

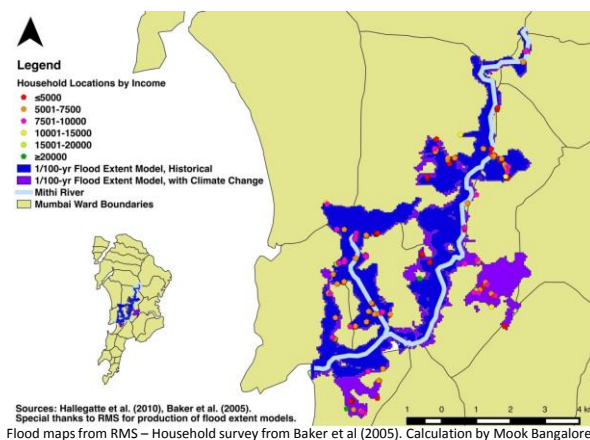
# The Economics of Adaptation

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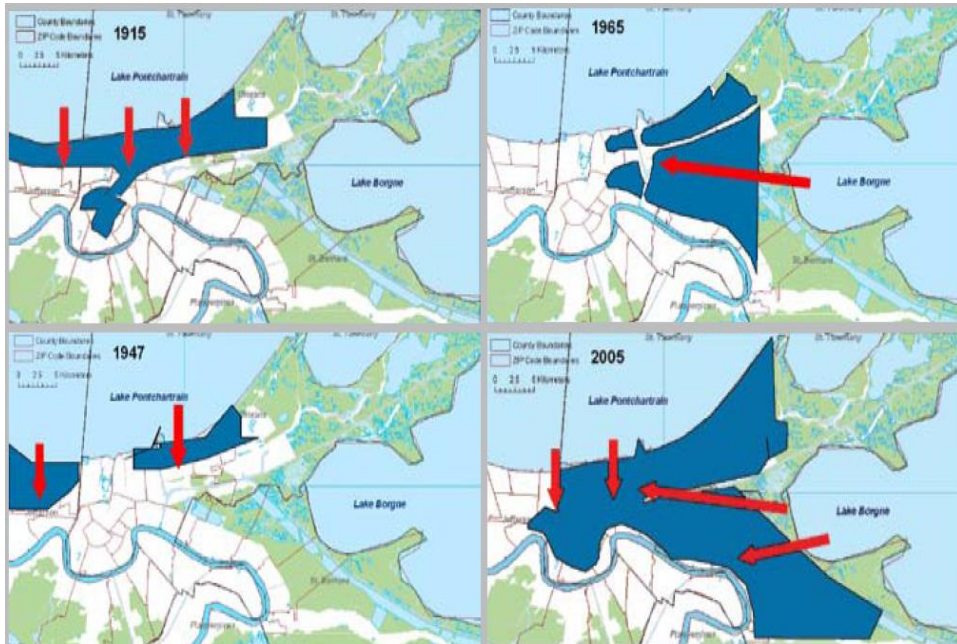
## Aggregate losses and the poorest...



Income (Rs. / month)	% of all HH (Greater Mumbai)	% Exposed to floods
<5,000	27%	44%
>20,000	6%	1%

In 2005, poor households in Mumbai lost Rs. 7,700 (\$177) on average (i.e. 20% of total asset values), for an average annual income of Rs. 8,400 (\$193) and average savings of Rs. 6,900 (\$159).

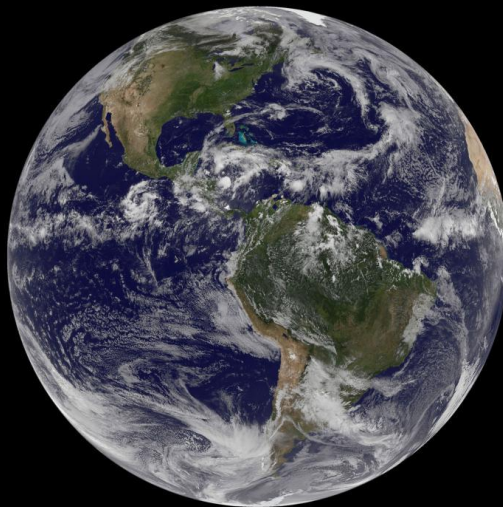
**Poor people are more exposed in Mumbai, they are more vulnerable and less able to cope, but their losses represent a very small share of economic aggregated losses.**



