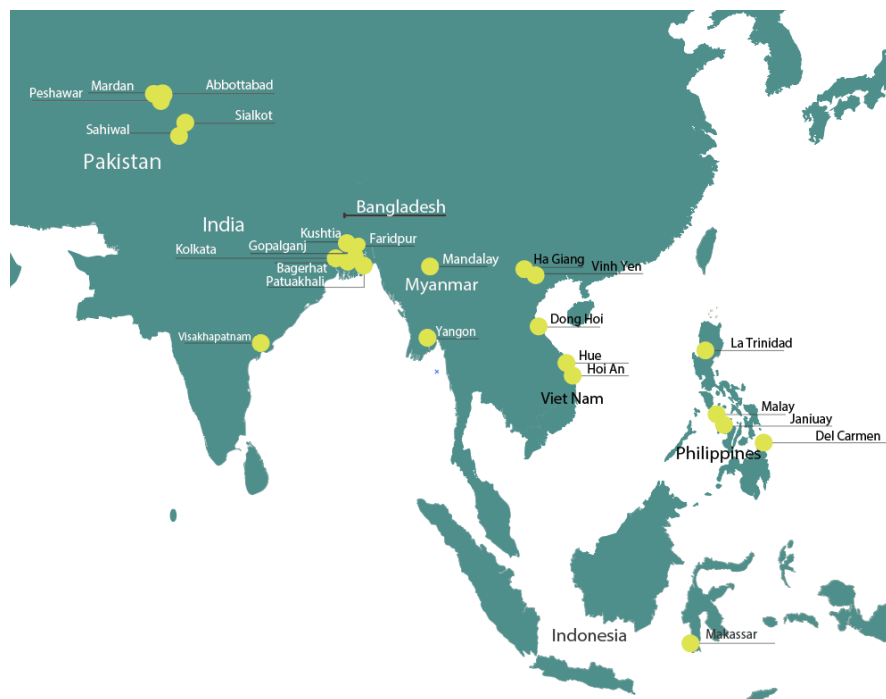


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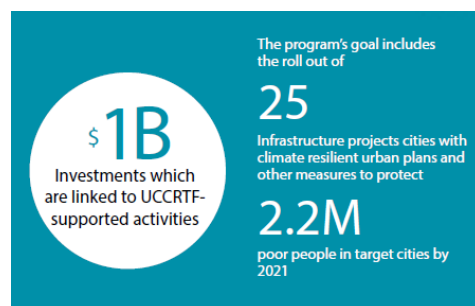


## UCCRTF: Economics of Urban Resilience

The Urban Climate Change Resilience Trust Fund (UCCRTF) is a \$150 million multi-donor trust fund (2013 – 2021) administered by the Asian Development Bank (ADB) under the Urban Financing Partnership Facility (UFPF) with contributions from the Rockefeller Foundation and the Governments of Switzerland and the United Kingdom.

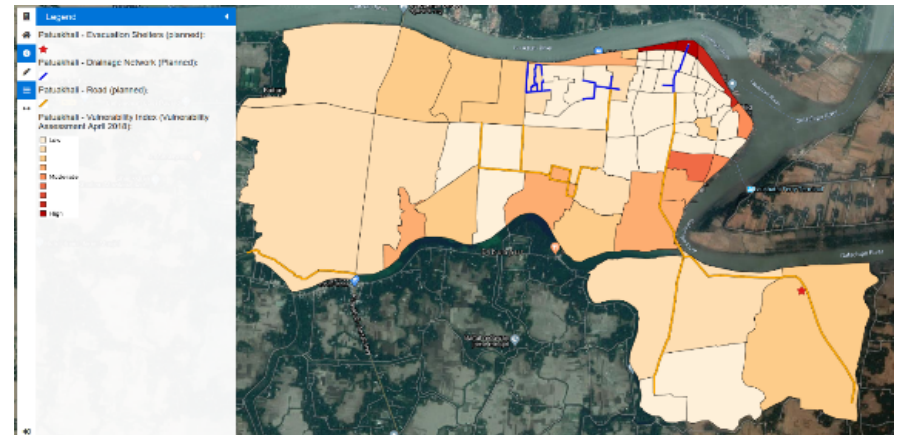
It aims to support fast-growing cities in Asia to reduce the risks poor and vulnerable people face from floods, storms or droughts, by helping to better plan and design infrastructure to invest against these impacts.

