Jakarta’s Giant Sea Wall: Resilient Infrastructure Project as Threat and Asset

Reny Revariah and Sara Hamideh, PhD

BACKGROUND

- Jakarta, the World’s fastest-sinking city, is building a $40 billion Giant Sea Wall (GSW) to protect itself from flooding caused by land subsidence and sea level rise.
- Planning and design of the GSW, as part of the National Capital Integrated Coastal Development masterplan, is a joint project of the Netherlands and Indonesian governments.
- The GSW plan is coupled with a reclamation project of 17 artificial lands for skyscrapers, luxury flats, shopping malls, located in North Jakarta Bay, Jakarta’s Provincial Strategic District.
- GSW construction has caused rapid increase in eviction: 66 cases affecting residential and commercial units 2015-2016, which mostly are slums where fishermen communities live.
- Some forced evictions only gave residents 11 days in advance, without providing any replacement options.
- Three justifications of eviction: flooding, informal settlement, and health issue.
- Interestingly, a high-end development, Pantai Indah Kapuk (PIK) owned by one of the real estate developers of the GSW is also located on the bay, next to the fishermen neighborhoods.
- PIK area, once a mangrove forest, was transformed to high-end residential and commercial development with soil compaction system on a 831-acre area, leaving 16 million cubic meter of unabsorbed water.
- The 2016 PIK expansion plan (PIK 2) is connected to GSW project.
- PIK 2 is planned as an independent area with superior facilities which are worth the investment.
- A questionable situation: why fishing neighborhoods are targeted for eviction while the PIK expands in the same location exposed to the risk of floods and sea level rise?

RESEARCH QUESTIONS

Whose resilience are projects like Giant Sea Wall going to enhance? Who will benefit and lose? Can resilient infrastructure become an asset and threat at the same time?

DATA AND METHODS

- Data:
  - Online news media
  - Official reports: Jakarta Provincial Government, Non Governmental Organizations and advocacy groups
  - Google Street View images of Jakarta
- Methods:
  - Mapping spatial transformation in North Jakarta Bay area: Penjaringan District
  - Archival research
  - Photo elicitation: condition of neighborhoods in North Jakarta

STUDY AREA

2018 Natural Hazards Workshop
Colorado, July 8-13, 2018