

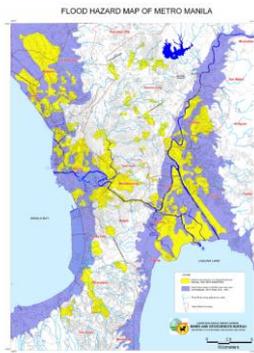
Affordable low cost floating housing for Manila

Delta's in Times of Climate Change II, September 25

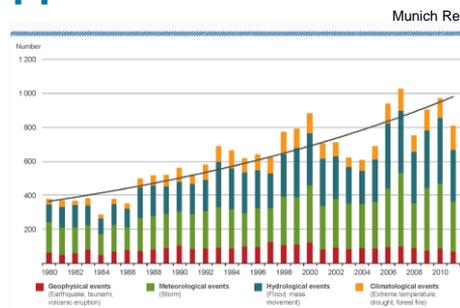
Rick Heikoop



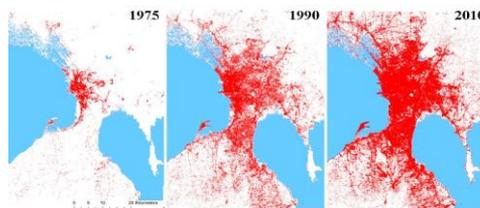
Vulnerability Philippines/Manila



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2 25 September 2014

Earthzine, 2010



Ondoy 2009: Philippine Inquirer

Context and problem analyses

The annual damage in Manila is as follows:

- \$160 Million damaged annually to the economy
- 640 lives lost annually
- 3.4 Million people affected annually
- 71,000 houses totally damaged annually

2013 Flood management master plan for Metro Manila:
part of the plan is to conduct a resettlement action plan for thousands of persons.



Objective

The aim of this project is to **reduce the vulnerability** of urban poor communities that live in flood prone areas by introducing **low-cost** floating housing schemes.

Demonstrate the feasibility of reducing the vulnerability of urban poor communities in flood prone areas by low-cost floating housing

Demonstrate effectiveness compared to conventional relocation projects including sustainability and ecology

Provide a scalable technical solution and organizational infrastructure (self-reliance) to facilitate wider implementation in Manila and the Philippines





Self-supporting floating houses with basic installations.

Commercially feasible

Floating sanitation units.

Targeting urban poor communities



Statement 1

The main obstacle for the implementation of floating housing on a larger scale is the need for an ‘integrated approach’ , which includes ecological, socio-economic and institutional factors. In most delta cities these obstacles will never be overcome.



Statement 2

**In most countries there is a (big) difference between policy and practice in climate change adaptation actions.
Floating housing will therefore never become a serious alternative to address the vulnerability of the housing stock.**



Statement 3

- **Floating cities could fit in the local culture of my locality. But the project should take into account some specific cultural characteristics to make it successful.**



Statement 4

The introduction of (low-cost) floating homes on a larger scale is a feasible adaptation strategy and will make the population of delta cities less vulnerable for climate change.



Statement 5

This project is a laboratory for more innovative climate change adaptation strategies for the Philippines and cities with similar geographical challenges. The project is therefor a significant and important step in the process towards resilient cities.

In my locality we should start a similar project.



Statement 6

Floating homes / cities are only feasible for the urban poor. Rich people will never like to live in them in most delta cities around the world.

