

Cities Development Initiative for Asia Preparing Bankable and Sustainable Infrastructure Projects

Kathleen Jovellanos, Capacity Development Specialist and Project Manager December 8, 2022











































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



Achievements as of October 2022











- Founded in 2007 and became an ADBmanaged multi-donor trust fund in 2018
- CDIA works closely with Secondary Asian
 Cities to develop project preparation studies
 (PPS) and link these to implementation
 financing
- CDIA provides grants for PPS (\$500,000 average cost), with cities contributing in-kind
- CDIA disbursement rate is around \$5 million per year















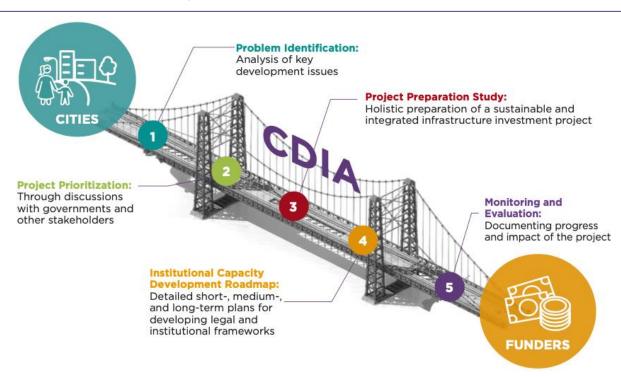






How CDIA Helps Secondary Cities





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

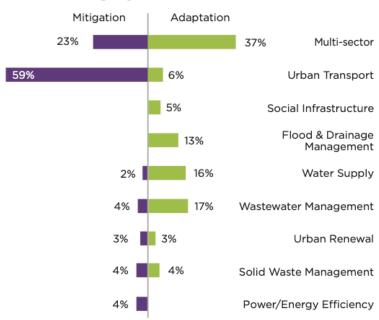
CDIA's contribution to Climate Finance (as of June 2022)



Distribution of PPS Support to Climate Change by Use



Distribution of PPS Support to Climate Change by Sector















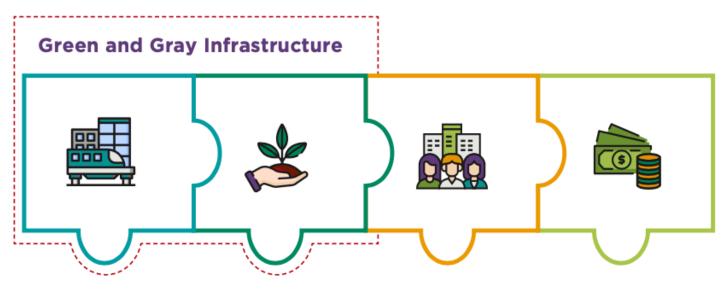








CDIA Deepens Its Climate Resilience Support in its Project Preparatory Studies (PPS)



Infrastructure Resilience **Ecological Resilience**

Social and Institutional Resilience

Financial Resilience















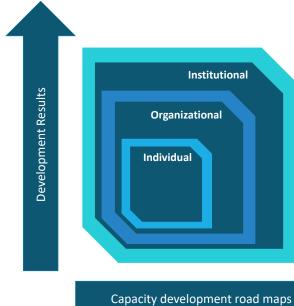






Dimensions of Institutional Capacity Development Road Map





Road Map is designed to address capacity development issues in project implementation and sustainability

- Short-term component: Address immediate individual capacity needs in the preparation of a project.
- Medium-term component: Addresses concerns and capacity requirements of the organization during the critical stage of project implementation
- Longer-term component: covers the broader system which organizations and individuals work that that defines their performance.





















CDIA Contribution to Climate Finance



Anticipated impacts on climate change, % of 31 completed PPS as of June 2022



52%Increased capacity to adapt to impacts of extreme weather events



48%Decreased exposure to the impacts of climate change



42%Engineered to cope with future climate variability



39%Reduced/avoided greenhouse gas (GHG) emission



19% Transformational contribution to low carbon development



13% Improved solid waste/ wastewater management



13%
Use of low carbon or alternative vehicle fuels



13%
Improved energy
efficiency or reduced
energy intensity



3%
Promotion or application of cleaner production



3% Improved use and management of land through greening, etc.

