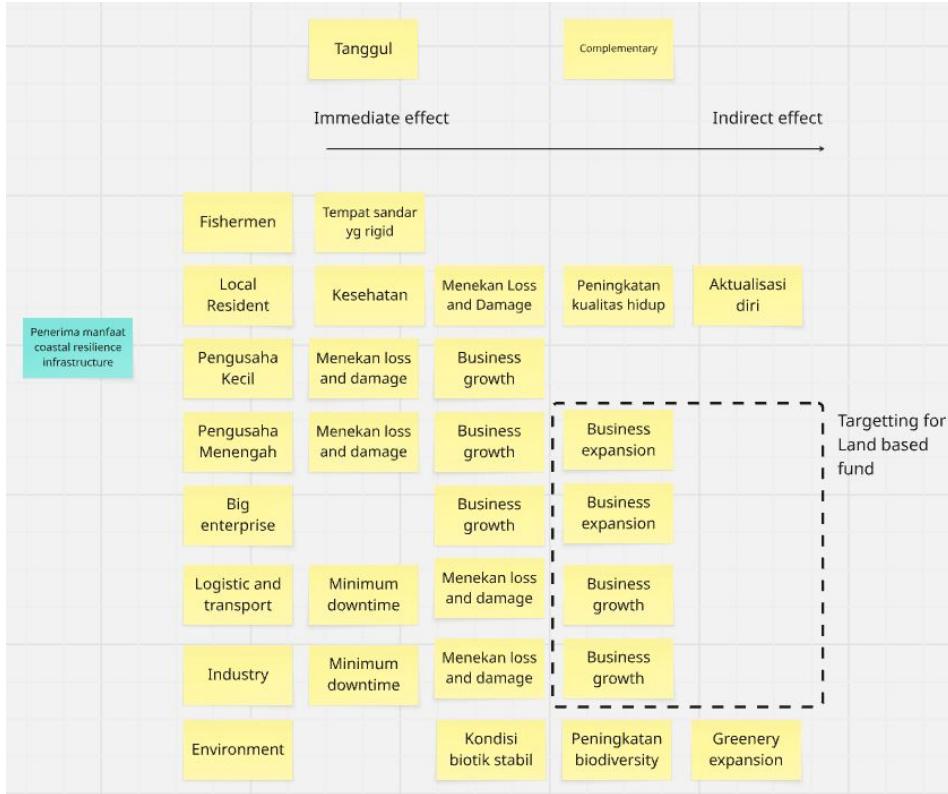


**Enhancing Resilience**



# Reclaiming Resilience with

# Land Based Financing



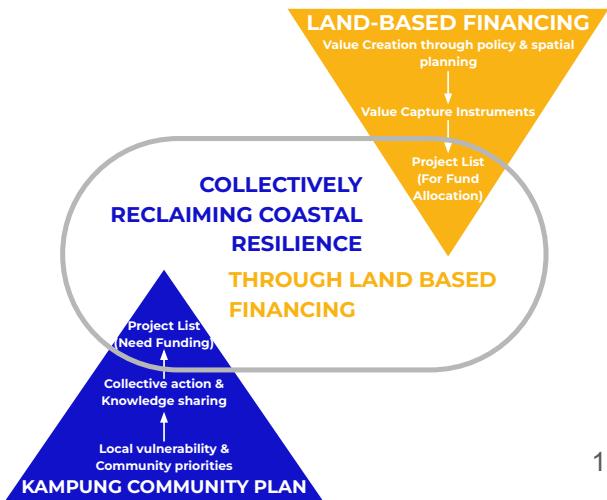
Kampung Resilience Project List akan dibiayai dgn skema in-kind contribution (development-based) dari LBF

Jelasin ada insentif pembebasan pajak inreturn to Value Capture

Apa justifikasi Kampung resilience project list ini?

Dengan adanya complementary measures ini, maka biaya kerusakan aset jadi nol/minim

Usaha lebih lancar, jadi ada potensi kenaikan pajak karena profit meningkat



# Kebutuhan Mapping:

Menjelaskan ambil sampel di kecamatan pademangan, karena salah satu tanggul pantai kritis ada di kecamatan ini.

