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Focus Area: Universal Water and Sanitation Services

Session Title: _____

Schedule: [Date | Time]

Project preparation for resilient urban water and sanitation services in secondary cities of Asia and the Pacific

Ramon Abracosa
Program Manager, CDIA

CDIA helps secondary cities in Asia and the Pacific develop sustainable urban infrastructure projects

Achievements as of April 2022

128
secondary cities

22
countries

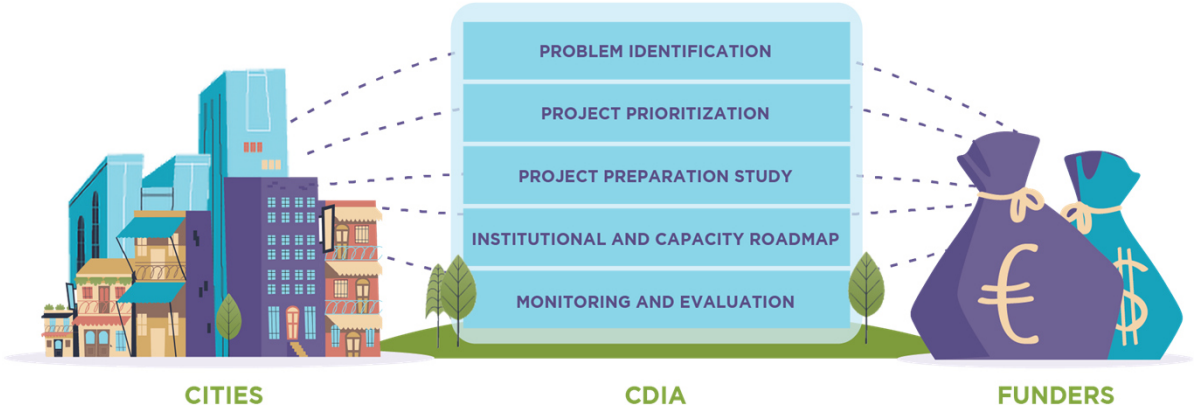
$112M
grants mobilized

114
PPS commissioned

$12.2B
investments generated

- CDIA was founded in 2007 and became an ADB-managed multi-donor trust fund in 2018.
- CDIA works closely with:
  - **Secondary Cities** to develop project preparation studies (PPS) to translate their development aspirations into tangible infrastructure projects.
  - **Co-financing partners** including Austria, European Union, France, Germany, Republic of Korea, Rockefeller Foundation, Switzerland, United Kingdom, and Urban Climate Change Resilience Trust Fund.
- CDIA provides grants for PPS ($500,000 average cost) and encourages cities to contribute in-kind.
- CDIA is highly efficient, with a disbursement rate of $5 million per year.

