Governance of the Urban Financing Partnership Facility

UFPF Steering Committee Chair
Bruno Carrasco, Director General concurrently Chief Compliance Officer, Sustainable Development and Climate Change Department (SDCC)

UFPF Steering Committee Members
Leah Gutierrez, Director General, Pacific Department (PARD)
Yevgeniy Zhukov, Director General, Central and West Asia Department (CWRD)
Teresa Kho, Director General, East Asia Department (EARD)
Ramesh Subramaniam, Director General, Southeast Asia Department (SERD)
Kenichi Yokohama, Director General, South Asia Department (SARD)

Urban Sector Group Committee Chair
Sangay Penjor, Director, Urban and Social Sectors Division, EARD

Urban Sector Group Committee Members
Jingmin Huang, Director, Urban Development, and Water Supply and Sanitation Division, PARD
Srinivas Sampath, Director, Urban Development and Water Division, SERD
Norio Saito, Director, Urban Development and Water Division, SARD
Yong Ye, Director, Urban Development and Water Division, CWRD
Hisaka Kimura, Advisor, PSOD

Urban Infrastructure Working Group Members
Joris van Etten, Principal Urban Development Specialist, Urban Development and Water Division, SERD
Arnaud Heckmann, Principal Urban Development Specialist, Urban and Social Sectors Division, EARD
Pedro Miguel Pauleta De Almeida, Urban Development Specialist, Urban Development and Water Division, EARD
Kristina Katich, Senior Urban Development Specialist, Urban, Social Development, and Public Management Division, PARD
Stefan Rau, Senior Urban Development Specialist, Urban and Social Sectors Division, EARD
Ramola Singru, Senior Urban Development Specialist, Urban Development and Water Division, CWRD
Thuy Trang Dang, Urban Development Specialist, Urban Development and Water Division, SERD

Facility Manager
Robert Guild, Chief Sector Officer, Sector Advisory Service Division, SDCC

Secretariat
Manoj Sharma, Chief of Urban Sector Group, Sector Advisory Service Division, SDCC
Aldrin Plaza, Senior Urban Development Officer, Sector Advisory Service Division – Urban Sector Group
Lindy Lois M. Gamolo, Senior Operations Assistant, Sector Advisory Service Division – Urban Sector Group
Virinder Sharma, Ma. Victoria Antonio
Urban Climate Change Resilience Trust Fund

Aldrin Plaza, Robert Domingo
Urban Environmental Infrastructure Trust Fund

Lara Arjan, Neil Chadder, Rudini Baoy
Cities Development Initiative for Asia Trust Fund

Joris van Etten, Aimee Orbe
ASEAN Australia Smart Cities Trust Fund
## Contents

1 | INTRODUCTION .................................................. 1
2 | FINANCIAL PERFORMANCE .................................. 2
3 | UFPF PROJECT IMPACT STORIES ........................ 5
4 | URBAN CLIMATE CHANGE RESILIENCE TRUST FUND .... 16
5 | CITIES DEVELOPMENT INITIATIVE FOR ASIA TRUST FUND 26
6 | ASEAN AUSTRALIA SMART CITIES TRUST FUND ........ 36
7 | URBAN ENVIRONMENTAL INFRASTRUCTURE FUND ....... 38

**APPENDIXES**

1. Status of Ongoing UCCRTF-supported Projects 45
2. Status of Ongoing CDIA TF Project Preparatory Support Activities 53
3. Status of Ongoing AASTC-supported Projects 57
4. Status of Ongoing UEIF-supported Projects 61
Abbreviations

<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>ADB</td>
<td>Asian Development Bank</td>
</tr>
<tr>
<td>AASCTF</td>
<td>ASEAN Australia Smart Cities Trust Fund</td>
</tr>
<tr>
<td>CDIA</td>
<td>Cities Development Initiative for Asia</td>
</tr>
<tr>
<td>CDTA</td>
<td>capacity development technical assistance</td>
</tr>
<tr>
<td>CWIS</td>
<td>citywide inclusive sanitation</td>
</tr>
<tr>
<td>DFID</td>
<td>Department for International Development (United Kingdom)</td>
</tr>
<tr>
<td>DC</td>
<td>direct charge</td>
</tr>
<tr>
<td>DMC</td>
<td>developing member country</td>
</tr>
<tr>
<td>DMF</td>
<td>design and monitoring framework</td>
</tr>
<tr>
<td>DWSSP</td>
<td>Dushanbe Water Supply and Sanitation Project</td>
</tr>
<tr>
<td>GHG</td>
<td>greenhouse gas</td>
</tr>
<tr>
<td>GMS</td>
<td>Greater Mekong Subregion</td>
</tr>
<tr>
<td>IG</td>
<td>investment grant</td>
</tr>
<tr>
<td>KPCIP</td>
<td>Khyber Pakhtunkhwa Cities Improvement Projects</td>
</tr>
<tr>
<td>KSTA</td>
<td>knowledge and support technical assistance</td>
</tr>
<tr>
<td>LWUA</td>
<td>Local Water Utilities Administration (Philippines)</td>
</tr>
<tr>
<td>MRF</td>
<td>materials recovery facility</td>
</tr>
<tr>
<td>MLCP</td>
<td>Makassar Livable City Plan</td>
</tr>
<tr>
<td>NbS</td>
<td>Nature-based Solution</td>
</tr>
<tr>
<td>PPP</td>
<td>public-private partnership</td>
</tr>
<tr>
<td>PPS</td>
<td>project preparation study</td>
</tr>
<tr>
<td>PRC</td>
<td>People’s Republic of China</td>
</tr>
<tr>
<td>SDCC</td>
<td>Sustainable Development and Climate Change Department</td>
</tr>
<tr>
<td>SIDA</td>
<td>Swedish International Development Cooperation Agency</td>
</tr>
<tr>
<td>SPADE</td>
<td>Spatial Data Analysis Explorer</td>
</tr>
<tr>
<td>TA</td>
<td>technical assistance</td>
</tr>
<tr>
<td>TRTA</td>
<td>transaction technical assistance</td>
</tr>
<tr>
<td>UCCRTF</td>
<td>Urban Climate Change Resilience Trust Fund</td>
</tr>
<tr>
<td>UEIF</td>
<td>Urban Environmental Infrastructure Fund</td>
</tr>
<tr>
<td>UFPF</td>
<td>Urban Financing Partnership Facility</td>
</tr>
<tr>
<td>USG</td>
<td>Urban Sector Group</td>
</tr>
<tr>
<td>WDDSP</td>
<td>Water District Development Sector Project</td>
</tr>
<tr>
<td>WSS</td>
<td>water supply and sanitation</td>
</tr>
</tbody>
</table>

Notes

(i) In preparing any country program or strategy, financing any project, or by making any designation of, or reference to, a particular territory or geographic area in this document, the Asian Development Bank does not intend to make any judgment as to the legal or other status of any territory or area. (ii) In this report, “$” refers to US dollars. (iii) All photos are by ADB.

Cover photo: Rethinking urban development. The ongoing health crisis is also an opportunity to revisit urban planning and development. The Asian Development Bank, through the Urban Financing Partnership Facility, continues to work with its partners in making urban services more accessible and equitable.
NEW UFPF-FUNDED PROJECTS AND ACTIVITIES

During the reporting period of January to June 2021, UFPF assistance has led to a total of four newly approved projects (comprised of one direct charge, and three project preparatory study): one for UCCRTF, and three for CDIA. These amount to $1.93 million in UFPF support.

---

1 The Urban Financing Partnership Facility was established in November 2009, UEIF in December 2009, UCCRTF in December 2013, and CDIA was established in 2007, but only became part of the UFPF in January 2018. AASCTF was established in 2019.
Introduction

The impacts of the pandemic continue to hit cities in Asia and the Pacific. The emergence of new variants also led to more challenges that affect city dwellers, especially the poor and the vulnerable. Year 2021, however, gave cities hope as more vaccination programs have been rolled out. While the end of the pandemic is still uncertain, the Urban Financing Partnership Facility (UFPF) continues to deliver its commitments to the Asian Development Bank’s developing member countries (DMCs).

This Mid-year Report covers the period of January to June 2021, detailing the progress made by UFPF and the related trust funds, namely: the Urban Climate Change Resilience Trust Fund (UCCRTF), the Urban Environmental Infrastructure Fund (UEIF), the Cities Development Initiative for Asia Trust Fund (CDIA TF), and the ASEAN Australia Smart Cities Trust Fund (AASCTF).

The coronavirus disease (COVID-19) has exposed the gaps in urban planning and development, but it also opened opportunities for cities to innovate and address existing gaps.

The UFPF, through AASCTF, organized the Smart Cities Datathon 2021 that invited innovators around the globe to pitch digital solutions that could help cities to build back smarter. The Datathon awarded seed funding to the team with the best solution. This seed funding will also enable the winning team to test and scale their proposed solutions in a real-world setting.

Meanwhile, the CDIA TF implemented the CDIA Virtual Clinics, a unique capacity development platform designed to enhance the knowledge of key city officials in drafting climate-resilient, bankable and sustainable project proposals in line with the priorities of downstream funders. This has helped the Trust Fund reach more of their target audience since the sessions were held online. For the first half of 2021, the virtual clinics were done with selected cities in the Philippines.

More innovations were also introduced in the first half of 2021, which also considered the learnings from the abrupt changes that the trust funds under UFPF had to deal with in 2020. The trust funds under the UFPF umbrella were able to support a number of projects that could help cities in the region build back better, with details provided in the succeeding section of this report. In addition, despite the alignment of priorities, UFPF was still able to provide funding to four new projects made up of three project preparatory study support and one direct charge activity with a total amount of $1.93 million from January to June 2021.

The impacts of the pandemic continue to hit cities in Asia and the Pacific. The emergence of new variants also led to more challenges that affect city dwellers, especially the poor and the vulnerable. Year 2021, however, gave cities hope as more vaccination programs have been rolled out. While the end of the pandemic is still uncertain, the Urban Financing Partnership Facility (UFPF) continues to deliver its commitments to the Asian Development Bank’s developing member countries (DMCs).

This Mid-year Report covers the period of January to June 2021, detailing the progress made by UFPF and the related trust funds, namely: the Urban Climate Change Resilience Trust Fund (UCCRTF), the Urban Environmental Infrastructure Fund (UEIF), the Cities Development Initiative for Asia Trust Fund (CDIA TF), and the ASEAN Australia Smart Cities Trust Fund (AASCTF).

The coronavirus disease (COVID-19) has exposed the gaps in urban planning and development, but it also opened opportunities for cities to innovate and address existing gaps.

The UFPF, through AASCTF, organized the Smart Cities Datathon 2021 that invited innovators around the globe to pitch digital solutions that could help cities to build back smarter. The Datathon awarded seed funding to the team with the best solution. This seed funding will also enable the winning team to test and scale their proposed solutions in a real-world setting.

Meanwhile, the CDIA TF implemented the CDIA Virtual Clinics, a unique capacity development platform designed to enhance the knowledge of key city officials in drafting climate-resilient, bankable and sustainable project proposals in line with the priorities of downstream funders. This has helped the Trust Fund reach more of their target audience since the sessions were held online. For the first half of 2021, the virtual clinics were done with selected cities in the Philippines.

More innovations were also introduced in the first half of 2021, which also considered the learnings from the abrupt changes that the trust funds under UFPF had to deal with in 2020. The trust funds under the UFPF umbrella were able to support a number of projects that could help cities in the region build back better, with details provided in the succeeding section of this report. In addition, despite the alignment of priorities, UFPF was still able to provide funding to four new projects made up of three project preparatory study support and one direct charge activity with a total amount of $1.93 million from January to June 2021.

The impacts of the pandemic continue to hit cities in Asia and the Pacific. The emergence of new variants also led to more challenges that affect city dwellers, especially the poor and the vulnerable. Year 2021, however, gave cities hope as more vaccination programs have been rolled out. While the end of the pandemic is still uncertain, the Urban Financing Partnership Facility (UFPF) continues to deliver its commitments to the Asian Development Bank’s developing member countries (DMCs).

This Mid-year Report covers the period of January to June 2021, detailing the progress made by UFPF and the related trust funds, namely: the Urban Climate Change Resilience Trust Fund (UCCRTF), the Urban Environmental Infrastructure Fund (UEIF), the Cities Development Initiative for Asia Trust Fund (CDIA TF), and the ASEAN Australia Smart Cities Trust Fund (AASCTF).

The coronavirus disease (COVID-19) has exposed the gaps in urban planning and development, but it also opened opportunities for cities to innovate and address existing gaps.

The UFPF, through AASCTF, organized the Smart Cities Datathon 2021 that invited innovators around the globe to pitch digital solutions that could help cities to build back smarter. The Datathon awarded seed funding to the team with the best solution. This seed funding will also enable the winning team to test and scale their proposed solutions in a real-world setting.

