
Jola Ajibade, Department of Geography, Portland State University
New elevation data triple estimates of global vulnerability to sea-level rise and coastal flooding

Scott A. Kulp & Benjamin H. Strauss
No of people on land exposure by 2050
Ho Chi Minh City

Southern Vietnam could all but disappear.

Kulp and Strauss, 2019
Bangkok

Kulp and Strauss, 2019
Shanghai

Old projection for 2050

New projection for 2050

Kulp and Strauss, 2019
Alexandria

Old projection for 2050

New projection for 2050

Kulp and Strauss, 2019
Should cities retreat?

When and How?
Global map of retreat locations

Legend
- Reactionary
- Anticipatory
- Combined A& R

Ajibade et al, 2020, in preparation
Case study sites
Makoko

Photo credit: Michael Kimmelman
Environmental justice & managed retreat

- **Environmental Justice**: The *fair treatment* and *meaningful involvement* of all people with respect to the environmental policies and laws

- Managed retreat & EJ
  - Risk avoidance and access to resource
  - Procedural justice (*ex ante*)
  - Distributive justice (*ex post*)
    - Cultural and livelihood losses
    - Marginalisation & facilitation
    - Redistribution of risk
Research Questions

1. When cities adopt or refuse retreat policies, whose interests does it serve?

2. Who has the power or resources (political, legal, and economic) to influence retreat plans or to mitigate future risk?

3. Who retreats - voluntarily or forced, and under what circumstances?

4. Who manages retreat?

5. And what happens to the land/coast after people retreat?
How does geography intersect with class, socio-economic conditions, and value systems, to shape people’s ability and willingness to retreat or adapt in-situ?
Method & Data Analysis

Policy analysis

Expert interviews

Focus group discussions

Field Observation
Findings
# Managed retreat in CCA Policy

<table>
<thead>
<tr>
<th>City</th>
<th>Year</th>
<th>Title</th>
<th>Retreat/ relocation</th>
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<td>The Lagos State Climate Change Adaptation Strategy</td>
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<td>LAGOS</td>
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<td>The Climate Change Act of 2009 / Act 10174</td>
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<td>2017-2027</td>
<td>Quezon City Local Climate Change Action Plan</td>
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Managed retreat in policy: Lagos

- **Policy ‘in tent’:** no discrimination on the basis of class, geographic area, industry or valuation lens.

- Recommends relocation of communities, transportation, energy infrastructure, and industries

- Recommends: the establishment of buffer zones
Managed retreat practice: Lagos

- Target of retreat: the urban poor
- Constructed as a ‘risk to the city’
- 7 days ultimatum to retreat; no consultation

Kuramo eviction, 2012

Agony of Kuramo Beach community

Otodo Gbame eviction, 2017

Photo: Reuters

Photo: Demolition at the beach; Photos: Kunle Ajayi
Retreat and Risk Redistribution

A group of former Otodo Gbame residents now living in Makoko.

Photo credit: Tim McDonnell for NPR
Eko Atlantic city

Project status: construction phase
Orange Island

Project status: construction phase
Gracefield Island

Project status: construction phase
Managed retreat practice: Lagos

- SRL downplayed for wealthy enclaves
- Utopian development seen as a source of resilience

*Sea level rise is not considered an imminent danger for Lagos. The construction of the EAC and other islands is a welcome development. It will boost economic growth in the City.*

City expert, March 2016
Double standard

Retreat for the poor, reclamation for the rich
Manila
Manila: flood and storm inundation maps
Managed retreat practice: Manila

- Target of retreat: **the urban poor**
- Provision of social housing
- Mortgage-pathway to homeownership

Resettlement site: Bulacan

Photo: Bulatlat
Barriers to Retreat: Manila

Cycle of retreat and return

- The lack of livelihood opportunities in resettlement site

“As long as we have a place to be transferred, we’re fine. But of course, we want where there are jobs. Because if you transfer to a far place and you can’t eat anything, you will die there too.”

(Frank, resident of Manila)
Barriers to Retreat: Manila

- Lack of social services as a disaster

“The relocation site are incomplete and far from people’s employment? How about economic, transportation and schooling needs of their children? That for me is a disaster, because there are no social services.”

(Esther, City expert, Quezon city)
Managed retreat practice: Manila

Retreat: Government offices to New Clark City

Project status: construction phase
Estrada approves building 3 islands at Manila Bay for new commercial district

The city government says the reclamation project, dubbed Horizon Manila, is expected to generate ‘hundreds of thousands of jobs’ and billions of pesos in revenues
The New Manila Bay City of Pearl, World’s Biggest ‘Smart City’ to Rise in Philippines
Solar City

Photo: pinoynews
Map from the Philippine Reclamation Authority
17
Metro Manila, Cavite and Central Luzon provinces that drain their waters into the bay

43
Projects in Manila Bay

11,600
Living in the vicinity of Manila Bay

1
Expected new jobs to be created during the construction of the New Manila International Airport along Manila Bay in Bulacan.

500,000
Generated by Solar City, one of the reclamation projects in Manila Bay

190
Length of the bay's coastline

194,400
Area of Manila Bay

32,000
Total estimated area covered by the reclamation projects in the Bay
Utopian imaginaries as a barrier to retreat and just transformation

- Create path dependency
- More adaptation dollars in the future

When completed, the Solar City, with its gleaming skyscrapers and world-class amenities, would be crucial to arresting the rapid deterioration and decay of an old city like Manila

Mayor of Manila

A new city will fix the old city
Climatic uncertainties and reclamation create a trust deficit on managed retreat
Conclusion

- Retreat and coastal reclamation are simultaneously happening

- The reconfiguration of waterfront areas is shifting the regimes of rights and opportunities available to different groups

- Who is marginalized through retreat and who is facilitated through investment in “resilience infrastructure”?

- What is required to ensure an environmentally and socially just approach to retreat?
Thank you

Questions or Comments:
Contact Jola Ajibade at jajibade@pdx.edu

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