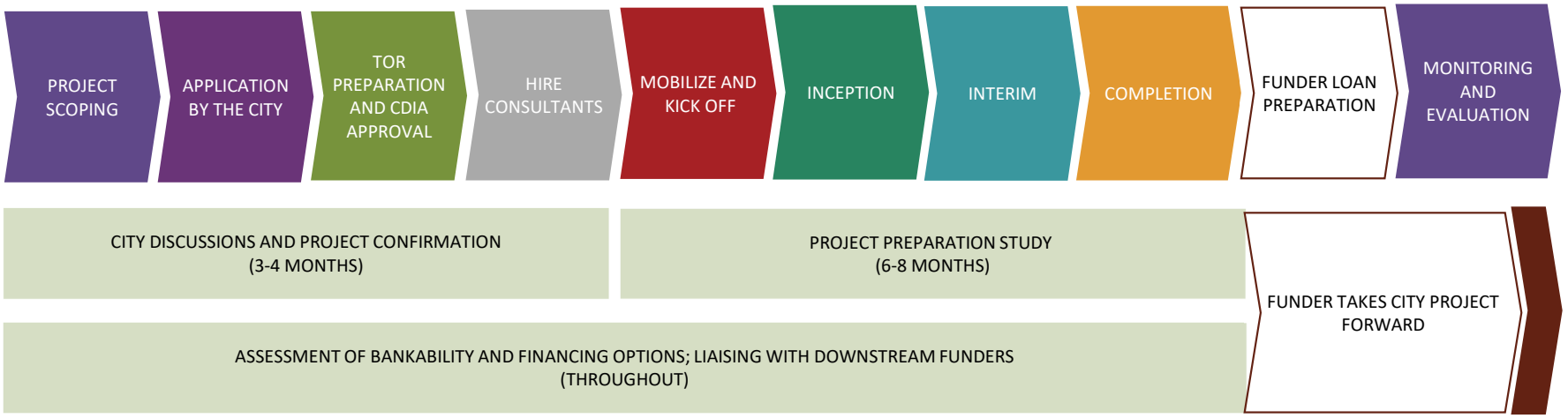
How CDIA Helps Secondary Cities



- CDIA meets with city officials to **identify key development concerns**.
- Works with city stakeholders to **identify top priority projects**.
- Supports the city to **carry out a PPS** (including technical, environmental, social, financial and economic due diligence), which integrates climate risk and resilience into the project design and establishes a good governance framework.
- Assesses the city's institutional capacities and gaps to **develop roadmaps for improvement**.
- Conducts regular **monitoring and evaluation** to ensure the achievement of targets.

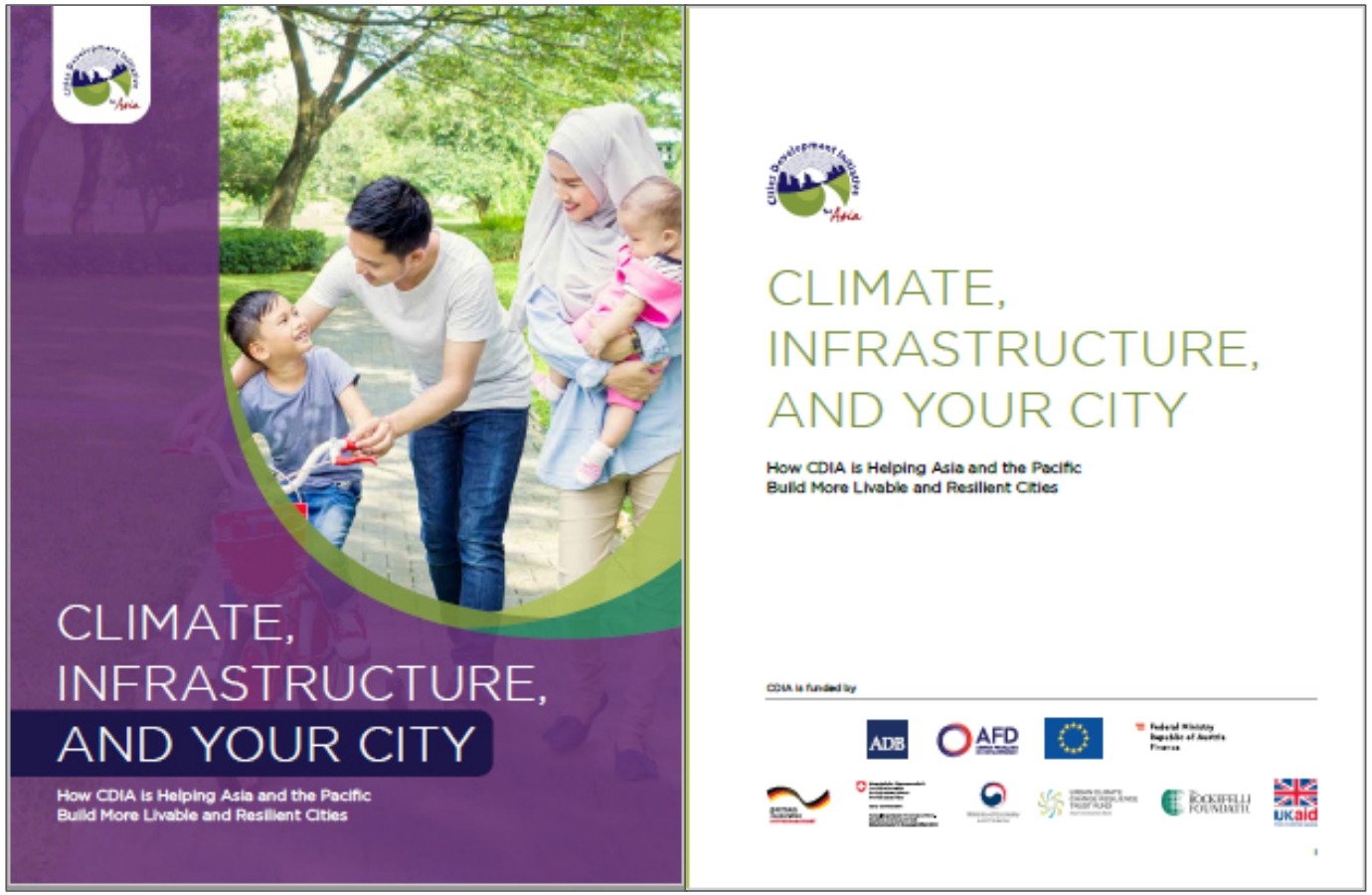
CDIA's overriding objectives are to **enhance city capacity** and **ensure project bankability and city access to finance.**