Meanwhile, the CDIA TF implemented the CDIA Virtual Clinics, a unique capacity development platform designed to enhance the knowledge of key city officials in drafting climate-resilient, bankable and sustainable project proposals in line with the priorities of downstream funders. This has helped the Trust Fund reach more of their target audience since the sessions were held online. For the first half of 2021, the virtual clinics were done with selected cities in the Philippines.

More innovations were also introduced in the first half of 2021, which also considered the learnings from the abrupt changes that the trust funds under UFPF had to deal with in 2020. The trust funds under the UFPF umbrella were able to support a number of projects that could help cities in the region build back better, with details provided in the succeeding section of this report. In addition, despite the alignment of priorities, UFPF was still able to provide funding to four new projects made up of three project preparatory study support and one direct charge activity with a total amount of $1.93 million from January to June 2021.

The impacts of the pandemic continue to hit cities in Asia and the Pacific. The emergence of new variants also led to more challenges that affect city dwellers, especially the poor and the vulnerable. Year 2021, however, gave cities hope as more vaccination programs have been rolled out. While the end of the pandemic is still uncertain, the Urban Financing Partnership Facility (UFPF) continues to deliver its commitments to the Asian Development Bank’s developing member countries (DMCs).

This Mid-year Report covers the period of January to June 2021, detailing the progress made by UFPF and the related trust funds, namely: the Urban Climate Change Resilience Trust Fund (UCCRTF), the Urban Environmental Infrastructure Fund (UEIF), the Cities Development Initiative for Asia Trust Fund (CDIA TF), and the ASEAN Australia Smart Cities Trust Fund (AASCTF).

The coronavirus disease (COVID-19) has exposed the gaps in urban planning and development, but it also opened opportunities for cities to innovate and address existing gaps.

The UFPF, through AASCTF, organized the Smart Cities Datathon 2021 that invited innovators around the globe to pitch digital solutions that could help cities to build back smarter. The Datathon awarded seed funding to the team with the best solution. This seed funding will also enable the winning team to test and scale their proposed solutions in a real-world setting.

Meanwhile, the CDIA TF implemented the CDIA Virtual Clinics, a unique capacity development platform designed to enhance the knowledge of key city officials in drafting climate-resilient, bankable and sustainable project proposals in line with the priorities of downstream funders. This has helped the Trust Fund reach more of their target audience since the sessions were held online. For the first half of 2021, the virtual clinics were done with selected cities in the Philippines.

More innovations were also introduced in the first half of 2021, which also considered the learnings from the abrupt changes that the trust funds under UFPF had to deal with in 2020. The trust funds under the UFPF umbrella were able to support a number of projects that could help cities in the region build back better, with details provided in the succeeding section of this report. In addition, despite the alignment of priorities, UFPF was still able to provide funding to four new projects made up of three project preparatory study support and one direct charge activity with a total amount of $1.93 million from January to June 2021.
Financial Performance

For January to June 2021, the Urban Financing Partnership Facility had a total of donor commitment of $146.79 million. The largest share comes from the Urban Climate Change Resilience Trust Fund (UCCRTF). However, commitments only saw a minimal increase during the reporting period. The total commitments of UFPF slightly rose from $146.41 million on 31 December 2020 to $146.79 million as of 30 June 2021. Project disbursements, while remaining to be a challenge, showed a gradual increase from $58.13 million on 31 December 2020 to $66.02 million as of 30 June 2021.

The UFPF Ecosystem

Facility Amount: $194.12 M

UCCRTF $149.36 M (77%)
UEIF $21.45 M (11%)
CDIA-TF $9.08 M (5%)
AASCTF $14.22 M (7%)
The UCCRTF-supported SPADE platform is now an ADB-wide Interim GIS tool and is supporting climate risk-informed planning and design for upcoming loan projects in Bangladesh, Indonesia, and Viet Nam.

After being hampered by COVID-19 pandemic, the activities of the RISE TA in Fiji supported by UEIF was completed. The preparation of the detailed engineering designs and technical specifications for the proposed water-sensitive infrastructure pilots were completed and approved by the Ministry of Public Works for implementation.

Implemented the CDIA Virtual Clinics, a unique capacity development platform designed to enhance the knowledge of key city officials in drafting climate-resilient, bankable and sustainable project proposals in line with the priorities of downstream funders. Two clinics were conducted during this reporting period participated in by 41 key officials from five Philippine cities, namely: Baguio, Dagupan, Naga, Tacloban, and Zamboanga.

Eight city intervention task orders have been endorsed. Development of project concepts and task orders for the remaining cities of Hue, Viet Nam and Chonburi, Thailand is ongoing, with expected commencement of works in both cities within 2021.

**Trust Fund Highlights**

<table>
<thead>
<tr>
<th>Commitments</th>
<th>Disbursements</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Committed: $146.79 (76%)</td>
<td>Total Disbursed: $66.02 (34%)</td>
</tr>
<tr>
<td>Total Uncommitted: $47.32 (24%)</td>
<td>Total Undisbursed: $128.09 (66%)</td>
</tr>
</tbody>
</table>

**UCCRTF:** $109.50 (75%)
- UCCRTF: $109.50 (75%)
- UEIF: $20.14 (14%)
- CDIA-TF: $6.89 (5%)
- AASCTF: $10.27 (7%)

**UEIF:** $45.03 (68%)
- UCCRTF: $109.50 (75%)
- UEIF: $16.65 (25%)
- CDIA-TF: $2.75 (4%)
- AASCTF: $1.60 (2%)
Working together amidst the outbreak. ADB continues to work with trust fund partners in implementing measures tailored to the situations of ADB members.
The first half of 2021 marked the first year when COVID-19 was declared a pandemic by the World Health Organization (WHO). In Asia and the Pacific cities, even with the ongoing vaccination and recovery efforts, the poor and the vulnerable remain the most adversely affected with the frequent lockdowns and several restrictions.

This mid-year report showcases selected stories resulting from UFPF’s trust funds to ADB’s work in its DMCs. Amidst the new challenges brought by the pandemic, UFPF still managed to deliver impact on the ground and continue its work aimed to transform developing cities in Asia and the Pacific into safe, inclusive, competitive, and resilient urban centers.
Background

Huangshan City plays a critical role in protecting Xin’an River and other water ecosystems within the Yangtze River Economic Belt in the People’s Republic of China (PRC) and in ensuring safe and clean water for 400 million residents.

In 2019, the Cities Development Initiative for Asia (CDIA), a multi-donor trust fund managed by the Asian Development Bank (ADB), provided technical assistance to the city government to support the core aspects of a project that will upgrade sewerage and stormwater drainage facilities in Huangshan, a city in Anhui Province, to reduce pollution in the Xin’an River.

The CDIA technical team supplemented project preparation by introducing innovative and international best practices in water pollution management, including an environmental, health and safety (EHS) management system that also covers industrial parks and enterprises.

CDIA and the Huangshan government made their recommendations and technical roadmaps available online through a series of publications to guide project design and implementation. This article on Cost-effective Environmental Management: Networking ICT Solutions summarizes the points mentioned in the publication series. It discusses the benefits of integrating information and communications technology (ICT)-networked systems with smart city data management platforms to improve environmental management and monitoring for industries and regulators alike.

A Smart Solution for Protecting River Ecosystems from Urban Pollution

DMC
People’s Republic of China

Project Title
Anhui Huangshan Xin’an River Ecological Protection and Green Development Project

CDIA TF Approval
March 2019

Trust Fund Support
$300,000

Results

• Placed data integration in the center of the overall project design. In Huangshan, Data Resource Administration Bureau (DRAB) will take the lead in developing the core functions for EHS management systems as demonstrated in the pilot for the two industrial parks which will create a smart EHS or WeHS. The industrial parks may still develop smaller-scale management systems to address their specific needs.

• Reduced environmental risks through data transparency. Through the Huangshan Smart City platform, the project’s ICT component will have access to real-time information in key environmental areas, which will help improve environmental monitoring and responses.

• Promoted economies of scale. The ICT systems to be developed for environmental management and monitoring have a number of common features. As the CDIA team has shown in its pilot study, these can be integrated into a single operating platform, enabling net savings of more than 60% on the project’s ICT component.
How UFPF Provided Support
Integrating Data and Systems for Environmental Monitoring

CDIA helped rethink the project design for the ICT component and demonstrated the benefits of networked, real-time monitoring of industrial parks and manufacturing enterprises to reduce the risk of water and air pollution. It also highlighted the cost-effectiveness and the advantages of data sharing and integrating separate ICT systems into Huangshan’s Smart City platform. Doing so reduces the risk of information isolation in key environmental areas and helps improve monitoring and emergency response. Under the original project design, four information systems will be developed: smart water conservancy system for Huangshan, smart environmental monitoring system for Qimen County, and smart EHS systems for Huizhou District Industrial Park and She County Industrial Park.

The CDIA team reviewed the feasibility studies on the four systems, conducted technical analyses and site visits, and engaged with various stakeholders. The CDIA team recommended that the four originally separate ICT programs should be linked, and Huangshan’s Data Resource Administration Bureau (DRAB) should lead the top-level design to establish a centralized, structured platform to assure policy compliance and resource sharing between the different systems. Specifically, any common functions shared by ICT systems at the implementation level should be integrated into one system, administered by the DRAB, and ultimately integrated into Huangshan’s Smart City platform. The integration of the project’s ICT components in the Smart City platform will enable them to be linked with other data sources and for data analytics to be shared, boosting environmental monitoring and risk prevention.

Developing a Web-based EHS System
The CDIA technical team developed a web-based EHS management system (WeHS). It aims to provide real-time monitoring of water and air quality and alerts on potential risks or hazardous leaks in the Huizhou District and She County industrial parks. The team proposed a conceptual design of how the two industrial parks and their manufacturing enterprises can collaborate to improve EHS compliance and emergency response through advanced ICT and data sharing. The team demonstrated that separate systems can be merged into one to optimize resources and prevent duplication. The system is replicable in other industrial parks that are facing similar hazards and is scalable in operations. The WeHS software may also be used by other enterprises and park locators as an internal auditing tool and training platform.

In contrast to the original concept of four individual systems, the proposed single WeHS system will help provide real-time linkages between government, industrial parks, and manufacturing enterprises and better manage environmental or safety risks in the two industrial parks. Overall, the revised project design was a paradigm shift from a conventional, compartmentalized, compliance-driven problem-solving approach to shared, cooperation-oriented environmental management in Huangshan City.

Results and Impact
Data integration should be central to the overall project design. The Huangshan, DRAB will take the lead in developing the core functions for EHS management systems as demonstrated in the pilot for the two industrial parks, which will create a smart EHS or WeHS. The industrial parks may still develop smaller-scale management systems to address their specific needs.

Data transparency can reduce environmental risks. The Huangshan Smart City platform will enable the project’s ICT component to access to real-time information in key environmental areas, which will help improve environmental monitoring and responses.

Plan for economies of scale. The ICT systems to be developed for environmental management and monitoring have a number of common features. As the CDIA team has shown in its pilot study, these can be integrated into a single operating platform, enabling net savings of more than 60% on the project’s ICT component.

In summary, the approach recommended by CDIA for ICT systems in the Huangshan Xin’an River Project shows that a well-designed system can support effective sharing of data and information and significantly improve management efficiency and effectiveness. It is hoped that the WeHS system will benefit not only the city but also other small and medium-sized cities in the PRC and in other countries in Asia and the Pacific.
Background
Makassar is a city that has an undeniably strong vision and philosophy. From the get-go, it already had the finish line in mind, complete with motto and marketing materials – the sombere (kind hearted) and smart city. It means becoming smart with a heart; to have character, culture, and equality in as much as business and technology. All the Indonesian city needed was a plan to take it forward, and this is where the ASEAN Australia Smart Cities Trust Fund (AASCTF) stepped in.

The coastal city of South Sulawesi is a dynamic hub of activity with evolving needs. Officials understand that Makassar has been undergoing rapid urbanization and industrialization, albeit at the expense of livability. Green spaces have been reduced. Informal settlements have increased. Water supply cannot cope with demand and air pollution is an accepted reality, along with traffic congestion and other issues. Furthermore, Makassar is faced with climate change impacts, such as increasing rainfall intensity, flooding, and rising temperatures and drought.

Makassar had a ‘war room’ installed as part of a smart city strategy in 2014. Real-time data and CCTV feeds are streamed on large monitors creating a dashboard that allow the local government to respond quickly. However, even a war room is not enough. Makassar has to arm itself with a holistic and strategic livable city plan that will pull together and build on years of past work and initiatives.

How UFPF Provided Support
The Makassar Livable City Plan (MLCP) is the pinnacle of AASCTF’s three-pronged approach, which also includes an urban situation assessment and an interactive urban development scenario e-report. More recently, however, the plan has shifted
into developing an MLCP prioritization platform that is more aligned to the smart city goal and adapts to citizens’ concerns. This proposed platform will integrate a stakeholder engagement dashboard and an urban planning-climate modeling tool and allow the city to prioritize interventions.