Bagaimana kita menentukan:

1. Siapa yang membayar, dan seberapa besar
  - Zona nilai tanah, njop kuning dan merah diintersect sama kampung, yg diluar area kampung jadi target land based financing (winu)
  - Intersect pola ruang
2. Area yang perlu diintervensi oleh project resilience
  - RW di area rawan banjir dan land subsidence
  - Potensial area buat RTH dan ekosistem pesisir
  -

# Policy Brief

Intro

Why does it matter

Value Creation

LVC potential and Benefit

Value Capture

Foundational Guidelines

Value Funding

Regulatory Tools

Recommendation

Conclusion

Appendix

# Kampung Pilot Community Plan

1. Introduction:
  - Konteks irregular settlements di Jakarta Utara
  - Lokasi hasil pemetaan risk map
  - Envisioning masyarakat berdaya/citizen power
  - Existing condition of *jaringan kampung*
2. Problem Statement:
  - Kampung flood resilience goals
  - Financing Issue
  - Legal Principle, System, and Management Issue
3. Community Action Plan Guideline
  - Forming collective action and agreement
  - Creating resilience plan
  - Important guidelines (general design and planning principle)
  - System and Management

# Risk Mapping: How do we map

Locus: Jkt Utara > Pademangan (Konteks What how why pademangan)

Main Data showcase:

1. Ecological Risk
2. Urban Morphology
3. Community Vulnerability

Sistem scoring sama grading area pada risk mapping ini

filter 1: Data irregular settlements: masuk ke policy framework atau pilot kampung?

filter 2: nilai njop rendah-tinggi

filter 3: rawan banjir

filter 4: tingkat keterbangunan

filter 5: proximity ke infrastruktur resilience

tiap filter ada skala nya, antara 1-3, atau 1/0, kalau nilainya makin tinggi maka dia jadi area target prioritas

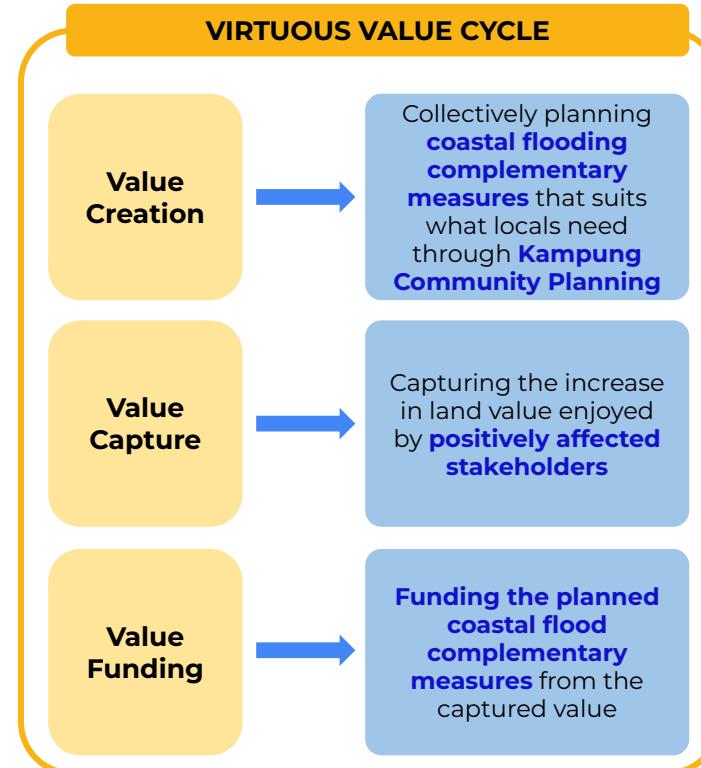
bisa ambil sampel 3 lokasi, buat mewakili tiap jenis intervensi nya



# Land Based Financing

**Land-based financing** is a mechanism used by the government to reap the unearned benefits experienced by **increasing land value caused by public action** (Alterman, 2012)

The principle of land-based financing is founded on three main pillars of **Virtuous Value Cycle** (ADB, 2021).



With these coastal flood complementary measures in place, asset damage costs become zero or minimal. Businesses can operate more smoothly, creating potential for an increase in their land value.