CDIA's Typical Project Preparation Process



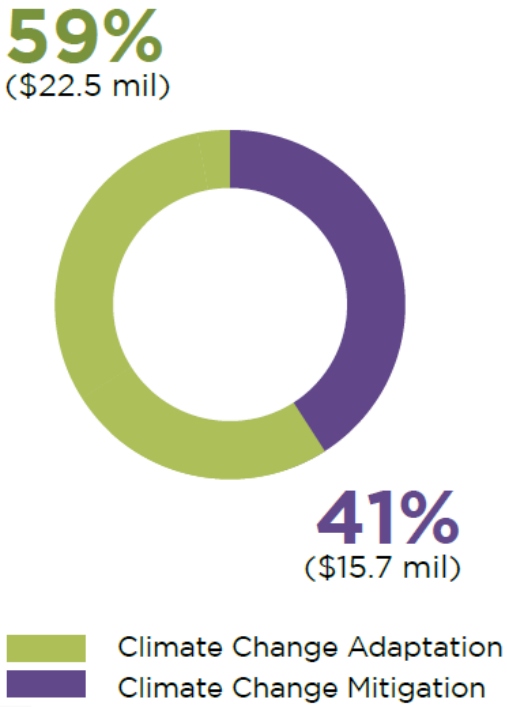
- Beginning 2018, CDIA has increased its focus on bankability and access to finance, to ensure its support is responsive to cities and potential finance providers, to maximize the benefits of its work.