In relation to this, at the time of writing, AASCTF has been finalizing a citizen engagement survey that sought to gather people’s perceptions and priorities on urban services. The survey was conducted in five districts across a range of demographics, either through “COVID-19 safe” interviews in the streets or through online methods. According to one respondent, Arifuddin Rahman: “This kind of survey has actually never been done here before, so I think that’s very good. For the Makassar government, I hope the city can become better for the common folk.”

In addition to the survey, AASCTF is conducting focus group discussions with relevant city government agencies to get their views on the interactive urban development scenario e-report and start identifying potential interventions that would improve infrastructure and services in Makassar.

The climate modeling tool that is part of the prioritization platform can also support this planning front. Called Indra, the geospatial-enabled tool combines datasets on climate, natural hazards, infrastructure, and economic metrics that will allow local urban planners or other users to embed climate resilience considerations in city planning. This reinforces the city’s long-term thinking and helps to future-proof investments, whether from sea-level rise, heat stress impacts, and other similar factors.

Indra is a product of the Commonwealth Scientific and Industrial Research Organisation (CSIRO) of Australia and was showcased to members of the government and other stakeholders on 4 June 2021.

Similar to CSIRO, Singapore-based Future Cities Laboratory (FCL) has also been collaborating with AASCTF and the city government to strengthen resilience and increase livability. FCL supported the city at the height of the pandemic to pinpoint COVID-19 hotspots using spatial data analysis. They also implemented their design-research approach to tap available data to help the government plan their post-pandemic recovery. This work has been summed up in a video and booklet, Leveraging Spatial Data for Pandemic-Resilient Cities.

**Results and Impact**

The journey to becoming a world-class city is one for the long haul, involving multiple cycles of assessments, planning, fine-tuning, and implementation. AASCTF’s work is still in progress and the upcoming MLCP prioritization platform will only be a stop in that journey.

The platform is expected to contribute to Makassar’s ongoing revision of its Medium-Term Development Plan. It will also promote cross-sector transformation projects and include a roadmap to guide government agencies on how to apply the recommendations.

With the MLCP prioritization platform and other smart interventions, the city of Makassar is on the right direction and in time, a sombere and smart city should be in sight.
Background

Never before has education been transformed in nearly an instant. The COVID-19 pandemic has brought digital learning to the fore—and not without challenges. However, in the city of Kaysone Phomvihane in the Lao People’s Democratic Republic (Lao PDR), this shift to e-learning could soon be raised a notch higher.

The Asian Development Bank (ADB) and the Australian Government’s Department of Foreign Affairs and Trade (DFAT), through AASCTF, has been working with Kaysone to develop a smart learning and employment service platform that will help students obtain the necessary skills required by the labor market. This will not only give students a better chance at employment, but also reduce the misalignment between the education and industry sectors, raise the quality of the workforce, and enhance business efficiency, leading to economic growth in the city and country.

According to Phanomkone Daralasmy, Vice-Director at the Savan-Seno Special Economic Zone (SSEZ), the first SEZ in the country that is located in Kaysone and part of an important economic corridor in the Greater Mekong Subregion, it has been “very challenging to train people with limited facilities and meet the high requirement of the firms in the SSEZ.” While there are training centers, he adds, these are of moderate standards and unlike those found in neighboring countries.

How UFPF Provided Support

The smart learning platform considers the concerns of the government, private sector, and academia in Kaysone, and was conceptualized with their inputs to bridge the divide. The platform also aims to create a more formal urban employment landscape that can help attract foreign investments.
“We know that the students lack practical skills,” shares Sitha Khemmarath, Associate Professor and Vice-President at Savannakhet University. “This project will help develop on-boarding tools for students.”

The platform, currently at prefeasibility stage, capitalizes on digital solutions like gamification and various e-learning modules. The platform will be web-based, packaged in a simple, user-friendly, interactive interface. Students and jobseekers will be able to learn essential skills such as communication, time management, critical thinking, goal-setting, conflict and risk management, and problem solving, among others. Additionally, the digital tools can provide a virtual tour of the work environment to give future employees a sense of familiarity, which can allow employers, on the other hand, to minimize the time needed for orientation.

Results and Impact

Aside from developing the smart learning platform concept and sample e-learning modules, the overall AASCTF project included a needs assessment and a viability and sustainability analysis. The project is expected to be further refined and potentially undertaken as an ADB investment.

For now, some students at Savannakhet University see the smart learning platform as a means to start their careers. “The project will help us get prepared for employment, to know and understand what the job requirements are,” says Pheutsaphar.²

Palita, a fellow university student, has an optimistic outlook. “I think this project will make looking for a job easier, helping us become more prepared and more confident in ourselves.”

Palita (left) and Pheutsaphar (right), students from Savannakhet University, shared their views on the learning platform being developed with AASCTF support.

² Watch the potential beneficiaries and other stakeholders in this project video supported by AASCTF: https://www.adb.org/news/videos/digital-tools-help-students-reach-labor-market-lao-pdr.
Background

Cities around the world are still struggling with the pandemic. The recovery phase will most likely be much longer and more challenging than initially expected, especially in developing nations where vaccine rollouts have been lagging behind due to various challenges—all while new COVID-19 strains and other diseases are rapidly emerging. The current disruption in health and other social services has already exacerbated the inequalities and hardships faced by already vulnerable groups, particularly the poor, elderly, persons with disabilities, and women.

Consequently, many cities will have to develop new short- and long-term means of safeguarding citizens’ health and livelihoods, which takes into consideration the need for continued social distancing, availability of reliable and accessible urban and social services, and protective measures for the most vulnerable. Digitalization and online/touchless services have proved to be crucial components in supporting social/healthcare systems and communications with citizens during the pandemic. These solutions are expected to remain a key feature of truly future-proof and pandemic-resilient cities under “the new normal”. But to be truly resilient and smart, cities need to prioritize accessibility and inclusivity of these solutions.

How UFPF Provided Support

Adjusting to “the new normal” in the post-COVID era and creating a gender and socially inclusive resilient society requires new ideas and smart solutions. Through the AASCTF Smart Cities Datathon,
ADB, and DFAT challenged innovators around the world to develop digital solutions that can be used to build back smarter and make cities more livable.

The Datathon received a total of 63 entries, which offered digital solutions focused on ensuring that vulnerable groups get reliable access to urban services and amenities and financial services.

From the 63 entries received, the top four solutions were identified after two rounds of screening and mentoring with the help of a panel of judges made up of representatives from ADB, DFAT, the City of Bandung (Indonesia), Amazon Web Services, Ramboll, Smart City Council Australia New Zealand, and UN-Habitat.

The Datathon awarded a total of $30,000 in seed funding to the teams with the best solution. This seed funding aims to encourage participating teams to ‘think globally’ with their ideas/solutions. This seed funding will also enable the winning team to test and scale their proposed solutions in a real-world setting.

Results and Impact

Aeloi Technologies emerged as the winner of the first-ever AASCTF Datathon and will receive $20,000 in seed funding. Through the use of digital tokens, Aeloi’s software helps microfinance institutions de-risk loans through a real-time audit for tracking their funds while increasing the borrowers’ digital financial footprints and credibility.

Alaga Health, meanwhile, was named as the runner-up and will receive $10,000 in seed funding. Alaga Health is the Philippines’ first digital health marketplace and health service app.
Background

Bangladesh is one of the most vulnerable countries in the world to climate change, facing risks from flooding, tropical cyclones and associated hazards, and drought.

ADB, through the use of the Spatial Data Analysis Explorer (SPADE) platform and consultancy services through TA 9513 Advancing Inclusive and Resilient Urban Development Targeted at the Urban Poor, supported the integration of climate-risk informed project design for the proposed Second Coastal Towns Environmental Improvement Sector Project (SCTEIP).

SCTEIP, planned for Board Approval in 2022, aims to enhance the economic development and livability of 22 coastal towns in Bangladesh by enhancing their climate disaster resilience through the provision of infrastructure, development of resilient livelihood opportunities and improving institutional capacity and governance to integrate climate change and disaster management into their urban development plans. The project builds upon the first CTEIP project which also focused on improving the climate resilience and disaster preparedness of 10 vulnerable coastal towns in Bangladesh through the provision of climate-resilient municipal infrastructure and institutional capacity building.

A climate risk and vulnerability analysis carried out in 2015 identified the 10 towns currently under Phase 1 of CTEIP as among the most vulnerable coastal towns in Bangladesh. With the increasing related damages suffered by these areas over the past years, it was acknowledged that ensuing infrastructure projects need to adopt a wider and more integrated approach to addressing climate risks, climate proofing not only...
the design of civil works projects, but also taking into consideration adverse impacts on future urban growth, economic development, and livelihood, among others. Greater availability of climate information, coupled with increased advancements in climate risk analysis and earth-observation technology, has made it possible to incorporate such concerns into project design.

TA 9513 Advancing Inclusive and Resilient Urban Development Targeted at the Urban Poor allocated resources to carry out a climate risk and vulnerability analysis for the 22 towns under SCTEIP. In particular, the team was asked to focus on assessing the specific climate risks faced by each town (flooding, storm surge, drought, etc.), and the potential extent of future damages, as a means to determine the appropriate investments for each town and the proper siting for these. SPADE², developed by USG together with the operations departments, was used as a platform to determine the risks faced by the different towns.

Figure 1 shows a time-lapse analysis (50 to 100 year period) of the extent of inland flooding from a storm surge caused by a cyclone. The image shows that some areas can experience more than 5 meters of flooding in the event of such a climate event. This detailed level of analysis provides project officers a more granular understanding of the specific climate risks faced by each pourashava (Figure 2), allowing a more targeted approach to identifying needed investments and interventions for each, as well as determining the impacts of climate events on a city/area wide scale and how to address them. Figure 3 shows an example of how this information can be translated to specific projects/sites. The red dot shows the location of a proposed cyclone shelter. By overlaying this information on the climate risk and vulnerability analysis on SPADE, one can simulate scenarios on the safety of the cyclone shelter and its accessibility to communities within its vicinity under various circumstances of rainfall over time.

Figure 1. Flooding Extent for 50-100 Year Period generated through SPADE

Figure 2. High-level overview of climate vulnerability of Pourashavas based on the analysis done with SPADE

Figure 3: Proposed Location of Planned Cyclone Shelter

² SPADE is a web-based open-sourced geographic information systems (GIS) platform that has the capacity to generate analysis and visualization of various data layers (including climate information, socio-economic data, geospatial information, etc.) to support analysis. It is recognized as ADBs short-term GIS solution, together with Sharepoint, as it works toward establishing a bank-wide GIS platform.
Building climate resilience of at-risk cities. The Urban Climate Change Resilience Trust Fund has been supporting projects that help reduce the risks of the poor and the vulnerable.
### About UCCRTF

The Urban Climate Change Resilience Trust Fund (UCCRTF) was established in 2013 to help 25 fast-growing cities in Asia reduce the risks people face from floods, storms, droughts, and other climate-related impacts through better planning and design of infrastructure.

The fund prioritizes investments that especially target the poor and vulnerable in eight ADB developing member countries (DMCs): Bangladesh, India, Indonesia, Myanmar, Nepal, Pakistan, the Philippines, and Viet Nam.

UCCRTF is a $150 million multidonor trust fund with contributions from the Governments of the United Kingdom and Switzerland and the Rockefeller Foundation. The trust fund is operational until December 2022.

### Trust Fund Amount

<table>
<thead>
<tr>
<th></th>
<th>Total amount ($ million)</th>
<th>Share in UFPF</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>149.36</td>
<td>76.95%</td>
</tr>
</tbody>
</table>

### Financial Status ($ million)

<table>
<thead>
<tr>
<th></th>
<th>Total approved(^a)</th>
<th>Total committed(^b)</th>
<th>Total disbursed</th>
</tr>
</thead>
<tbody>
<tr>
<td>Approval status</td>
<td>119.08</td>
<td>109.50</td>
<td>45.03</td>
</tr>
</tbody>
</table>

\(^a\) Approved by UFPF
\(^b\) Approved and effective

### Trust Fund Overview

#### Projects approved (cumulative)

<table>
<thead>
<tr>
<th></th>
<th>Investment grants</th>
<th>TA projects</th>
<th>Direct charge activities</th>
</tr>
</thead>
<tbody>
<tr>
<td>Count</td>
<td>10</td>
<td>32</td>
<td>25</td>
</tr>
<tr>
<td>Projects</td>
<td>67</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

#### Projects completed (cumulative)

<table>
<thead>
<tr>
<th></th>
<th>TA project</th>
<th>Direct charge activities</th>
</tr>
</thead>
<tbody>
<tr>
<td>Count</td>
<td>5</td>
<td>17</td>
</tr>
<tr>
<td>Activities</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
**Fund Usage by Modality**
(cumulative)

- TA $73.26 M (61%)
- IG $41.60 M (35%)
- DC $4.22 M (4%)

**Fund Allocation by Department**
(cumulative)

- REG $40.98 M (34.4%)
- SERD $39.97 M (33.6%)
- SARD $24.73 (20.8%)
- CWRD $7.29 (6.1%)
- PSOD $5.73 (4.8%)
- OPPP $0.39 (0.3%)
The Urban Climate Change Resilience Trust Fund (UCCRTF) approved one project within the first six months of 2021 for an amount of $225,000, while two technical assistance projects were closed. With the deadline for issuing contracts by 31 December 2021 fast approaching, UCCRTF will only approve funding for new projects that can meet this timeframe. Instead, the trust fund is focusing on the delivery of the ongoing projects and capturing the results and lessons emerging therein.