As of June 2022















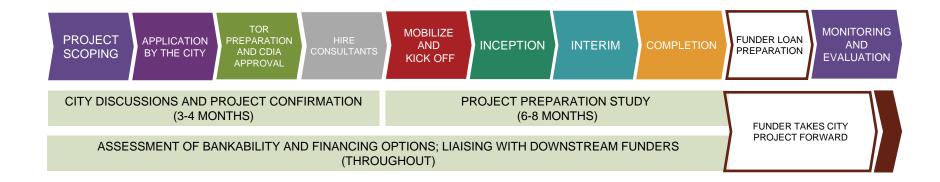






CDIA's Typical Project Preparation Process





• 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.





































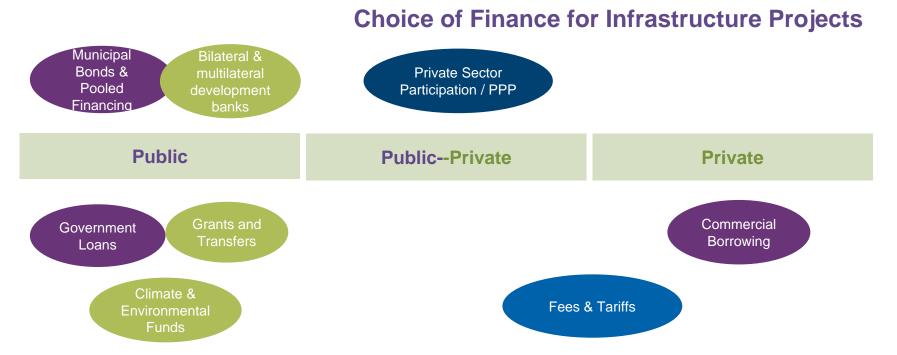






Infrastructure Financing Options





Plenty of financing options, but there is limited robust pipeline of projects.

Attracting Project Financiers



Critical Elements in attracting funds for urban infrastructure projects:

- 1. Capacity as a viable investment partner—
- ✓ Creating an enabling environment, i.e. policies on ease of doing business, credit worthiness of the city, presence of framework for aligned and smoother infrastructure implementation, clear direction of where the city wants to go.
- 2. The feasibility of the investment project(s), and
- 3. Alignment to financiers' priorities















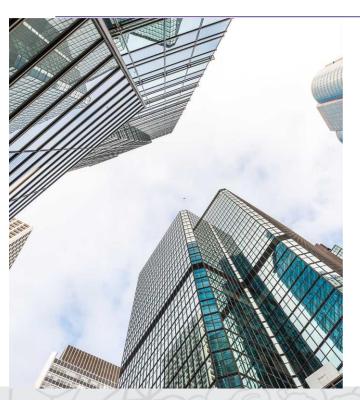






Bankability defined





A project is bankable*, whether from public or private sources, when its risk-return profile meets investors' criteria and can secure financing to implement the project

Key criteria for bankability include the probability of meeting the project's financial, environmental, and social goals, sufficient estimated cash flows to cover costs and produce returns that meet investor expectations.

*What is bankability? https://citiesclimatefinance.org/wp-content/uploads/2022/04/bankability mar22update.pdf

Project preparatory study (PPS)—the process of making projects Bankable



Project Preparation* is the process of defining, studying, refining, and developing an infrastructure project concept to the point that it becomes bankable, raising implementation financing from public or private sources.

Technical options

Assessment of poverty, relocation and socioeconomic impacts

Institutional and capacity gaps assessment

diligence

Environmental due

Assessment of economic benefits

Estimates of project costs and financial sustainability

Issues to be considered during implementation

Steer to the source of funding: PPP, IFIs, Government, etc.

Climate resilience. Risk

and Vulnerability

assessment

* What is project Preparation? https://citiesclimatefinance.org/wpcontent/uploads/2022/04/Project-Preparation-2-pager FINAL.pdf

CDIA supports secondary cities to achieve cross-cutting benefits.





Supporting climate-resilient development through knowledge generation and adaptation/mitigation measures, including nature-based solutions.



Promoting inclusion of all vulnerable elements of society including the elderly and persons with disabilities.



Gender mainstreaming of interventions through stakeholder consultations and participatory design.



Livable Cities



Strengthening implementation, management and operation skills through bespoke institutional capacity development roadmap preparation and training.



Developing human capital through training programs and city-to-city learning.





Promoting innovation

as part of sustainable

infrastructure design.



















Georgia Tbilisi City Hall Transport Department Advisory





Situation/Challenges:

 Tbilisi Transport Department (TD) needs advisory support to assist its staff to "do things in the right way" in the implementation of measures targeting a shift to sustainable mobility.