CDIA approach to resilience-building for urban infrastructure and services

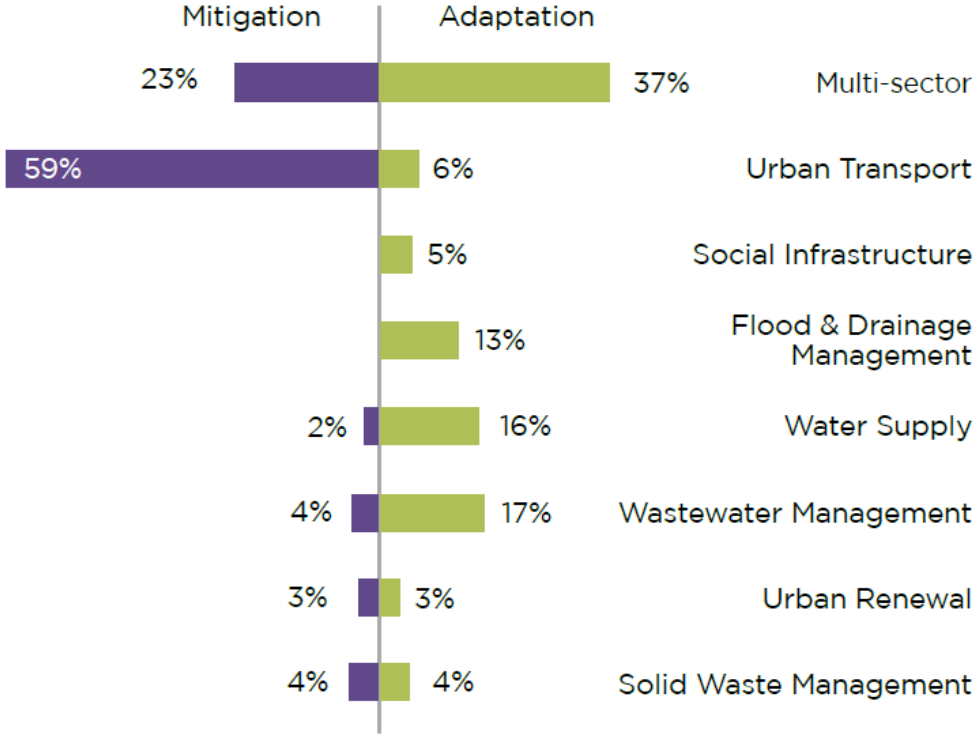


CDIA's contribution to climate finance
(as of June 2022)

Distribution of PPS Support to Climate Change by Use



Distribution of PPS Support to Climate Change by Sector



Anticipated impacts on climate change
(by percentage of completed CDIA project preparation studies)

48%

Decreased Exposure of the Population to the Impact of Climate Change

52%

Increased Capacity of Government Stakeholders to Adapt to Climate Change

39%


Reduced/ Avoided Greenhouse Gas (GHG) Emissions

42%

Engineered to Cope with Future Climate Variability

3%

Improved Use and Management of Land through Urban Greening or Afforestation/ Reforestation