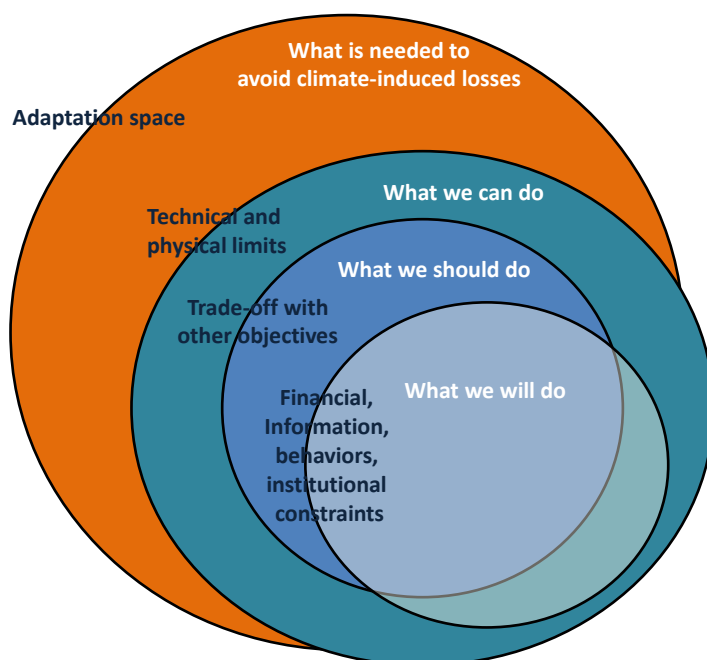
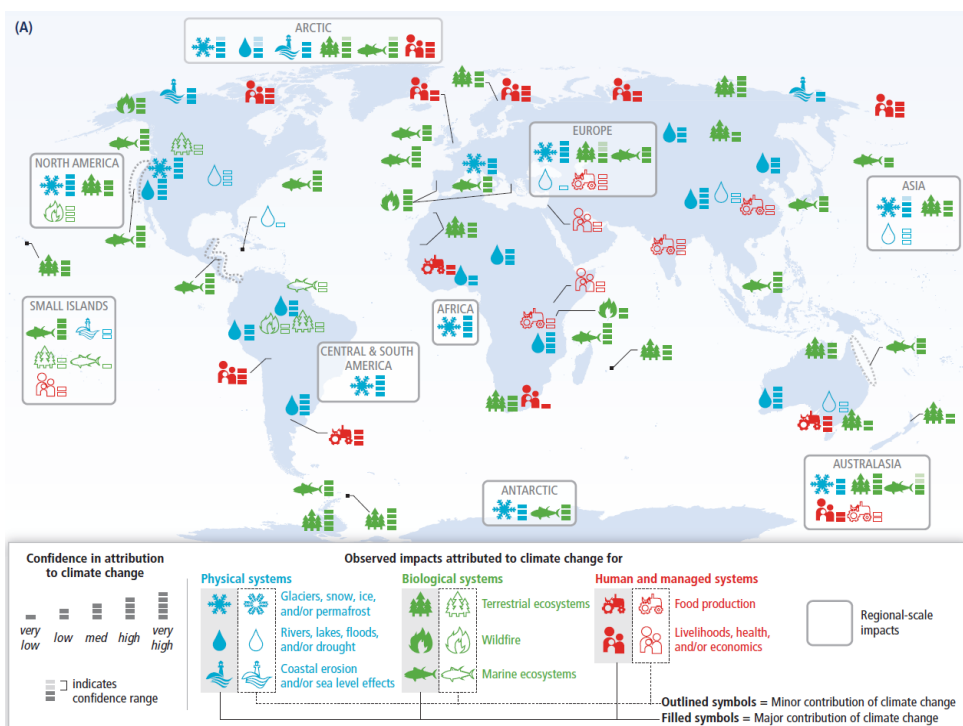
*Historical flooding in New Orleans in 1915, 1947, 1965 and 2005*

Source: Muir-Wood and Grossi (2006)

What does that mean for  
adaptation to climate change?