CDIA Interventions:

Placement of 5 urban transport advisors who supported TD in:

- The design of bus priority measures, incl. training in data collection,
 CAD and junction design software;
- · Transport Department business planning;
- Update of the Tbilisi Sustainable Urban Transport Strategy; and
- · Development of the Transport Authority















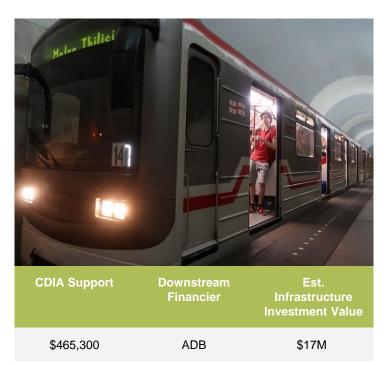






Georgia Tbilisi Metro Upgrade and Refurbishment Plan





Situation/Challenges:

 The Tbilisi Metro, commissioned in 1966 is the oldest Metro in the old Soviet Union. Following decades of under-investment, it is in urgent need of rehabilitation and upgrading.

- Development of investment program to improve the operation of the Tbilisi Metro to meet present day technical, operational, safety and accessibility standards.
- Linking to ADB financing for rapid progression to implementation.
 Through ADB's \$15 million investment, power cables and ventilators were rehabilitated, thus, making the daily commute safer.















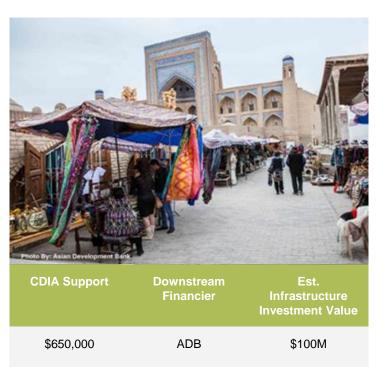






Uzbekistan Integrated Urban Development Project





Situation/Challenges:

 One of the key urban development challenges in Uzbekistan is the ongoing in-migration from rural areas, which is creating pressure on the existing poor-quality infrastructure and the low urban governance capacities of secondary cities.

- Pre-feasibility study/outline design preparation on urban renewal, water supply and sanitation, and solid waste management for the cities of Khiva, Djizzak, and Yangiyer/Havas; and
- Institutional capacity development for urban management, urban renewal, water supply and sanitation, and solid waste management.





















India Smart Cities: Panaji





Situation/Challenges:

- Despite having a reasonable supply of good quality water, the city residents still only receive between 1-7 hours of water supply per day depending on their location.
- St. Inez Creek was once a beautiful stream, but years of neglect have turned it into an open sewer, posing health threats to people.

- Outline design for the additional works to achieve the 24/7 water system, which will be incorporated in a performance-based Design Build and Operate contract.
- Review of the existing technical report on the regeneration of St. Inez Creek, and development of a roadmap to define a more environmentally friendly approach, while maximizing community/youth engagement in finding appropriate and acceptable solutions.





















Pakistan Khyber Pakhtunkhuwa Inclusive Urban Growth Program





Situation/Challenges:

 Urban infrastructure in most cities in Pakistan is aging and has not expanded at the pace necessary to provide basic services, or stimulate economic growth and create job opportunities.

- Preparation of an integrated, climate-resilient urban environmental infrastructure investment and city development programs for the cities of Peshawar, Mardan and Abbottabad;
- Pre-feasibility study for prioritized infrastructure including outline designs;
- Institutional arrangements for project implementation; and
- Building the capacity of relevant stakeholders to facilitate the sustainable development and management of prioritized urban infrastructure investments.















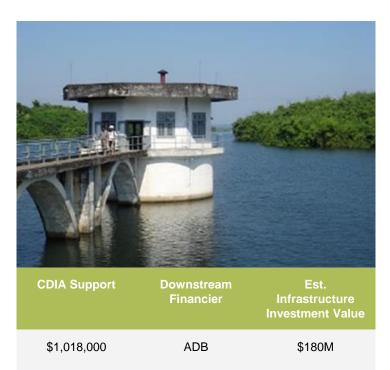






Myanmar Yangon Urban Services Improvement Project (YUSIP)





Situation/Challenges:

 The YCDC-managed water supply provision to the 33 townships is limited in terms of coverage, quantity, quality and efficiency. Also, the city's sewerage built in the late 1800s only serves the central business district comprising less than 5% of the population.