13%

Improved Solid Waste/Wastewater Management

13%

Promote Low Carbon with Alternative Vehicle Fuels

19%

Transformational Contribution to Low Carbon Development

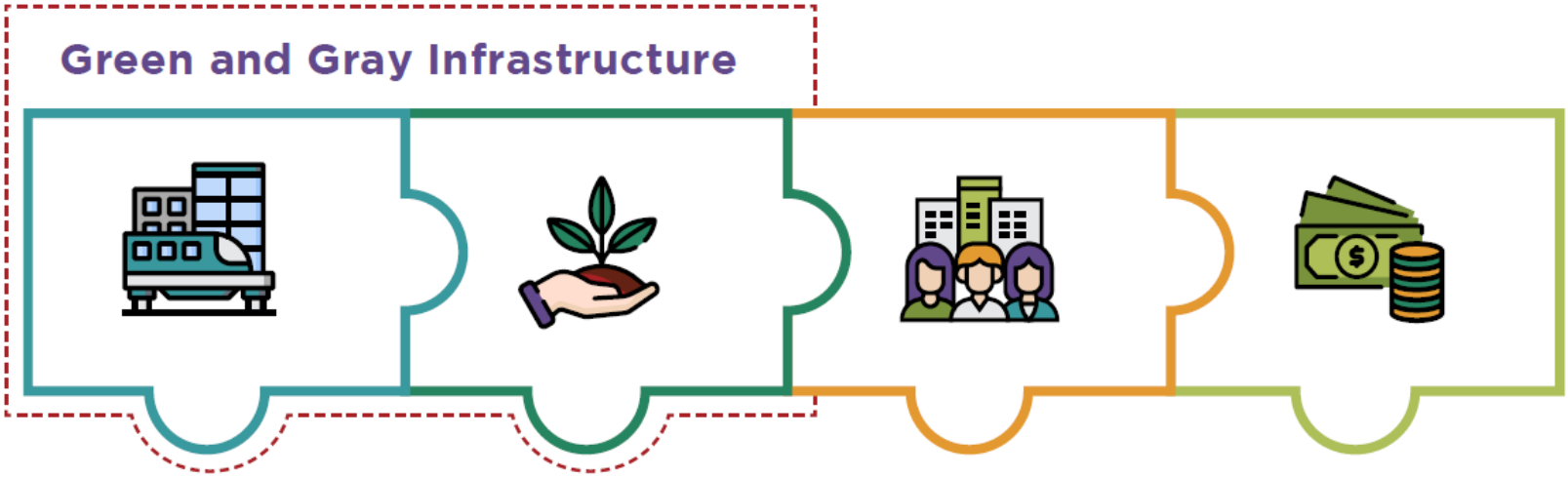
3%

Promotion or Application of Cleaner Production

13%

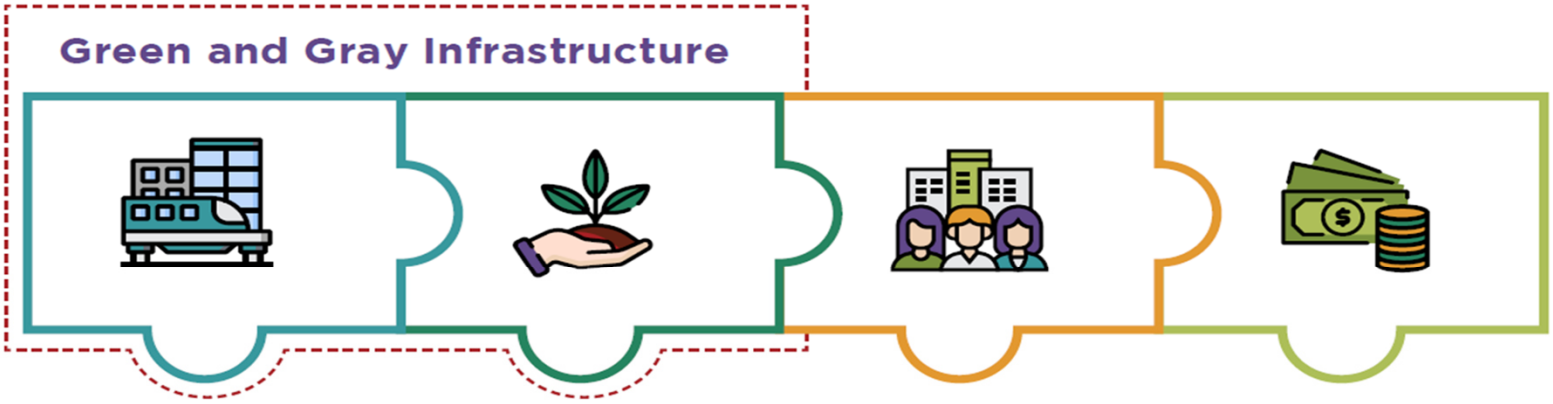
Improved Energy Efficiency or Reduced Energy Intensity

Holistic resilience framework



	Infrastructure Resilience	Ecological Resilience	Social and Institutional Resilience	Financial Resilience
DESCRIPTION	Climate change and disaster risks must be considered when planning, designing, and building physical infrastructure.	There should be greater emphasis on ecosystem services and nature-based solutions as part of an overall strategy to address climate change.	Focus on social and institutional dimensions of resilience to reflect the mutually reinforcing nature of poverty and vulnerability.	Provide a strong investment case for building resilience and strengthen financial prepareness for residual disaster risks.

Tools and Methods



	Infrastructure Resilience	Ecological Resilience	Social and Institutional Resilience	Financial Resilience
TOOLS AND APPROACHES	Apply a system vulnerability context in conducting risk assessment; apply climate science and new technologies to inform project design.	Use earth observation datasets and conduct hydrology analysis to map flooding and examine wider geographic footprint (e.g. basin or landscape context).	Apply guidelines on social impact analysis and integrated safeguards, gender equality, inclusive design, disaster preparedness, and early warning.	Explore new methods for qualifying and quantifying the co-benefits of resilience.

Bac Kan, Vietnam, climate resilience and urban development project

- Package of gray and green infrastructure to protect against river flooding and urban drainage and sewerage issues
- Capacity building of local officials through an institutional development roadmap to be taken through to implementation
- Cross-cutting benefits including avoiding health costs from avoided flood damage, improved sanitation, and increased revenue from tourism

Investment	Ward in Project Areas	DIRECT BENEFICIARIES	
		Population	Poor Population
Upstream Embankment and Weir	Duong Quang	3,005	51
Downstream Embankment and Weir	Duc Xuan, Huyen Tung	14,091	198
Nong Thuong Drainage and Sewerage Works	Song Cau	9,239	89
Pa Danh Drainage	Minh Khai	5,540	20
Total		31,875	358

"If this project is implemented effectively, I am sure that it will solve many of the city's problems. It will solve its flooding and landslide problems, help improve the livelihood of local people, and minimize our drainage problem. It will bring great changes to Bac Kan."

Duong Huu Buong
Chairman of Bac Kan City People's Committee.