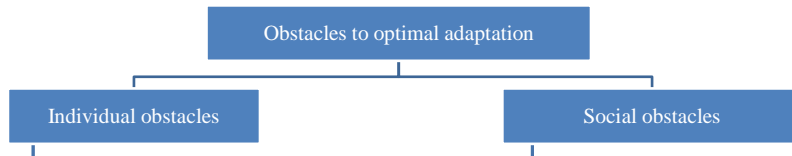




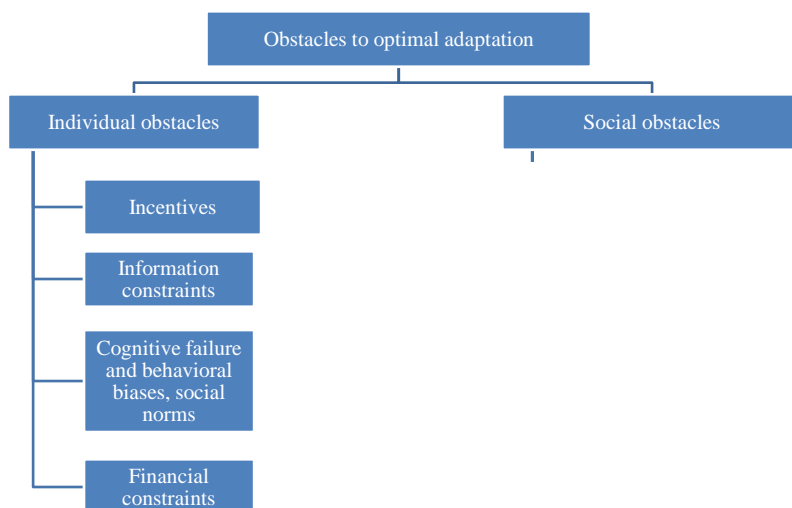


Source: Author team of chapter 17, IPCC AR5, WG2

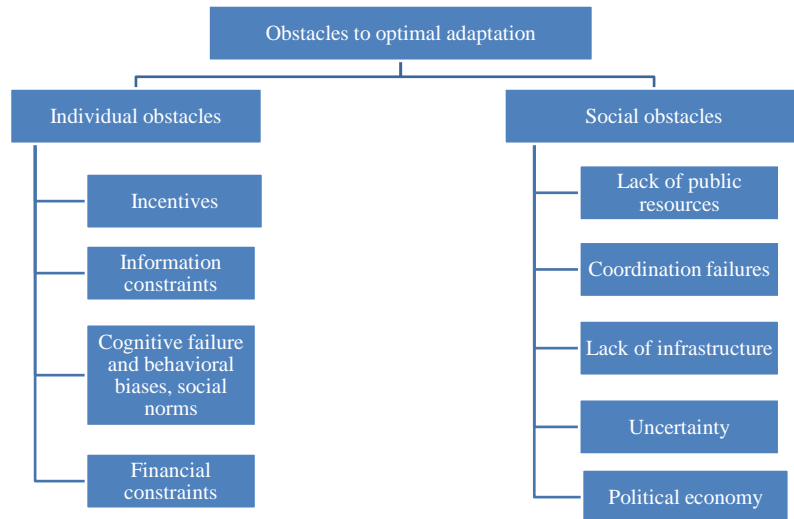
## Target the obstacles to optimal adaptation



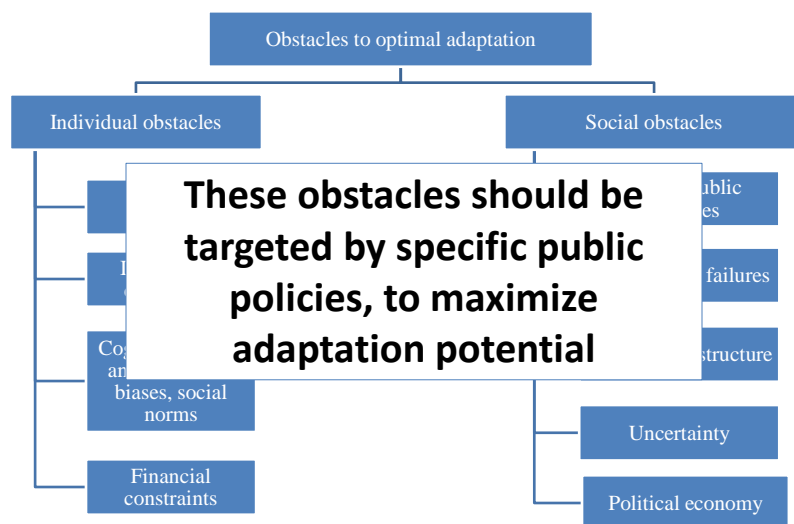
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What about financial resources?