COVERAGE  
**8 COUNTRIES**  
**70+ CITIES**  
[25 PRIORITY CITIES]



## What we are doing?

- Understanding costs and benefits of investing in/mainstreaming resilience
- Portfolio of 25 cities in 8 countries
- Hard infrastructure (e.g. roads, shelters, embankments, drainage)
- Planning, policy and readiness support with municipal authorities



## Why are we doing it?

- Build business case for incorporating resilience into urban infrastructure
- Demonstrate value for money to both funders and beneficiaries
- Inform better programme appraisal, design and prioritisation



Hue, Vietnam, 2020

Patuakhali, Bangladesh 2020



La Trinidad, Philippines (2018)

# How are we doing it?



## Socio economics

- Population
- Incomes
- Assets
- Budgets
- Vulnerable groups



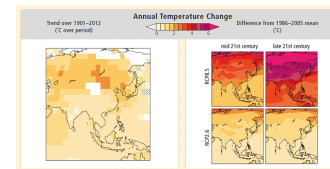
## Climate impacts

- Multi-hazard
- Scale (level of impact)
- Frequency (return)
- Damages and losses
- Economic valuation



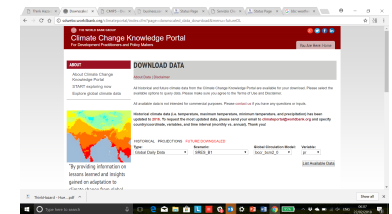
## Changes over time

- Exposure
- Population growth
- Asset growth
- Climate change



## Benefits

- Avoided costs
- Benefit Cost Ratios
- Ex-post case studies
- Socioeconomic benefits



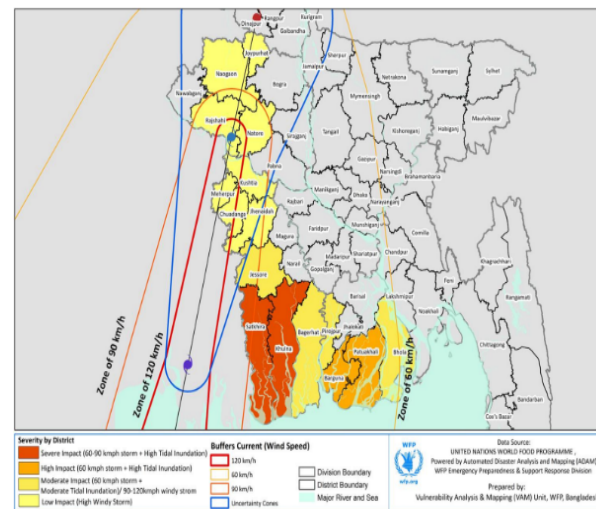


# Lessons from Bangladesh

- May 2020 – First Super Cyclone since Sidr (2007)
- Bagerhat, Patuakhali 3<sup>rd</sup> and 5<sup>th</sup> most impacted
- Bagerhat municipality estimated \$50 million costs
- Significantly higher preparedness, EWS, evacuation plans
- Deaths significantly lower than previous events
- City areas escaped with minimal damage, UCCRTF untouched
- Resilience benefits for local population (shelter, transport)

Division	Khulna	Barisal
District	Bagerhat	Patuakhali
Number of People Impacted	5331	481970
No of extreme poor impacted	397	40478
Fisheries and other areas damaged (ha)	4000	n/a
Houses Damaged Fully (#)	347	2355
Houses Damaged Partial (#)	4349	8121
Embankment and roads Damaged (km)	38	45
Tube Well Fully damaged (#)	280	82
Flood-inundated area (ha)	35339	8869
Worst affected Upazilla	4	4
Worst Affected Unions	14	23

Cyclone Amphan 2020



## What have we learned?

- Value of good baselines (trends, additionality)
- Higher economic value at risk in dense urban areas
- Benefits > costs given proper VRA and planning
- Co-benefits are important (health, transport, economy)
- Integrate infrastructure investment with policy/preparedness
- Economic appraisal sets out opportunity, tests assumptions