In January, UCCRTF approved a direct charge (DC) application of $225,000 for the project Promoting Urban Climate Change Resilience through Strengthening UCCRTF Thematic approach. The DC will be used for the continuation of support from UCCRTF Secretariat and the design of UCCRTF Phase 2.

Two technical assistance (TA) projects were closed in March. Through the $5 million TA8556 Support for the Cities Development Initiative Asia (CDIA), UCCRTF financed the preparation of nine project preparation studies with a cost of $3.3 million, have been linked to downstream financing with a total amount of $535.2 million in loans and $57.4 million in government counterpart financing. TA9593 Revitalization of Informal Settlements and their Environments (RISE) knowledge and support technical assistance financed the construction of a pilot in one community in Makassar, Indonesia. A similar project implemented in Fiji was financed by UEIF. The project demonstrates the applicability of using non-networked nature-based solutions for the provision of water supply, drainage and sanitation services in informal settlements. The approach and experiences were documented in a three-volume knowledge product launched by ADB Vice-President for Knowledge Management and Sustainable Development Bambang Susantono on 25 March 2021.

With the continued restrictions posed by COVID-19 worldwide, the pace of activities followed an up-down cycle, mimicking the rise and fall of infections in the region. Technology facilitated the ease of organizing online events, supporting wider dissemination of trust fund activities and participation in a number of internal and external events including the Climate Adaptation Summit (January), Asia Pacific Adaptation Network Conference (March), ADB E-marketplace (March) and Sanitation Dialogue (April). Consulting services also managed to proceed but were affected by the lockdowns, prompting project officers to assign mainly national consultants to initiate some activities until the travel restrictions are lifted. While consulting services and events were able to continue in spite of COVID-19, disbursements against the project activities were greatly reduced due to minimal travel costs and other event related expenses. Civil works projects were most adversely affected with construction work commencing only in the last quarter of 2020. But despite this, four community-led projects in the Philippines managed to break ground and construction is moving ahead.

UCCRTF portfolio and tools have achieved an advanced level of maturity, gaining ground in terms of promoting a holistic resilience approach within ADB at various scales. To cite a few examples:

- UCCRTF is providing inputs to urban sector in the scale up climate finance and supporting the development of methodologies for Paris Agreement alignment and Climate Adaptation Finance in response to COP 26.
- The country level diagnostics work under UCCRTF is supporting the upstream identification of projects on air quality in Pakistan and work on urban poor resilience in Viet Nam is helping inform the Country Partnership Strategy.
- SPADE is now an ADB-wide Interim GIS tool and is supporting climate risk-informed planning and design for upcoming loan projects in Bangladesh, Indonesia, and Viet Nam.

In the remaining one and a half years of the trust fund, the team will focus on delivering the results and impacts envisioned by the financing partners. With many of the projects reaching maturity, substantive lessons are emerging and will be documented as the trust fund moves towards the closing. In the same way, some of the innovative approaches financed by UCCRTF have been increasingly recognized by the ADB community, which has requested for enhanced support from the trust fund. The Secretariat will aim to extend the reach of UCCRTF for these innovative non-UCCRTF projects within the remaining period.
Fund utilization remains a challenge, but the team continues to work closely with the Operations Department and other ADB units to determine the most opportune approaches to carry out these projects and use the approved amount to the maximum extent possible.

Projects Approved

- **Regional: Promoting Urban Climate Change Resilience through Strengthening UCCRTF Thematic Approach**
  - UCCRTF DC Support: $225,000

A direct charge amounting to $225,000 was approved in January for the continuation of support from UCCRTF secretariat and the design of URTF (2nd phase of UCCRTF). The primary activities to be carried out under this project shall involve: (i) project implementation; (ii) documentation of results from UCCRTF supported projects; and (iii) knowledge and lessons capture/sharing towards integrating urban climate change resilience in ADB projects.

The DC, which shall encompass the trust fund’s eight priority countries, seeks to improve integration of urban climate resilience in ADB urban operations by contributing the achievement of ADB Strategy 2030, particularly OP4 and OP3. It has the following outputs: (i) Climate resilience and thematic focuses of UCCRTF strengthened for ADB operations, and cities and DMCs supported by UCCRTF; (ii) knowledge-capturing and results measurements enhanced for ADB operations, cities and DMCs supported by UCCRTF; and (iii) Urban Climate Change Resilience tools enhanced and disseminated within ADB projects.

Projects Completed

- **Regional: Supporting the Cities Development Initiative for Asia**
  - UCCRTF TA Support: $5,000,000

TA 8556: Supporting the Cities Development Initiative for Asia (CDIA) was the first TA project of the trust fund. CDIA had already been identified as a complementary mechanism for directing city level investments for building resilience even at the inception of UCCRTF, given their experience preparing feasibility studies and linking them to downstream financing.

For the duration of this project, CDIA produced nine project preparation studies, two of which were terminated at inception after it was determined that the proposed project was not viable. Part of the funds were also allocated to support capacity building activities for the cities supported by CDIA. The table below shows the list of CDIA-supported PPS and the linked downstream financing.
2. **Pakistan: Punjab Intermediate Cities Improvement Investment Project (PICIIP) Phase I Cities: Sahiwal, Sialkot**

   $625,093 Loan 3562 - Pakistan: Punjab Intermediate Cities Improvement Investment Project

   $200 million (loan)

3. **Indonesia: Sewerage System Development Project Cities: Banda Aceh, Bekasi, Mataram**

   $802,840 Loan 3545 - Indonesia: Accelerating Infrastructure Delivery through Better Engineering Services

   $148.2 million (loan)
   $19.4 million (government)

4. **Myanmar: Yangon Urban Services Improvement Project City: Yangon**

   $684,770 Loan 3984 - Myanmar: Yangon City Water Resilience Project

   $180 million (loan)
   $16 million (government)

5. **Philippines: Baguio Drainage and Wastewater Management Project, Philippines City: Baguio**

   $231,536 Government financing

   $20 million (government)

6. **Philippines: San Fernando Drainage and Wastewater Management City: San Fernando**

   $231,536 Government financing

   $2 million (government)

**TOTAL**

$3,325,688

$535.2 million (loan)

$57.4 million (government)

CDIA and UCCRTF collaborated on several projects, combining the planning and climate change considerations vis-à-vis prioritizing infrastructure investments. Under the Kyber Pakhtunhwa Inclusive Urban Growth Program, UCCRTF financed the preparation of city and provincial level climate risk and vulnerability analysis, on the basis of which CDIA identified the priority infrastructure investments for the respective cities. This was further supplemented with the conduct of a Resilience Academy workshop in 2018 for 6 KP cities. For the PICIIP Phase 1 Project, UCCRTF complemented the $7 million loan with a $2 million investment grant to ensure that climate change resilience features are integrated into the detailed engineering designs for the ensuing investment projects. In the Yangon Urban Services Improvement Project, UCCRTF financed a hydrology study to ensure that the water supply project covered in the PPS would have sufficient bulk water supply to cover the future requirements of the city, taking into consideration climate change impacts, and population growth.

**Indonesia: Revitalization of Informal Settlements and their Environments using a Water-Sensitive Approach**

UCCRTF TA Support: $196,000, with cofinancing from UEIF for Fiji

The knowledge and support technical assistance (KSTA) for the Revitalization of Informal Settlements and their Environment (RISE) was completed in December 2020 with the demonstration site in Makassar, Indonesia having received UCCRTF support to demonstrate the effectiveness of a water-sensitive approach for wastewater treatment, flood risk reduction, and urban environment improvement using decentralized green infrastructure to biologically treat contaminated and polluted water.

Households in the Batua community now benefit from improved toilet facilities, greywater biofilters, rainwater tanks to augment water supply, stormwater drainage and the elevated pathways, which mean they no longer have to build bamboo rafts during monsoon season. The UCCRTF contribution were channeled towards community engagement, detailed engineering design, preparation of bidding documents, and construction supervision.
Furthermore, training for community stakeholders built human and institutional capacity on operations and maintenance, and three knowledge products were published to capture and disseminate the technology and approach. The RISE pilot is helping inform the replication across six other informal settlements in Makassar with downstream financing of A$4 million from the Australian Government. The KSTA manifested the significant value in partnering with academia, local government and communities in testing and providing “proof of concept” for non-business-as-usual projects. This KSTA offers critical insights for ADB on integrating nature-based solutions.

### Support to Knowledge Sharing and Capacity Building

The work from home arrangements posed by the COVID-19 pandemic substantially increased opportunities for knowledge sharing and capacity building activities with technology allowing both participants and event organizers alike to reach out to one another across time zones with the click of a button. Although it still cannot substitute for the more meaningful exchanges provided by face-to-face interactions, virtual meeting options have become a suitable alternative at higher convenience and lower costs.

UCCRTF saw increased participation in international conferences where the trust fund had the opportunity to showcase some of its projects. In January, the trust fund co-organized a side event at the Climate Adaptation Summit (CAS) jointly with Wetlands International Eco-shape, One Architecture, and Monash University. In the same month, UCCRTF community-led projects and approaches for measuring reduced loss were featured in the launch of the Community Resilience Partnership Program (CRPP) organized by the CCDRM Thematic Group in the Annual Gobeshona Conference. Two UCCRTF-supported projects were featured in separate sessions in the 7th Annual Asia Pacific Climate Change Adaptation Forum. The Trade Finance Project (TA 9669) presented their work in integrating social and environmental safeguards in the project’s partner banks and their clients, featuring the project’s interventions in the India garment industry to prevent illegal forced labor. TA 9329 also featured how locally-led adaptation that can inspire ADB and Developing Member Countries (DMCs) to channel climate finance to communities. The SPADE platform was featured as a tool for supporting design of citywide inclusive sanitation in FSMA Conference Spotlight Series 5 on Climate Resilient Sanitation in low-income cities.

ADB Conferences and internal events/webinars were organized in collaboration with ADB operations departments (South Asia), sector (water, health) and thematic groups (social development, CCDRM), underlining the cross sectoral and cross-thematic approaches of UCCRTF in building resilience into ADB projects. In March, UCCRTF supported the conduct of the first-ever E-marketplace, led by the South Asia Department, which is a dedicated online platform to bring together government officials, water services and management solutions providers, development professionals, academia, and the private sector from ADB’s DMCs with providers of digital technology and best practices on products, tools and technologies for delivering smart, resilient, safe, and inclusive water management and services delivery. Another first for this year was the Annual ADB Sanitation Dialogue organized by the Water Sector Group which was held online over a two-week period focusing on approaches to integrate citywide inclusive sanitation in sanitation projects. Recognizing that resilience goes beyond climate change, UCCRTF also supports activities to ensure inclusivity in planning and project design. In May, the trust fund collaborated with the Social Development Thematic Group (SDTG) in the webinar on Accessibility and Inclusive Design in Ulaanbaatar: Creating More Inclusive Cities for People with Disabilities in Mongolia to launch the study on the same theme in the interest of sharing the learnings from this initiative among other UCCRTF priority countries and other DMCs. UCCRTF was represented in this year’s Annual ADB Meeting of Board of Governors where one of its civil society organization (CSO) partners under TA 9329 was invited to be part of a dialogue with ADB President Masatsuku Asagawa.

UCCRTF launched its webinar series Urban Resilience Journeys in February during the event: Planning for Healthy and Resilient Cities which was
co-organized with the Health Sector Group. Two other webinars are planned for the remainder of 2021. In collaboration with the CCRDM Thematic Group, the trust fund also supported the design and conduct of the webinar on Resilient Infrastructure Towards Resilient Water Systems, which is part of the thematic group’s webinar series on Resilient Infrastructure. March and April included the launching event of two knowledge products which were supported by UCCRTF. A three-part knowledge series emerging from the Revitalization of Informal Settlements and their Environments (RISE) pilot under TA 9593 was launched on 25 March. In the following month, the Publication on Creating Livable Asian Cities was launched. UCCRTF contributed to three chapters of this document.