Quantified estimates of adaptation investment needed are very weak, fragile, and partial

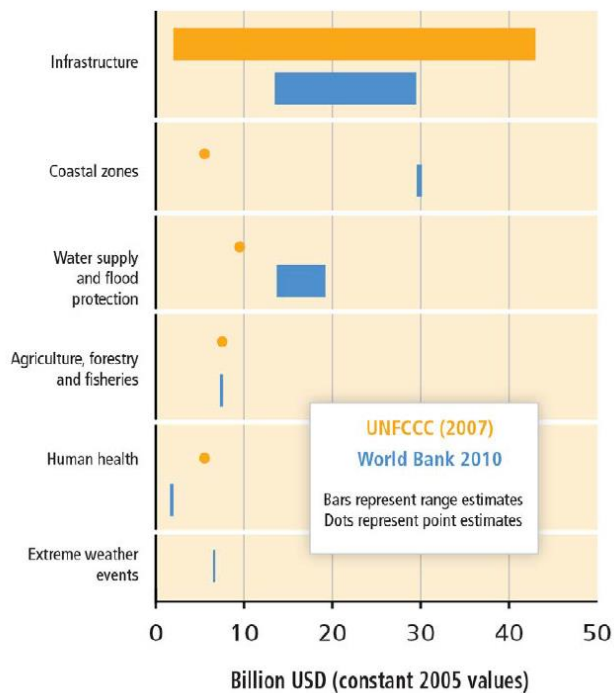
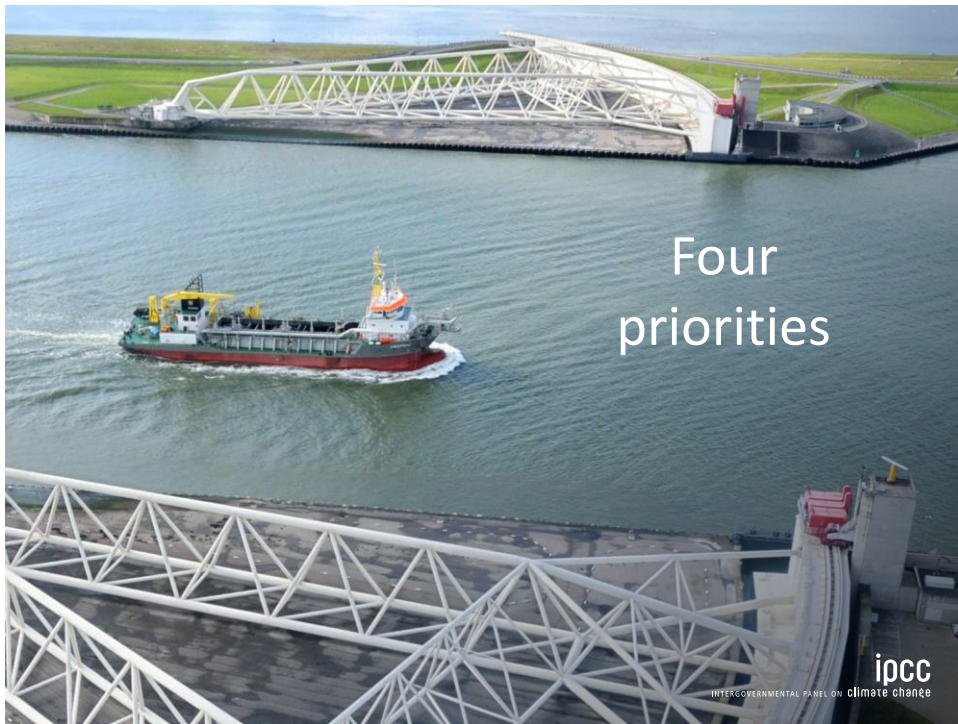