- Replacement of the existing open raw water channel from the Ngamoeyeik reservoir to the Nyaunghnapin water treatment plant and subsequently to the Aungtagon pumping station with a dedicated raw water transmission pipeline; and
- Construction of a new sewerage system and wastewater treatment serving five townships in zone W1 and W2.













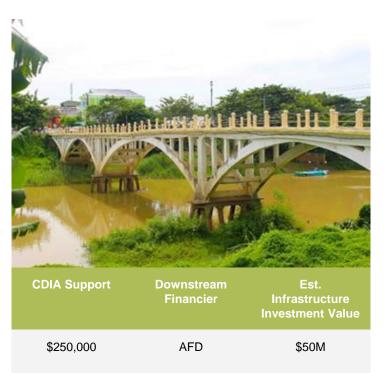








Cambodia Climate Vulnerability and Adaptation Assessment in Battambang, Kampot Kratie and Chhlong



Situation/Challenges:

 Cambodia is one of the countries most vulnerable to climate change, as it is prone to flooding, drought and windstorms.
 Cambodia's high vulnerability comes from a combination of a low adaptive capacity, poor infrastructure, limited institutional capacity and a high exposure to climate risks.

- Assessment of the nature and spatial location of climate hazards, vulnerabilities and risks in the four cities; and
- Identification and recommendation of priority interventions with a climate adaptation approach to inform the investments' prioritization and the project design of the subsequent Feasibility Study.





















Vietnam Urban Development and Climate Resilience Project in Bac Kan and Phu Ly



Situation/Challenges:

 Bac Kan and Phu Ly experience significant and frequent floods during the monsoon season. In Bac Kan, most land available for development are along the flood plains of the Cau River or near its tributaries. In Phu Ly, agriculture areas can experience damaging drought during dry season.

- Feasibility study/preliminary engineering design of drainage and flood management infrastructure with emphasis on adaptation to climate change and improved urban livability through water sensitive urban design; and
- Preparation of a road map for capacity development covering institutional, organizational and individual development for both cities.





















PRC Chongquing Innovation and Human Capital Development



Situation/Challenges:

- Large scale state-owned and resource dependent heavy industries dominated Chongqing's economy.
- To survive in a rapidly growing and environmentally-sensitive economy in PRC, Chongqing needs to create an "innovation ecosystem" for sustainability and resilience; and invest in human capital development.

- Design of a project integrating human capital development with infrastructure investment:
- Development of detailed assessment and design for the Changshou Economic and Technology Development Area; and
- Conduct of socio-economic assessments; and technical support to the TRTA team in the formulation of sub-projects to be proposed for funding by ADB.











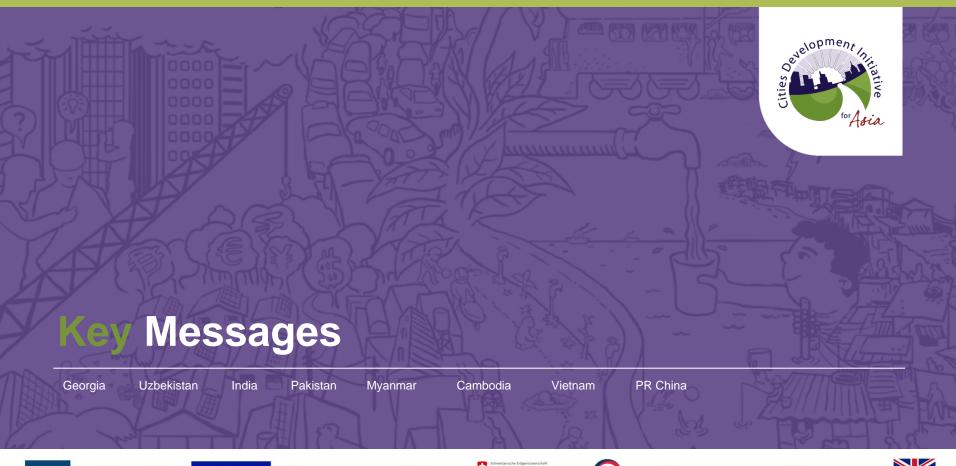
































Key Messages



Bankable projects undergo rigorous technical preparation to take it up to investment-ready levels.

Required levels of details in the project preparation stage may vary depending on the funder, the project nature and the project size.

Each Project Preparation Facility (PPF) has criteria used to select projects that it will support. Thus, eligibility of a project will differ for each PPF, making the selection of PPFs to apply to is an important consideration for cities seeking support.

Institutional capacity matters!