During the reporting period, UCCRTF supported the development and publication of 26 knowledge products. The trust fund continues with the publication of the UCCRTF Newsletter, published in January and April, for which subscribers have reached more than 1,000. Fourteen Event Snapshots were also produced within the same period, featuring the events supported by the trust fund. The list of knowledge products and the links to the publications and videos are provided below:

- RISE – ADB Knowledge Product series: Water-sensitive Informal Settlement Upgrading
  - Part 1: Overall Principles and Approach
  - Part 2: Co-design of water-sensitive settlement upgrading
  - Part 3: Description of technologies
- Creating Livable Asian Cities Publication
- Planning for Healthy and Resilient Cities Framework and Practitioner Guide
- 100 Climate Actions from Cities in Asia and the Pacific
- Three Project Profiles on Nature-Based Solutions Revitalization of Informal Settlements and Their Environments (RISE) Using a Water-Sensitive Approach. Reviewing the Master Plan of New Clark City (NCC), and Making Recommendations for Nature-Based Solutions to Give More Room to the River, and Water Supply Study Ho Chi Minh City Wastewater and Drainage System Improvement Project.
- UCCRTF Brochure
- Videos:
  - Nature-based Solutions (Climate Adaptation Summit)
  - ADB and Habitat for Humanity: Helping Vulnerable communities, One Home at a Time

International Events
- CAS Summit (25–26 January)
- Gobeshona Conference (18–24 January)
- 7th Asia Pacific Climate Change Adaptation Forum (12 March)
  - Climate Finance for Catalysing Transformative Economic Development
  - Partners not Beneficiaries – Empowering Local Communities as Climate Finance Actors
- FSMA Conference Spotlight Series 5: Climate Resilient Sanitation in Low-income Cities (2 June)

ADB Conferences
- E-marketplace, (15–19 March)
- ADB Sanitation Dialogue (12–22 April)
  - Accessiblility and Inclusive Design in Ulaanbaatar: Creating More Inclusive Cities for People with Disabilities in Mongolia (6 May)
- 54th Annual ADB Meeting of Board of Governors: Meeting between Civil Society Organizations and ADB Management, where UCCRTF coordinated the inclusion of its implementation partner in TA 9329 in the panel (3 May)

ADB Webinars
- Webinar on Planning for Healthy and Resilient Cities (11 February)
- Resilient Infrastructure Series: Resilient Infrastructure Towards Resilient Water Systems (25 February)
- RISE Knowledge Products Launch (25 March)
- VPKM Livable Cities Book Launch (29 April)
Maintaining Relations with Financing Partners

UCCRTF organized an online meeting with its Financing Partners on 23 June 2021. Robert Guild, Chief Sector Officer, welcomed the participants, which included the following: Shan Mitra, Kanupriya Sharma (FCDO); Roman Windisch (SECO); Deepali Kanna and Abhivav Verma (The Rockefeller Foundation); and Manoj Sharma, Virinder Sharma, Rajeev Prasad Singh, and Michelle Buen Tumilba (ADB). The agenda items included: (i) UCCRTF results and impacts; (ii) update on financial status and projections; (iii) UCCRTF contributions to ADB Corporate goals, DMC strategies, Joint working with FPs, key takeaways and plans for 2021-2022; and (iv) Status of UCCRTF Phase 2.

(i) UCCRTF Annual Report

- The Financing Partners appreciated the comprehensive report, which highlights the achievements of UCCRTF supported projects and details the trust fund’s contributions to ADB’s knowledge dissemination, resilience measurement and how UCCRTF is taking all this forward for higher and long-term impacts. They also noted that the trust fund managed to achieve remarkable achievements on several parameters despite the challenges posed by the COVID-19 pandemic.
- The UCCRTF Secretariat presented the trust fund’s achievements by highlighting how it is aligned with the ADB resilience framework and detailing the range of program activities—spanning upstream (DMC policies, partnerships, strategies), midstream (project preparation) to downstream (implementation support and demonstration) activities along the ADB project cycle.
- With the UCCRTF portfolio reaching maturity, with a substantive number of projects already under implementation, the Secretariat highlighted the following achievements:
  - Support for the integration of climate resilience and inclusiveness in project concept and design, combing hard and soft measures in projects such as smart water supply and sanitation (Philippines, Pakistan, Viet Nam); solid waste management (India and Pakistan); energy efficient and smart streetlighting (Viet Nam); clean and low-carbon energy pilots (India and Indonesia), e-mobility (Indonesia, Philippines, and India) and solar floating park (India). SPADE has been instrumental in supporting the analysis and integration of climate change considerations into project design and has been recognized as the ADB-wide interim GIS solution.
  - Demonstrating multiple benefits and effectiveness of nature positive investment and ecosystem services in the areas of air quality monitoring and action planning for cities (Pakistan, Viet Nam, Bangladesh); nature-based waterfront development (Philippines); upgrading of informal settlements (Indonesia); watershed restoration (India), and urban green spaces (Viet Nam and Pakistan).
  - Working with the private sector, business and financial services to leverage capacity to scale-up climate actions. The work under this component includes innovative work in a disaster risk financing pilot in Viet Nam; microfinance for enhancing resilience of peri-urban areas; green affordable housing in India; PPP arrangements for water supply projects in Bangladesh; and enhancing social and environmental safeguards for partner banks of the trad finance program.
  - Support DMCs in identifying resilience investment for building resilience of poor and vulnerable communities, as well as promoting inclusive process for project implementation. Urban poor resilience studies in Bangladesh, Indonesia, and the Philippines have been completed and supporting design of new loan projects; training and interventions
to promote inclusive design in projects; preparation of a national health facilities development plan in the Philippines; and, integrating safeguard measures to prevent illegal forced labor in textile value chains in India. In spite of the challenges posed by the pandemic, civil works for four community-led projects in the Philippines are nearing completion.

- The trust fund continues to face challenges in fund utilization due to delays and reduced costs brought forth by the COVID-19 pandemic. The Secretariat has developed several scenarios to determine how the disbursement of funds will pan out in the next two years, which may have implications on the transfer of remaining funds from FCDO. UCCRTF has assured the FPs that close monitoring of the portfolio is a priority and will seek strategies jointly with the operations department to expedite and maximize the use of the funds.

- With the trust fund already having demonstrated some successes and proof of concept in several projects, it has gained further traction in contributing to ADB corporate goals including: provision of policy and strategy inputs for the development of methodologies for Paris Agreement Alignment (PAA); working with sector and thematic groups on developing guidance notes and new policies; and, the integrated safeguards monitoring system (ISMS) which aims to link integrated risks (social and environmental) with cross-sectoral themes (labor, gender, climate and occupational health).

(ii) Status of UCCRTF Phase 2

- The UCCRTF Phase 2 preparation process started more than a year ago, and it has experienced challenges in terms of internal approvals due to the DFID/FCDO departmental merger, timing of FCDO budgeting, and the COVID-19 pandemic which has affected the overall funding envelopes. Despite the challenges, FCDO commitment to increasing the volume of UK climate finance remains firm.

- The approval process for the CARA project is now progressing. If approved, it will provide financing for UCCRTF Phase 2 and the CRPP.

Plans for 2021

The Secretariat will focus on close monitoring of COVID-19 impacts on projects. The UCCRTF Secretariat will also explore options with relevant project officers to maximize the savings due to reduced costs for consultants, travel, and events.

The Secretariat will also follow up with directors, chiefs of sectors and thematic groups, project officers in ADB to review high-risk or red flag project slippages and consider partial/full grant cancellation or reallocation.

Included in the remaining plans for 2021 is to document UCCRTF value addition and bank-wide dissemination of cross-sector and thematic work. Particularly, the Secretariat will work to strengthen knowledge sharing through webinars, event snapshots, guidance notes, and other knowledge products. It will also expand opportunities to share lessons with non-UCCRTF countries.

The Secretariat will also increase collaboration and collaboration with all financing partners for UCCRTF Phase 2. It will also work to incorporate lessons in the design of UCCRTF Phase 2 and CRPP while promoting wider replications of the trust fund’s work at the regional and global level such as COP 26 events.
Preparing for bankable projects. ADB, through the Cities Development Initiative for Asia Trust Fund, is helping its developing member countries prepare urban infrastructure projects that are both sustainable and bankable.
About CDIA

In October 2017, the Asian Development Bank (ADB) approved the establishment of the Cities Development Initiative for Asia (CDIA) Trust Fund under the Urban Financing Partnership Facility (UFPF).

The overall objective of the fund is to support cities in ADB’s developing member countries (DMCs) to prepare urban infrastructure investments and link these to financing. Specifically, the objectives are to: (i) assist secondary Asia-Pacific cities to prepare sustainable and bankable infrastructure projects; (ii) ensure financing for these urban infrastructure projects is secured; and, (iii) strengthen individual and organizational capacities of DMC stakeholders related to the preparation and financing of high priority urban infrastructure investments.

The fund builds on the 10-year track record of the CDIA program in supporting cities in Asia and the Pacific to bridge the gap between their development plans and the implementation of their infrastructure investments through technical assistance in project preparation and capacity building activities. Using a demand-driven approach, CDIA supports the identification and development of urban investment projects that emphasize two or more of the following impact areas: urban environmental improvement, urban poverty reduction, climate change mitigation and adaptation, and improved governance.

---

Trust Fund Amount

| Total amount ($ million) | 9.08 |
| Share in UFPF | 4.68% |

Financial Status ($ million)

| Total committed | 7.59 |
| Total disbursed | 1.68 |

---

Trust Fund Overview

Project preparation studies (PPSs) commissioned (cumulative)

- 99 completed
- 41 linked to ADB financing
- 42 linked to non-ADB financing
- 11.4 total financing secured ($ billion)

PPSs commissioned (January to June 2021)

- 1 completed
- 2 linked to ADB financing
- 2 linked to non-ADB financing
- 0.23 total financing secured ($ billion)
Approved PPS by Region (cumulative)

Amount of CDIA Support by Region (cumulative)

Approved Projects by Sector (cumulative)

PPS Linked to Finance by Region (cumulative)
In line with CDIA Strategy 2018-2022, CDIA continued to work closely with secondary cities in Asia and the Pacific to meet their urban infrastructure needs by providing technical assistance in the preparation of sustainable and bankable infrastructure projects, linking cities with financing sources, and strengthening local capacities to develop and implement high priority investments.

As of June 2021, CDIA has supported 117 cities in 21 developing member countries (DMCs) in the conduct of PPSs of various infrastructure projects. As a result of its city interventions, 83 PPSs covering 162 projects in 93 cities have been successfully linked to an estimated $11.4 billion worth of investments.

By region, Southeast Asia accounts for the biggest share of the total CDIA PPS support at 43%, followed by Central and West Asia (20%) and East Asia (19%). By infrastructure sector, wastewater management, water supply and urban transport account for almost 60% of total CDIA resources allocated to support PPS interventions.

Within the current CDIA five-year strategy period, CDIA has completed a total of 25 PPSs covering 64 infrastructure projects across 37 cities in 12 DMCs. During the same period, a total of 36 PPSs covering 82 infrastructure projects have been linked to downstream financing estimated at $3.8 billion.

During this reporting period, CDIA commenced with two tracer studies for the following PPSs: Green and Integrated Wastewater Management for San Fernando City in the Philippines and Pasar Johar Climate Proofing and Revitalization in Semarang City in Indonesia. Due the travel restrictions and lockdown measures brought about by the COVID-19 pandemic, these tracer studies are being carried out remotely using online platforms and mobilizing national consultants based in the two countries.

Finally, the external mid-term review (MTR) of the CDIA Strategy 2018-2022 is currently in the final report preparation stage. The MTR findings and recommendations were presented to the CDIA financing partners during their meeting last 24 June 2021. The MTR final report is expected to be disseminated to key program stakeholders in August 2021.

Projects Approved

Despite the challenges to program operations brought about by the COVID-19 pandemic, CDIA still managed to obtain the CDIA Trust Fund management approval of three city applications for PPS support for the following projects: (i) Chattogram Metropolitan Sewerage Project in Bangladesh; (ii) Local Devolution and Disaster Risk Reduction Management Program in the Philippines; and (iii) Tri-City Ferry System Project in the cities of Alaminos, Dagupan, and San Fernando in the Philippines.

Bangladesh: Chattogram Metropolitan Sewerage Project for North Kattoli Catchment

CDIA PPS Support: $700,000
Linked to AFD Loan: $180 million

The primary objective of the CDIA assistance is to prepare the feasibility study, preliminary design, and design-build (DB) or design-build-operate (DBO) tender documents for the proposed Chattogram Metropolitan Sewerage Project for North Kattoli Catchment, including climate change assessment, safeguard due diligence and financial/economic analysis necessary to facilitate the preparation of an AFD investment loan. The proposed project involves the construction of wastewater and faecal sludge collection and treatment infrastructure for the North Kattoli catchment. Specifically, the project intends to: (i) construct the sewerage system and wastewater treatment infrastructure for the North Kattoli catchment located in the northwest part of Chattogram City; and (ii) establish faecal sludge management facilities including on-site sanitation improvement wherever a sewerage facility cannot be provided because of constraints in infrastructure construction space.