Figure WG2.17.5

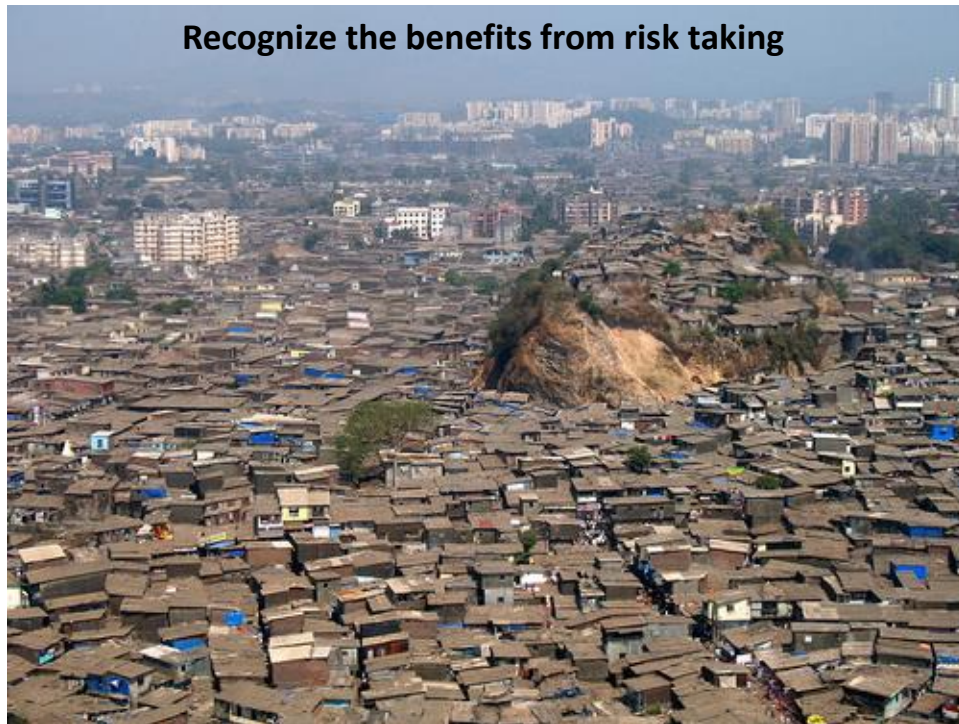


Stop being the “bad guys” ! Create a positive storyline: adaptation is about development



Instead of only prohibiting development in flood zone, favor development in safe places by providing transport, schools, and basic services.





## Confront the political economy of adaptation

- **Cost-benefit asymmetry:**
  - Adaptation cost will be immediate, visible, and concentrated
  - Resulting benefits will be remote, invisible (avoided impacts), and diffuse
- **We lack indicators of adaptation “performance”,** to reward policy-makers
- **Adaptation is difficult:**
  - Huge role of lobbies and interest groups
  - Need to buy out the losers (even when they don’t deserve it)
  - Need for strong leadership



Focus on distributional aspect – who cares about aggregate losses?

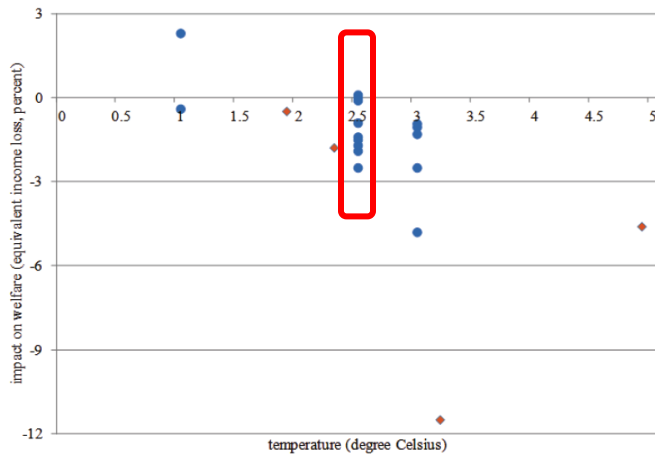


Figure WG2.10.1