Climate vulnerability and adaptation assessment for Cambodia

City-level Priority Recommendations

Battambang:
Construction of three sluice gates on the western side of the Sangkae River to stop floodwaters from backing up into the city's drainage system.

Kampot:
First phase of a southern flood protection project to reduce flood risks and enhance transportation by avoiding the town center.

Kratie and Chhlong:
Flood and riverbank protection through construction of a levee on the Mekong's left bank, in conjunction with erosion protection work to stabilize the river's bank and avoid property damage.

Cross-cutting Recommended Interventions

1. Restoration, conservation, and sustainable use of ecosystems to reduce climate-related risks; for example restoration of riparian vegetation to protect river banks and planting urban vegetation to reduce the impact of heat waves.

2. Implementation of flood prevention-related projects such as wastewater, and solid waste management.

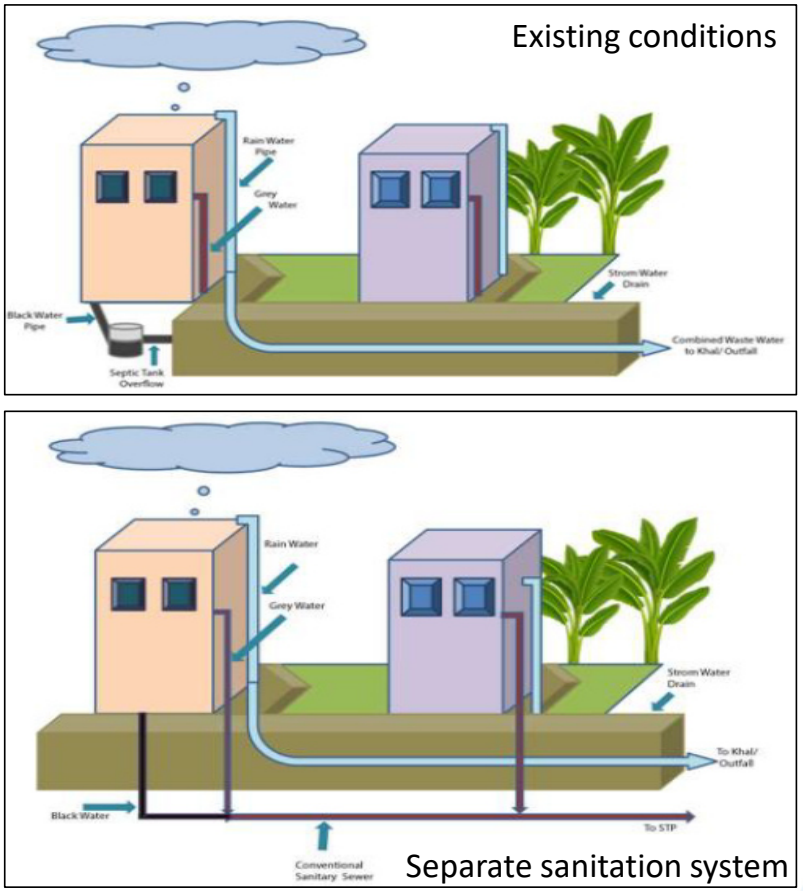
3. Additional integrated spatial planning options which incorporate essential climate adaptation-related structural interventions and the interconnectedness of biodiversity and ecological upgrades.

"During the floods every year, we lose a lot of money to rebuild. Climate change is a fight against our infrastructure."

Heng Rathpiseth
Director General of the Ministry of Public Works and Transport (MPWT)

Integrating climate resilience in wastewater management, sanitation and sewerage – Chattogram, Bangladesh