Approved by CDIA Financing Partners in November 2017, the CDIA Strategy 2018-2022 defines the strategic orientation and work plan of CDIA for the period January 2018 to December 2022.
Philippines: Tri-City Ferry System Project
CDIA PPS Support: $500,000
Expected to be linked to Public-Private Partnership Financing: tbd

The CDIA-financed PPS aims to prepare, to feasibility level, infrastructure projects for the Tri-City Ferry System for the cities of Alaminos, Dagupan, and San Fernando, whose management and operation are to be taken up through PPP modality. One of the key outputs of the PPS is the preparation of PPP Call for Proposals. Among others, the key activities that will be supported by CDIA include: (i) feasibility study on the ferry terminal infrastructure in the three cities and the related and required auxiliary infrastructure; (ii) determination of the most appropriate business case for the development of ferry services that would make the project financially viable to the Government and private sector partner and would optimize economic impacts; (iii) assessment and analysis of the market as well as opportunities and major risks and their impacts on the project; and (iv) drafting of bidding documents, including minimum performance standards and specifications (MPSS) and the PPP contract. A key objective of the PPS is to review and assess the institutional and financial aspects of the target cities, which will lead to the preparation of a capacity building and institutional development road map giving due consideration to capacity development needs of the three cities.

Philippines: Local Devolution and Disaster Risk Reduction Management Program
CDIA PPS Support: $500,000
Linked to AFD loan: tbd

The CDIA PPS support primarily aims to develop a Local Devolution and Disaster Risk Reduction and Management Program (LD-DRRMP) that will help build DRRM and climate change adaptation capacity both at the national and local level. Moreover, the PPS will support the Department of the Interior and Local Government (DILG) in the ongoing DRRM reform programs, including the implementation of relevant interventions in the context of the full devolution of key national government functions to the local governments. The LD-DRRMP will serve as the basis for the approval by AFD of a policy-based loan (PBL) and an accompanying technical assistance (TA) grant for the development and improvement of DRRM and climate change adaptation tools, knowledge, and operational capacities of national agencies and local government units.

Projects Completed

During this reporting period, CDIA completed one PPS intervention on the Uzbekistan Integrated Urban Development Project covering the cities of Khiva, Djizzak, and Yangiyer in Uzbekistan. In addition, nine PPS interventions covering 13 cities were in various stages of implementation, of which four are pipelined for ADB loan, four are earmarked for AFD funding, and one is being prepared for public-private partnership financing.

Uzbekistan: Uzbekistan Integrated Urban Development Project
CDIA PPS Support: $650,000
Linked to ADB Loan: $100 million

CDIA supported the recently established Agency for Urbanization of the Uzbekistan Government in the preparation of pre-feasibility studies and outline designs, including outline financial/economic analysis and safeguard due diligence, to facilitate further feasibility level studies and subsequent preparation of the proposed ADB investment loan for the Integrated Urban Development Project (IUDP) covering the cities of Khiva, Djizzak, and Yangiyer. The CDIA work built on the recommendations of the country’s Urbanization Program with the selected cities serving as pilots for the integrated urban development approach. Priority sectors assessed
during the PPS included solid waste management, water supply, wastewater management, urban regeneration, and integrated capacity development. The PPS prepared integrated development projects in line with the over-arching objective to improve city livability and economic competitiveness. Institutional capacity at the city-level is relatively weak and hence CDIA has reviewed and assessed the institutional, financial, and other municipal governance aspects of each city. The key issues and constraints were identified and CDIA prepared a capacity building and institutional development program for inclusion in the downstream loan.

**Projects Linked to Financing**

In terms of linking projects to financing, four CDIA-supported PPS interventions were linked to downstream funding agencies in the first half of 2021 including: (i) Additional Financing – Dushanbe Water Supply and Sanitation Project in Tajikistan; (ii) Georgia Livable Cities in Tbilisi, Georgia; (iii) Panaji 24/7 Water Supply and Saint Inez Creek Rejuvenation Project in India; and (iv) Chattogram Metropolitan Sewerage Project for North Kattoli Catchment in Bangladesh. Key features of the two PPS interventions linked to ADB financing are highlighted below.

**Tajikistan: Additional Financing – Dushanbe Water Supply and Sanitation Project (AF-DWSSP)**

CDIA PPS Support: $100,000  
Linked to ADB Loan: $35 million

The primary objective of the CDIA-financed PPS is to prepare updated technical feasibility and preliminary engineering designs of the water supply and sanitation (WSS) infrastructure elements of the AF-DWSSP for ADB grant financing. This will ensure that the prioritized WSS infrastructure investments identified under the previous CDIA PPS can be completed such as: (i) the rehabilitation and expansion of the urban water supply infrastructure including water transmission, pumping stations, storage, distribution system and customer connections; and (ii) the rehabilitation of portions of sewerage main pipeline as well as the expansion of the sewerage system to unserved areas in Shomansur district. A key factor leading to CDIA's involvement in the project was the city's familiarity and trust with CDIA's work.

**Georgia: Georgia Livable Cities Project**

CDIA PPS Support: $500,000  
Linked to ADB Loan: $50 million

In support of the formulation of the proposed ADB Livable Cities Investment Program, CDIA will provide technical assistance in the preparation of feasibility studies and outline designs of key project components, including financial/economic analysis and safeguard due diligence, to facilitate downstream ADB loan document preparation. In line
with the overarching objectives of the ADB Livable Cities Investment Program and in support of the ongoing upgrading of Tbilisi’s public transportation systems and the steady shift to sustainable urban mobility, CDIA will provide assistance in: (i) conducting a pre-feasibility level assessment of the environs to all 23 metro stations with a view to improving linkages between the metro and the city through enhancements of pedestrian walkways, development of open spaces and leisure areas and the improvement of metro signage, safety and street lighting and (ii) further development to feasibility/preliminary design level of five prioritized metro station focused sub-projects, including outline social, environmental, financial and economic assessment.

Support to Capacity Building

In line with Strategy 2018-2022, CDIA continuously implemented the focused capacity development approach whereby capacity building support is fully integrated into CDIA's infrastructure project preparation activities. For this reporting period, institutional capacity assessments and capacity development road maps were prepared as part of CDIA’s support to the PPS on Urban Development and Climate Resilience in Bac Kan and Ha Nam Provinces (Viet Nam), PPS on Yerevan Sustainable Urban Transport Implementation Project (Armenia), and PPS on Local Devolution and DRRM Program (Philippines). In addition, training workshops on Climate Risk and Resilience were conducted in Bac Kan on 1 April 2021 and Ha Nam on 8 April.

Towards Indonesia’s infrastructure development. CDIA has collaborated with PT SMI in Indonesia to deliver a comprehensive capacity development program aimed at enhancing the project development and fund management capabilities of officials and staff of PT SMI.
2021 participated in by 41 project stakeholders, of which 17 were women. The onset of the pandemic did not curtail the conduct of the capacity development activities as training interventions were conducted online.

This reporting period also saw the active collaboration between CDIA and its national Project Development Facility (PDF) partners: (i) PT Sarana Multi Infrastruktur (PT SMI) in Indonesia and (ii) PPP Center in the Philippines. From March to May 2020, CDIA implemented the Stage 1 of the comprehensive capacity building intervention for PT SMI aimed at enhancing the capacity of the institution to provide project development services and ensure continuous contribution towards Indonesia’s infrastructure development. Adopting a virtual coffee meeting format, Stage 1 was designed to engage a large number of PT SMI officers/staff in an open discussion to stimulate the sharing and understanding of CDIA’s approaches and experiences in infrastructure project preparation. In light of PT SMI’s expanded mandate in public housing infrastructure, Stage 1 was culminated in a deep-dive session wherein ADB sector experts invited by CDIA shared their extensive knowledge and experience in responding to the challenges in the housing sector. Specifically, the deep-dive session aimed at addressing PT SMI’s knowledge gaps in the field of housing development including management of PPP housing projects in its pipeline. Due to pandemic-related travel restrictions, training sessions were conducted online with a total of 139 participants, 81 of which were female.

Similarly, CDIA has continued its close collaboration with PPP Center in connection with the application for the PPS support for the Tri-City Ferry Terminal (TCFS) Project by the cities Alaminos, Dagupan, and San Fernando. During this reporting period, CDIA engaged the PPP Center in several coordination meetings to finalize the city application resulting in the approval of the application of PPS support by CDIA TF management last June 2021.

Finally, CDIA implemented the CDIA Virtual Clinics, a unique capacity development platform designed to enhance the knowledge of key city officials in drafting climate-resilient, bankable and sustainable project proposals in line with the priorities of downstream funders. Two clinics were conducted during this reporting period participated in by 41 key officials from five Philippine cities, namely: Baguio, Dagupan, Naga, Tacloban, and Zamboanga. Key to the initial success of the CDIA Virtual Clinics was the support provided by the PPP Center in the identification of participating cities and the active participation of its project officers in the virtual consultations with city stakeholders wherein the CDIA urban development experts provided practical recommendations on how to take the project proposals forward and improve its marketability among downstream funders.
Knowledge Products and Outreach Activities

CDIA launched new and exciting knowledge products and outreach activities in the first half of 2021, which enabled the CDIA team to engage with more cities and development partners.

1. CDIA Virtual Clinics

In this reporting period, CDIA with Clickable Impact Consulting Group, a Hanoi-based communications firm engaged by AFD to support the implementation of the roadmap, launched the CDIA Virtual Clinics, a unique capacity development opportunity offered to officials of secondary cities in Asia and the Pacific so they can get direct feedback on their planned infrastructure projects. The clinics are structured to give one-on-one consultation with the CDIA urban development team, and they offer a pathway for potential project preparation grant assistance. Nine clinics are planned to be conducted until mid-2022. The COVID-19 pandemic has restricted CDIA from conducting scoping missions, a key strategy for building our project pipeline. Through the Virtual Clinics, however, CDIA was able to turn this challenge into an opportunity to hold city introductions and project scoping discussions, build rapport with city officials and enhance their capacity to conceptualize bankable and climate-focused infrastructure projects. CDIA has set up three outreach campaigns to promote the clinics and drive registrations: (i) reengagement with previous city partners through a targeted email campaign; (ii) strategic outreach with network and development partners; and (iii) social media campaign across Twitter, LinkedIn, and Facebook starting second half of 2021. Strategic communication materials have been developed, including a dedicated landing page https://cdia.asia/virtual-clinics/, where cities can learn more about the event and register, agenda brochure and a video, and presentation decks, among others. CDIA intends to continue with its promotion campaigns in the coming months to generate more interest in the clinics, which, as the evaluation surveys have shown, city officials find very helpful in formulating their projects.

2. Animated Webpage on Cities and Climate Change

In March this year, CDIA launched an animated webpage to help cities find climate solutions. Visitors to the page will follow the journey of a cyclist as she travels through a city and learn how climate change impacts urban infrastructure and services. They will further see how CDIA can be a good starting point for cities wanting to develop a range of infrastructure solutions to increase their resilience.

3. Other Deliverables

CDIA published on its website six special feature articles to provide deeper insights on topics central to its work and how it adds value to cities through the PPSs. Examples of these articles can be found through the following links: Invisible Burden of Tourism on Infrastructure in Secondary Cities, World Environment Day 2021: The Role of Cities in Ecosystem Restoration, Sustainable Mobility Is About Moving People, Not Vehicles, Announcing CDIA’s Virtual Clinics: Helping Secondary Cities Develop Bankable Infrastructure Projects, How Nature-based Solutions Can Bring Climate Resilient Future to Cities, and Three Ways for Cities to Strengthen the Implementation of Global Sustainability Agendas. Continued throughout the current reporting period, CDIA has revitalized its presence on LinkedIn, Facebook and Twitter. During the first half of 2021, there has been a substantial growth of followers. From an audience size of 5,749 on 1 January 2021, it grew to 6,355 followers on 30 June – an increase of 606 new followers. Meanwhile, CDIA’s engagement rate of 5.02% on Facebook, 3.26% on LinkedIn and 1.45% on Twitter exceeded industry benchmarks of 1-2%, 2% and 0.5% respectively. The strategic frequency of topical posts, particularly in June brought about the steady increase in CDIA followers and engagement.

