



CILIWUNG RIVER RESTORATION (SOUTH JAKARTA CITY)

BY

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▪ Law

1. Law of DKI Jakarta Governor No. 163/2012 on Planning Land Procurement for Ciliwung Restoration from Manggarai Flood Gate to Kampung Melayu
2. Law of DKI Jakarta Governor No. 2181/2014 on Planning Land Procurement for Ciliwung Restoration from Manggarai Flood Gate to Kampung Melayu (Extention)

▪ Goal of the policy

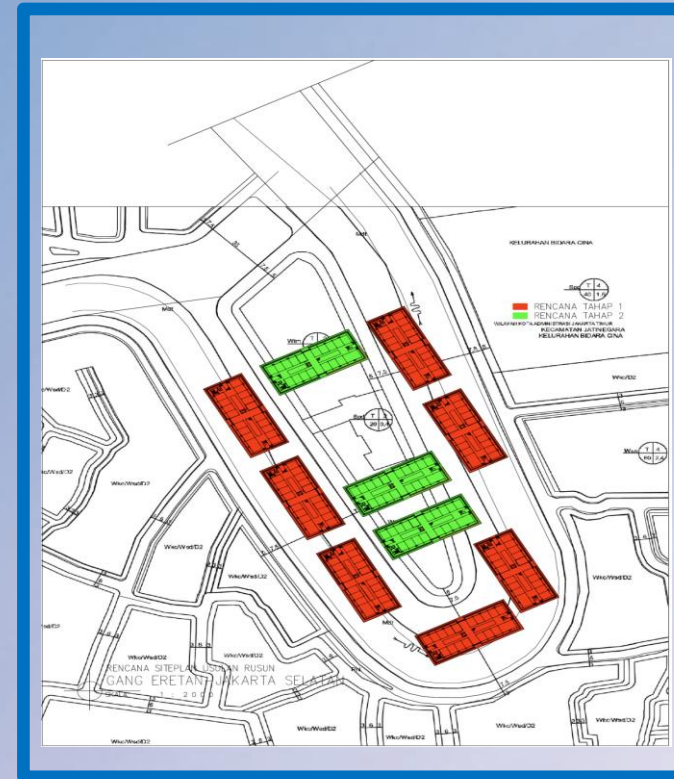
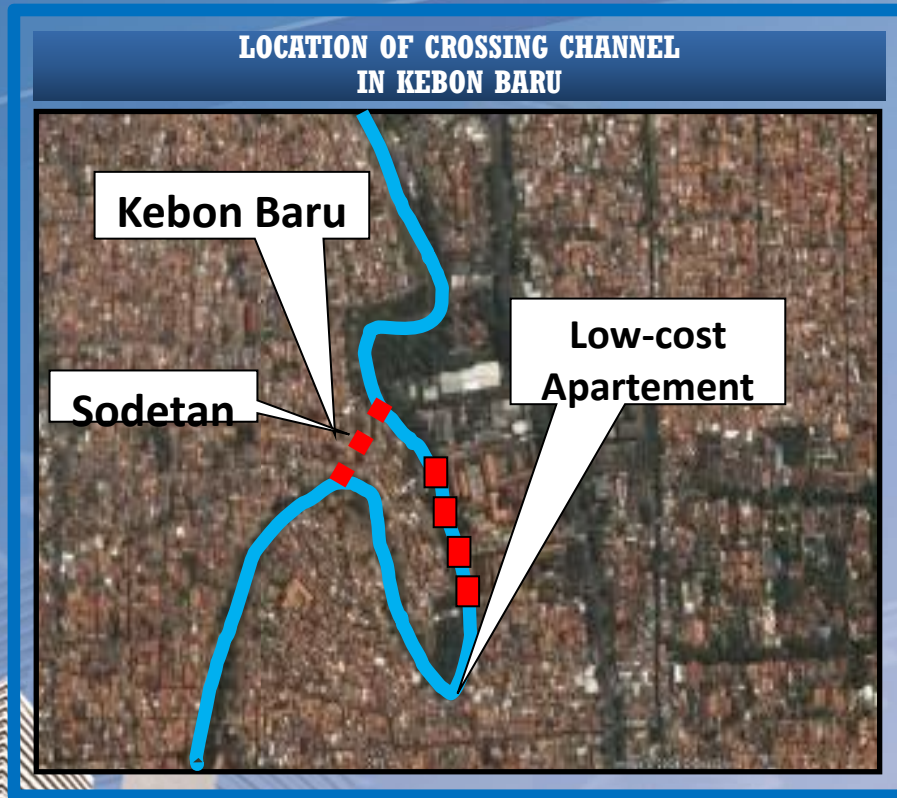
1. Structuring Jakarta drainage system
2. Jakarta flood control
3. Restore the function of Ciliwung River
4. Implementation of Law No. 8/2007 on Public Order



BACKGROUND

- The largest river, but also the most polluted and problematic one, is the Ciliwung River, which originates in the Puncak highlands and flows into the Java sea, passing active volcanoes and the major cities of Bogor, Depok and Jakarta along the way to 570 cubic meters per second. Ciliwung river is 97 km long, has a catchment area of 476 km², and is located in the western region of Java where it flows through two provinces, West Java and the special region of Jakarta.
- The population along the Ciliwung river basin reaches 4.088 million and can be regarded as the most densely populated area.
- Every years floods hit several areas along Ciliwung River, affecting 8,000 residents with approximately 5 million people residing within the Ciliwung River's 384-square-kilometer catchment, the benefits and urgency of making this vision a reality should not be understated.
- The causes of flooding is :
 - land use changes in the headwater area of Ciliwung River
 - bad drainage system
 - land subsidence of Jakarta because of groundwater exploitation
 - uncontrolled settlement
 - weak law enforcement