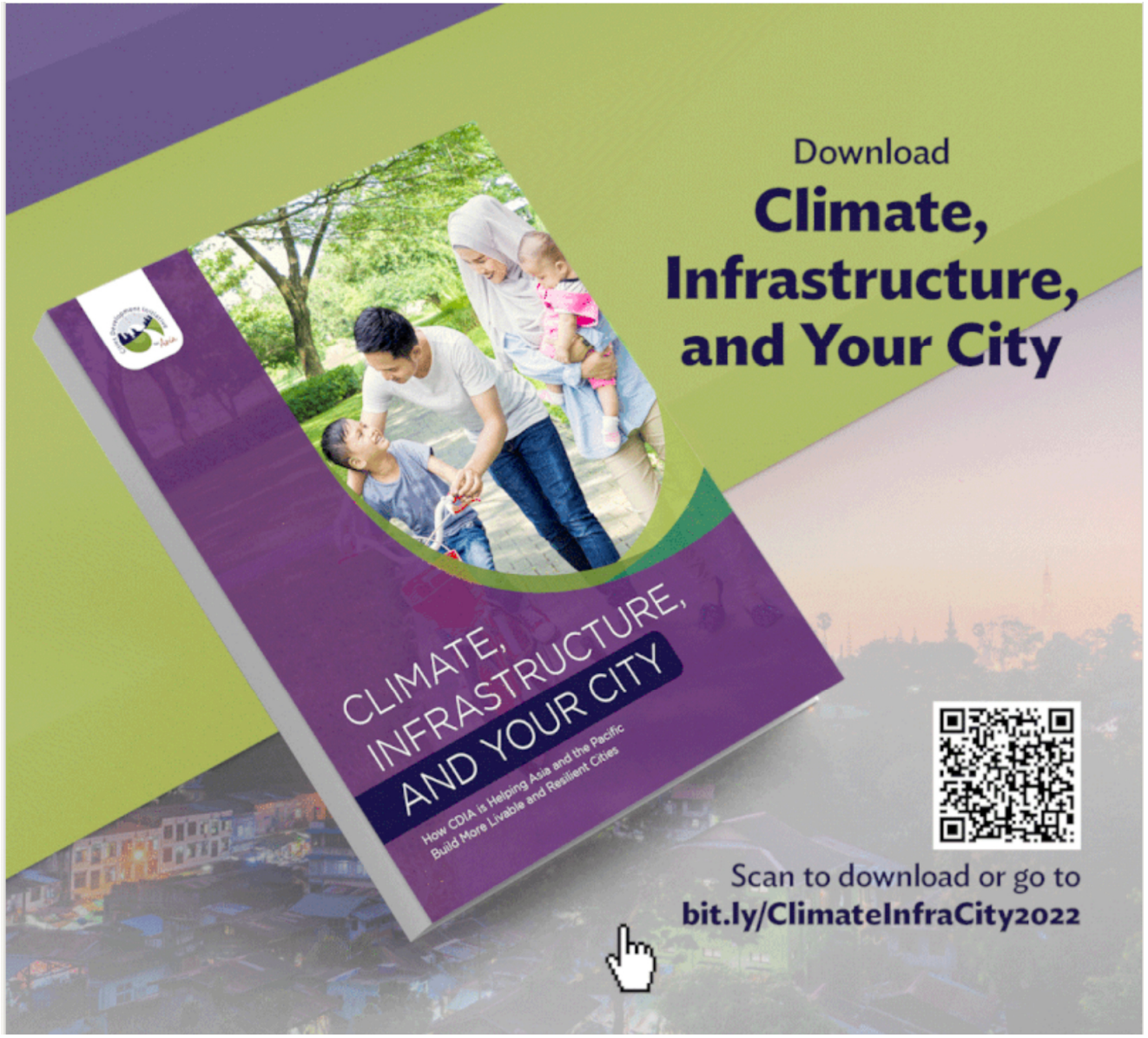
- Feasibility study and preliminary design for the proposed citywide sewerage and on-site sanitation project:
  - Sewerage system and wastewater treatment infrastructure for the north-west part of the city
  - Fecal sludge management facilities including on-site sanitation improvement in areas unserved by sewerage because of constraints in infrastructure construction space
- Engineering design and construction parameters were adjusted for climate change impact



Takeaways

- Proactive work done in the early stages of project development; embed climate concerns early in the project cycle and follow through to design and monitoring framework
- Conduct climate change diagnostics and discuss findings with client cities to build the case for climate mitigation and resilience, then develop holistic solutions
- Multi-disciplinary team adopting a holistic approach to project design, particularly the integration of capacity development and municipal finance frameworks
- Holistic approach that addresses infrastructure resilience, nature positive solutions, and enhanced social and financial capacity
- Avoid:
  - Incremental “climate-proofing” measures, usually by just adjusting siting and engineering design parameters
  - Late adjustments or rationalizations in the project plan narrative

Reference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