Technical notes to facilitate the development of bus priority measures

CDIA published in February the Technical Notes for Improving Tbilisi’s Urban Mobility as part of the outputs of the Tbilisi Hall Transport Department.
Advisory Project. Through these 20 technical notes, CDIA experts have documented the technical advice, international best practices, and pragmatic solutions they have proposed while working with Tbilisi’s Transport and Urban Development Agency from January to November 2020. They are primarily for Tbilisi as their reference in redesigning their core urban transport corridors, but CDIA further made them available online so that other transport planners can learn from the systematic approach CDIA has taken to help Tbilisi plan, design, and implement measures leading to a more sustainable mobility.

Partnership building activities

CDIA has engaged with various international and national organizations to explore possible partnerships for PPSs. It has ongoing discussions with: (i) Sustainable Design of Urban Mobility for Medium-sized Metropolitan Region for a potential PPS in Can Tho, Viet Nam and Thailand/Lao PDR cross-border ropeway; (ii) UNDP Global Centre for Technology, Innovation, and Sustainable Development for potential projects in Hue, Viet Nam as well as Moynaq and Namangan, Uzbekistan; (iii) Public-Private Partnership Center of the Philippines for the Tri-city Ferry System PPS in Dagupan City, Philippines, which was recently approved; and (iv) Alliance to End Plastic Waste for a solid waste management project in Vung Tao, Viet Nam.

It has likewise collaborated with various partners for the development of knowledge products. For example, CDIA has started contributing articles to Development Asia, ADB’s knowledge collaboration platform for sharing development experience and expertise, best practice, and technology relevant to the Sustainable Development Goals. So far, two articles have been published: A Smart Solution for Protecting River Ecosystems from Urban Pollution and Restoring a River the Natural Way. CDIA likewise contributed to the development of Accelerating Progress toward the SDGs through City-led Initiatives and its Urban October activities were included in UN-Habitat’s Urban October Report 2020. CDIA continues to look for partnership opportunities to be able to produce more knowledge products and share its experiences with more cities and development partners.

CDIA participated in several outreach activities to build its visibility and attract interest from cities. Urban Development Specialist Brian Capati served as a panelist in an energy efficiency and conservation forum held on 21 May for the Philippine local governments in the Visayas and Mindanao regions. It was organized by EU-supported Access to Sustainable Energy Programme with support from ADB, World Bank, and US Agency for International Development. Brian Capati and Capacity Development Specialist Kathleen Jovellanos also represented CDIA in the Asia-Pacific Mayors Academy forum on 4 May to present insights on preparing bankable projects and engage with city mayors on their prospective development projects. The event was organized by United Cities and Local Governments – Asia Pacific. Finally, Urban Development Specialist Fabienne Perucca has more actively engaged with Cities Climate Finance Leadership Alliance (CCFLA) as part of the project preparation action group.

Finally, CDIA has continued with its newsletters featuring CDIA projects, activities and milestones with the publication of three editions (February, April, and June). It has also continued with its regular updates via its website and social media pages.

How COVID-19 affected knowledge products and outreach activities

One of the most difficult challenges that CDIA has to deal with during the pandemic is the inability to do scoping missions and face-to-face engagement with partners, which are key to keeping a robust pipeline of projects. While COVID-19 has closed this important door, the Virtual Clinics have opened up a wider opportunity to build pipeline of projects and help city officials integrate bankability, climate resilience, and capacity development into their infrastructure projects.
About AASCTF

Approved on 1 April 2019, the ASEAN Australia Smart Cities Trust Fund (AASCTF) is a single-partner trust fund under the Urban Financing Partnership Facility (UFPF) with an indicative contribution from the Government of Australia, through its Department of Foreign Affairs and Trade (DFAT), for $14.04 million (AUS$ 20 million).

The envisioned impact of the AASCTF is aligned with ADB’s Strategy 2030, which includes an operational focus on building livable cities that are green, competitive, inclusive, and resilient, and ASEAN’s Sustainable Urbanization Strategy, which aims to promote high quality of life, competitive economies, and sustainable environments. Focus areas of AASCTF include adoption of digital solutions and improved planning systems, service delivery, and financial management in participating ASEAN cities.
As of June 2021, the total AASCTF commitments amounted to $10.27 million (about 74%), comprised of a $10 million technical assistance being managed through the Southeast Asia Urban Services Facility (SURF); and $0.27 million for two direct charge (DC) activities: (i) Asian Livable Cities Forum 2019: Digital Solutions for Livable Cities, and (ii) City Resource Mobilization Framework.

Total fund disbursement from all AASCTF-funded activities amounted to $1.76 million (17% of the committed amount), while uncommitted funds is estimated to be around $3.82 million.

There are no approved or completed projects noted for AASCTF during this reporting period.

**Plans for 2021**

As of June 2021, eight city intervention task orders have been endorsed. Development of project concepts and task orders for the remaining cities of Hue, Vietnam and Chonburi, Thailand is ongoing, with expected commencement of works in both cities within 2021.

Communication and knowledge sharing activities is expected to continue in 2021, including the production of the webinar series, digital solutions brief, social media posting, quarterly newsletters, video products, and several blogposts covering topics on gender equality and social inclusion, COVID-19, and smart financial management among others.

The rollout of the city twinning, and networking framework is also planned for the year targeting all 26 AASCTF participating cities.
Building sustainable cities. The Urban Environmental Infrastructure Fund focuses on funding basic economic infrastructure, which is crucial in making cities more livable.
### About UEIF

The Asian Development Bank (ADB) approved the establishment of the Urban Environmental Infrastructure Fund (UEIF) on 2 December 2009 under the Urban Financing Partnership Facility (UFPF). Parallel to this approval was the commitment of the Government of Sweden to contribute about $14 million for the UEIF, followed by an additional contribution of $7 million in 2011.

The fund supports ADB’s response to the huge unmet needs of the region for both basic and economic infrastructure, which under the then prevailing Strategy 2020 is a core business area of operations.

The objective of UEIF is to raise and invest cofinancing from development partner agencies to support the implementation of Strategy 2020 through the provision of grants for technical assistance and investments.

### Trust Fund Amount

<table>
<thead>
<tr>
<th>Total amount ($ million)</th>
<th>21.45</th>
</tr>
</thead>
<tbody>
<tr>
<td>Share in UFPF</td>
<td>11.05%</td>
</tr>
</tbody>
</table>

### Financial Status ($ million)

<table>
<thead>
<tr>
<th>Total committed&lt;sup&gt;a&lt;/sup&gt;</th>
<th>20.14</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total disbursed</td>
<td>16.65</td>
</tr>
</tbody>
</table>

<sup>a</sup> This is the total committed amount for investment grants, technical assistance projects, and direct charge activities.

### Trust Fund Overview

<table>
<thead>
<tr>
<th>Projects approved (cumulative)</th>
</tr>
</thead>
<tbody>
<tr>
<td>49</td>
</tr>
<tr>
<td>6 Investment grants</td>
</tr>
<tr>
<td>19 TA projects&lt;sup&gt;b&lt;/sup&gt;</td>
</tr>
<tr>
<td>24 Direct charge activities</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Projects completed (cumulative)</th>
</tr>
</thead>
<tbody>
<tr>
<td>41</td>
</tr>
<tr>
<td>3 Investment grants</td>
</tr>
<tr>
<td>17 TA projects&lt;sup&gt;b&lt;/sup&gt;</td>
</tr>
<tr>
<td>21 Direct charge activities</td>
</tr>
</tbody>
</table>

<sup>b</sup> Number of TA projects made consistent with SDPF methodology.
**Fund Usage by Activity**
(cumulative)

- IG $10.34 M (51%)
- TA $7.11 M (35%)
- DC $2.69 M (13%)

**Fund Allocation by Region**
(cumulative)

- EARD $6.58 M (33%)
- SERD $5.85 M (29%)
- SARD $3.24 M (16%)
- REG $2.60 M (13%)
- CWRD $1.87 M (9%)
As of June 2021, total UEIF commitments (net of savings) amounted to $20.14 million, composed of: $2.69 million for direct charge (DC) activities, $7.11 million for technical assistance (TA), and $10.34 million for investment grants (IG). These commitments constitute a total of 49 projects and activities: 6 grants, 19 TA projects, and 24 DC activities.

One DC-funded and three TA projects were financially closed/completed for the reporting period. This brings the total number of successfully completed projects and activities to 41 projects, to date: 21 projects under DC, 17 TA projects, and three IGs. Approvals for future projects has been put on hold as the Swedish International Development Cooperation Agency (SIDA) has expressed its intention of ending support to the trust fund.

Total fund disbursement from all UEIF-funded activities amounted to $16.65 million (80.65%). The figure showed an increase of nearly four percent in disbursements as compared with end of 2020 figure. Uncommitted funds, on the other hand, is estimated to be around $0.51 million resulting from savings generated from completed activities.

In terms of fund allocation among regional departments, East Asia still remained as the leading user of UEIF (33%), followed closely by Southeast Asia with 29%.

Projects Completed

**Philippines: Water District Development Sector Project**

**UEIF TA Support: $500,000**

The Local Water Utilities Administration (LWUA) requested a loan of $60 million from ADB’s ordinary capital resources under the Water District Development Sector Project (WDDSP). The sector loan, which was approved and committed in 2016, was designed to help finance the extension and rehabilitation of water supply systems and the construction of new sanitation facilities of less established water districts. Apart from the loan, a $2 million investment grant to subsidize the construction of new sanitation systems and a capacity development technical assistance (CDTA) were likewise provided.

The primary objective of the CDTA is to provide support to LWUA under the WDDSP to help it redefine its role in the water supply and sanitation sector. The undertaking involved the strategic business review of LWUA and consultations with key stakeholders to assist said agency in preparing an updated corporate plan aligned with the sector’s need. The CDTA also provided support to LWUA to:

(i) strengthen water district sustainability;
(ii) create enhanced awareness about sanitation and sustainable
local government unit-water district sanitation partnership; and (iii) generate political support of national, provincial, and municipal governments to maintain facilities and ensure cost recovery tariffs for enhanced sustainability.

In particular, the TA provided support to LWUA and 12 participating water districts in project management and capacity building. The capacity building program covered areas such as technical (planning design and methodologies), fund and financial management, procurement, environmental safeguard, social safeguard, gender and development as well as sanitation information, education, and communication, among others.

There have been frequent changes in the priority water districts to be covered under the project and it is one of the critical issues which contributed to the delay in implementation. The capacity building trainings for the water districts only started in the third quarter of 2019 upon LWUA’s confirmation of the final list of water districts included under WDDSP. The onset of the COVID-19 pandemic in the first quarter of 2020 resulted in face-to-face trainings being discouraged, which also presented a challenge but was successfully managed using available digital technology platforms (i.e., conduct of webinars, particularly for sanitation information and education campaign). Another challenge encountered was the limited number staff available within the current LWUA structure to fill up the required positions to establish the project management unit.

The CDTA was closed on 22 April 2021, with all expected deliverables completed. Financial closure of the project is currently being processed.

People’s Republic of China: Shaanxi Transport and Logistics Port
UEIF TA Support: $400,000

Approved in September 2018, the UEIF support for the TA project will be utilized to further enhance ADB’s value-addition in project design by bringing in international best practices in multimodal connection, logistics facility planning, information system development, and other demonstrative aspects. Enhanced efficiency in movement of goods will translate to reduced urban congestion and improved urban environment, which is consistent with Strategy 2030 operational priorities on making cities more livable and fostering regional cooperation and integration.

The fund was used to support the following activities implemented by the international consulting firm, David Lupton and Associates, Ltd.:

- Conduct of due diligence activities to prepare the Shaanxi Green Intelligent Transport and Logistics Management Demonstration Project for ADB’s approval (project scope, design, financial and economic analysis, feasibility studies). Said project was approved last
December 2020 and benefitted from the TA through the incorporation of innovative components in its project design;

• Conduct of surveys by IT experts to interview relevant stakeholders;

• Conduct of a workshop on “Innovations in planning and operations of logistics centres in China; lessons learned from international experiences”, which was attended by the executing and implementing agencies, project implementation entities, ADB, and the consulting team; and

• Conduct of tripartite workshops to discuss findings and progress of the project, which was attended by the executing and implementing agencies, project implementation entities, ADB, and consulting team.

The final report prepared under this activity provided valuable inputs to the feasibility study reports made by the government. The document also provided support in the preparation of due diligence reports. To date, final claims for services rendered are being processed.

Regional: Revitalization of Informal Settlements and their Environments using a Water-Sensitive Approach
UEIF TA Support: $329,000

The knowledge and support technical assistance (KSTA) supported the proposed Revitalization of Informal Settlements and their Environments using a Water-Sensitive Approach (RISE) Projects, which were undertaken in Makassar city, Indonesia, and in the Greater Suva Area (GSA), Fiji. The KSTA intended to demonstrate the effectiveness of a water-sensitive approach for wastewater treatment, flood risk reduction, and urban environment improvement using decentralized green infrastructure to biologically treat contaminated and polluted water. Experiences and lessons from the project activities undertaken through the KSTA informed the technical design, implementation arrangements, and cost estimates for larger-scale interventions that may be undertaken by ADB through investment projects. The KSTA also complemented the preparatory work undertaken through the knowledge partnership with the Cooperative Research Centre for Water Sensitive Cities.