1. CROSSING CHANNEL (SODETAN) IN KEBON BARU AND KALIBATA



Law : Instruction of DKI Jakarta Governor No. 44 Year 2010

Purpose : shorten flow distance to the downstream of the river

Low-cost Apartement

- 10 block
- 1.000 unit, with large 36 m² for each unit

2. LOW-COST APARTEMENT DEVELOPMENTS AND RESETTLEMENT

UNCONTROLLED SETTLEMENT IN
CILIWUNG RIVERBANKS



RESETTLEMENT



- The city administration has normalized 9 kilometers of the planned 19 kilometers of Ciliwung riverbanks, with illegal buildings still occupying some of the riverbanks. About 50,000 people live along the Ciliwung, according to city data.
- Build the low-cost rental apartments where evicted residents will move into.
- Only that Jakarta residents living illegally on Ciliwung's riverbanks will be evicted and told to move into the subsidized apartments.

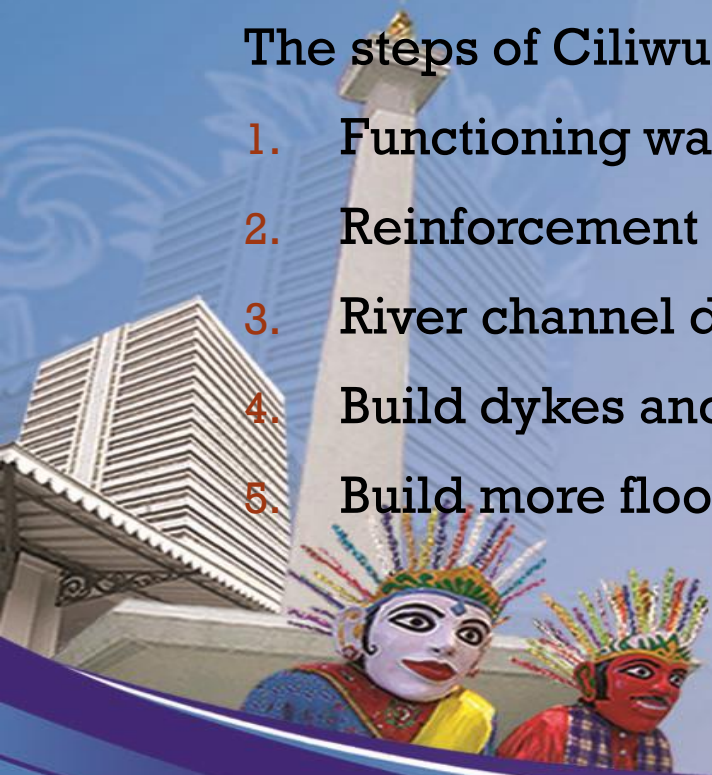
3. CILIWUNG RIVER RESTORATION AND REHABILITATION FROM MANGGARAI TO TB SIMATUPANG

The Ciliwung restoration project is divided into four sections with a total length of about 19-km, extending from Manggarai to the Jl. TB Simatupang area in South Jakarta, with a budget amounting to Rp 1.18 trillion [US\$88.5 million].

It is expected that the water debit will increase from only about 200 cubic meters per second become 570 cubic meters per second.

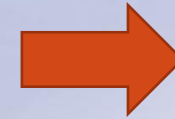
The steps of Ciliwung Restoration is :

1. Functioning watershed/catchment area.
2. Reinforcement the riverbanks with Sheet Pile construction or Retaining Wall.
3. River channel dredging as wide 50 m.
4. Build dykes and inspection road along the river as wide 7,5 m.
5. Build more floodgate.



4. NON STRUCTURAL MITIGATION

- SPATIAL CONTROLLING
- INCREASING PUBLIC AWARENESS (INFORMATION, LAW, GARBAGE MANAGEMENT)
- EARLY WARNING SYSTEM
- FLOOD PRONE AREA MAPPING
- WEATHER MODIFICATION
- WATER COUNCIL AND NATIONAL MOVEMENT FOR WATER SAFEGUARD PARTNERSHIP
- FLOOD FIGHTING, EVACUATION
- RELOCATION
- RETENTION & DETENTION PONDS



*"FLOOD
DAMAGE
MITIGATION"*

- For Jakarta, clean rivers are not the norm. Jakarta's rivers are notorious for being always dirty-and-full-of-trash, clogged, toxic, and flood-prone. Many residents thought that seeing clean water ways were almost impossible in Jakarta.



OBSTACLES

Planning

1. Coordination among the institute (authority issue)
2. Socialization to the residents
3. Determine the trace

Implementation

1. Land acquisition process
 - ✓ Most of the residents did not own the certificates
 - ✓ The documents varied from land certificates to girik (customary land appointments), verbonding, purchase agreements, building use permits (HGB) and other documents
2. Relocation and resettlement process
 - ✓ Not enough space to built low-cost rental appartement
 - ✓ Most of resident refuse to be relocated

KEY STRATEGIS

1. Making standard operating procedures in all of the restoration process especially in land acquisition process
2. Provide the low-cost rental appartement close to the location
3. Giving more information and education to the residents by the experts about how important the restoration is

ACHIEVEMENT AND FAILURE

- Based on city data, flooding area in Jakarta almost 2.200 spot/area, but after the project (Ciliwung River Restoration), the area has been decreased until 400 flooding area.
- Succeed to relocate the resident, make better quality life for them.
- Since the project begin in 2012, progress of the restoration only 40% (6 years).

THANK YOU