The activity resulted in the following deliverables: (i) the supervision and project management of the construction of two demonstration sites, Batua (Makassar, Indonesia) and Tamavua-i-Wai (Suva, Fiji), which were co-designed with community, engineered, tendered, and implemented. The TA however did not cover the civil works; (ii) conduct of training workshops with local government and community stakeholders to strengthen human and...
institutional capacity for decentralised water and sanitation technologies and to provide a platform for discussion and agreement on the long-term operations and maintenance (O&M) of the systems; and (iii) preparation of three knowledge products, co-authored with ADB, to capture the lessons learned under the TA.

Regional: Knowledge Sharing Support for Urban Innovations and Livable Cities

UEIF DC Support: $225,000

The activity intends to contribute to the Livable Cities operational priority by providing resources to ADB staff, especially in Operations Departments and Sustainable Development and Climate Change Department (SDCC), and DMC partners for knowledge work to promote urban innovations and analytical work on Livable Cities. This will include, among others, lessons and good practices of ADB investment projects from operations departments pertaining to the Livable Cities operational priority, and cross-sharing and learning from sector and thematic groups in SDCC. It also aims to support sharing of experiences on urban innovations with other multilateral development banks (MDBs), as well as with international organizations, think-tanks, research institutes, universities, and cities.

The deliverables accomplished under the DC activity included the preparation of the 2019 Regional Development Banks publication and the recruitment of the following consultants: Urban Innovations and Knowledge Specialist, Research and Knowledge Development Specialist, Knowledge Sharing Specialist (Graphic Design), and Web Development Specialist.

Plans for 2021

Most of the activities programmed for 2021 are focused on ensuring that all ongoing initiatives (i.e., direct charges, technical assistance, and investment grants) are accomplished/concluded and, if possible, financial closed by the end of the year. Savings generated from all completed activities will be accounted for and promptly returned to SIDA by early 2022.
APPENDIX 1

Status of Ongoing UCCRTF-supported Projects

Investment Grants

- Bangladesh: Coastal Towns Environmental Improvement Project - Additional Financing
  UCCRTF IG Support: $6,000,000

The investment grant of $6 million, which financed the construction of cyclone shelters, emergency access roads, and drains in the towns of Bagerhat and Patuakhali in Bangladesh have achieved 100% and 82%, respectively. Work was on hold for almost nine months in 2020 due to the pandemic, and was further affected by Cyclone Amphan in May 2020. In spite of the delays, the PMU expects to complete the construction works in the next 6 months. The initial design for the integrated drainage plans for both towns have also been submitted to the PMU for review. The completion of these plans by June 2022 shall provide a good initiative to start-up Phase 2 of the CTEIP project, which is scheduled for loan approval next year. The Bagerhat and Patuakhali were identified as among the most vulnerable towns to climate change so the benefits from the investments were immediately felt, particularly during the recent cyclones. The cyclone shelters provided the additional space needed to accommodate evacuees due to the social distancing required, while the emergency access roads provided safe access to the shelters.

- Bangladesh: Urban Primary Healthcare Services Development Project - Additional Financing
  UCCRTF IG Support: $2,000,000

The project aims to improve the climate change resilience of urban primary healthcare centers (UPHC) in 24 partnership areas through the provision of facilities and equipment to allow them to operate during disasters, improve operational efficiency, and improve the capacity of the UPHC to deliver healthcare services. The delivery and installation of solar power systems, energy and water efficiency equipment, as well as other medical equipment have been completed and in use. However, the works for the provision of rainwater harvesting facilities in selected UPHCs was unable to proceed due to the site conditions.

In light of the loan and grant closing, the project management unit (PMU) has decided to not go ahead with this component. Instead, the PMU proposes to utilize the grant savings to support the government’s COVID-19 response measures as the situation continues to escalate in Bangladesh. In 2020, ADB had already approved the reallocation of a portion of the savings for pandemic response which were deployed for the purchase of personal protective equipment, handwashing stations, information awareness materials and training for doctors on diagnosing the symptoms.
The remaining training workshops planned under this grant are planned for completion in the last quarter of 2021, assuming the conditions improve.

**Pakistan: Khyber Pakhtunkhwa Cities Improvement Projects (KPCIP) Project Readiness Financing**

UCCRTF IG Support: $2,000,000

KPCIP PRF (Project readiness financing) is ADB’s first PRF, and the grant supported the preparation of future KPCIP loan project. The grant supported the completion of 26 detailed engineering design and due diligence assessments, through effective integration of urban climate change resilience principles into the design of key urban infrastructure and services such as water supply, sanitation, solid waste management, and green urban spaces (including pedestrianization of market area for women, and nature-based solutions), which will be implemented in five cities in KP province (Abbottabad, Mardan, Kohat, Peshawar, Mingora). The project will help the governments to improve the livability and climate resilience of up to 3.5 million people by expanding physical investments and providing institutional support, including the effective post-COVID-19 recovery. The KPCIP is expected to be effective in Q4 2021.

**Philippines: Marawi Reconstruction and Recovery Project**

UCCRTF IG Support: $5,000,000

At the review mission held in November 2020, it was agreed with the project implementing agency that an extension of closing date is required to (i) complete the civil works under both components; (ii) allow sufficient time for trainings and capacity building measures for MCWD and the local health workers; (iii) address the delays caused by COVID-19; (iv) disburse the project funds for the works and activities under the project; and (e) achieve project objectives, outputs, and targets included in the design and monitoring framework and gender action plan.

### A. Health Component

Although the delivery of ambulances has been completed, the construction of the health units has been impeded by slow procurement, specifically the need to undertake rebidding to comply with national procurement rules. Below are the construction targets for the health units as of May 2021:

<table>
<thead>
<tr>
<th>Health Facility</th>
<th>Targets</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lumbayanague Rural Health Unit (decided to be rebid)</td>
<td>September 2021 - issuance of notice to proceed</td>
</tr>
<tr>
<td></td>
<td>September 2021 - start date of construction</td>
</tr>
<tr>
<td></td>
<td>March 2022 - completion of construction</td>
</tr>
<tr>
<td>City Health Unit Marawi (if rebid)</td>
<td>September 2021 - issuance of notice to proceed</td>
</tr>
<tr>
<td></td>
<td>September 2021 - start date of construction</td>
</tr>
<tr>
<td></td>
<td>March 2022 - completion of construction</td>
</tr>
<tr>
<td>City Health Unit Marawi (if existing bid award</td>
<td>June 2021 - issuance of notice to proceed</td>
</tr>
<tr>
<td>recommendation is confirmed)</td>
<td>June 2021 - start date of construction</td>
</tr>
<tr>
<td></td>
<td>December 2021 - completion of construction</td>
</tr>
</tbody>
</table>

### B. Water and Sanitation Component

For the water supply component, the remaining civil works contract for water supply pipe laying was awarded in May 2021. The kick-off meeting with the contractor took place on 2 June 2021. The timetable for completing this construction contract is 7 months. Construction works on the other package is underway.

The master plan for water supply, sanitation, and drainage is being finalized, which is now in its fourth version and more clearly describes climate resilience measures. A series of webinar trainings on water supply operations management is underway, with participants from the city’s water utility, provincial government, and representatives and partners from the Red Cross.
Viet Nam: Secondary Green Cities Development Project (SGCDP)
Community-led Initiatives in Hue and Vinh Yen
UCCRTF IG Support: $4,000,000

Through a triangulation of climate change vulnerability risk assessments, a series of local stakeholders’ consultation meetings and workshops between January–June 2021 and a community-driven development approach, the project was able to determine the primary hazards in each of the cities, the most vulnerable populations and their level of exposure, and the wards most suitable for the project. Households from six wards in Hue have shortlisted small-scale projects to improve their resilience, including multi-purpose community houses, dredging of canals, construction of drainage, green parks and equipment for search and rescue during disasters.

In Vinh Yen, three wards ranked as their priorities the dredging of canals, construction of green, and public spaces, upgrading of roads and drainage, and rehabilitating the Ben Tre riverbank. Nature-based solutions are being integrated in the projects’ design.

The initially proposed Vinh Yen Sanitation Revolving Fund has been assessed as not viable and is being restructured as subsidies for poor and near-poor households to build or repair toilets and/or to connect to drainage their greywater.

Technical Assistance Projects
Philippines: Strengthening Public-Private Partnerships in the Philippines
UCCRTF TA Support: $3,000,000

Implementation of the TF-supported transaction advisory services under the PDMF was delayed by COVID-19 and related travel restrictions. Only three of originally four packages approved by the PPP Center are now being pursued: (i) Ormoc City water supply; (ii) Bislig water supply; and (iii) University of the Philippines Los Baños IT Park. Consultancy contracts for the resumption of work on these three projects were recently approved.

Utilization of the fund for the TA activities was also delayed by (i) the PPP Center’s decision to prioritize the use of another fund scheduled for earlier closing and with no option for extension (specifically the Australia-DFAT contribution set to close in April 2021), and (ii) the delay in the government issuance of the imprest account authorization for the TF contribution (now resolved). With the closure of the DFAT funding, it is expected that utilization of the TF budget will accelerate.

To accelerate the use of the capacity building budget, the PPP Center is currently pursuing arrangements to support the Department of Environment and Natural Resources in preparing provincial climate and disaster resiliency plans, with a view to identifying opportunities for PPP projects.

Regional: Accelerate Sanitation for All
UCCRTF TA Support: $2,000,000

The TA provided technical support to two upcoming loan projects in India (Uttarakhand Integrated Urban Development Project) and the Philippines (Baguio City Sanitation Improvement Project) to incorporate citywide inclusive sanitation (CWIS) as part of the overall sanitation component. The support allowed for comprehensive mapping of field-based information to guide the investment priorities. The granular information generated by the approach provided detailed information down to the household level, identifying key issues affecting specific areas, allowing the project team to design context-specific investments targeted at the poor and vulnerable. The approach was first carried out in the Philippines and replicated in the India project. Other projects are in the pipeline for India, Nepal, and Viet Nam. The team organized the Annual ADB Sanitation Dialogue as an online event on 12–22 April. This regional ADB Water Sector Group flagship event highlighted the different facets of developing, implementing, and sustaining inclusive sanitation projects. The
The TA is expected to deliver three outputs: (i) resilience measurement; (ii) capacity development; and (iii) knowledge management.

For Output 1, the team has secured sign-off of the Baseline Report from the Secretariat covering 17 cities in four countries. These have been translated into more concise City Resilience profiles, which shall be used as the medium for disseminating the results to the cities and raising awareness on building urban resilience. The progress on the case study methodology for measuring reduced loss encountered delays due to travel restrictions posed by COVID-19. The approach was re-calibrated to adopt remote data collection and analysis methods so that the work can progress. It will include 2-3 case studies on the economic costs and benefits for investing in urban climate resilience and wider resilience engagement for selected city contexts. The team has continued to gather data at both country level and city level and to refine the model further with a view to the completion of modelling for the final report in 2022. The first case study for Patuakhali and Bagerhat is being updated with impacts from Cyclone Yaas (21 May) before being finalized. The Bangladesh case study is beginning to identify and estimate the benefits of UCCRTF resilience investments in the cities. For instance, investments in climate resilience in Bagerhat and Patuakhali have seen significant reduction in loss of life, economic damage, transport disruption and infrastructure impacts from recent super-cyclones compared to similar-scale events 10-15 years previously. These benefits arise from a mixture of UCCRTF and wider investments in resilience and early warning. For the second case study, the team has kicked off the data gathering in Hue, Viet Nam. The methodology for the endline measurement has been enhanced in order to adequately assess the impact and effectiveness of UCCRTF interventions and identify any change in city and household resilience at the end of the project, commencing in January 2022.

Output 2 has progressed on the implementation of the capacity development activities and outputs, which are more responsive and dynamic in relation to ADB and the city stakeholders’ needs. This period focused on completing the first thematic package on urban health/healthy cities, including the finalization of the Practitioner Guide on Planning for Healthy Resilient Cities Framework (PHRCF). The Framework takes lessons from ADB’s COVID-19 interventions and UCCRTF projects on urban health. The second thematic package on Nature-based Solutions (NbS) is currently under development. With the increase in number of online webinars, a total of 14 event snapshots were issued during the period. Several have been adapted into a web-format on the ‘ADB USG Community site’ (internal) by the Livable Cities Team; made available for sharing via the UCCRTF newsletter; and featured in the monthly newsletter of the Disaster Risk Management team. The team has developed three project profiles for NbS projects and UCCRTF brochure for the Climate Adaptation Summit (CAS) 2021. The dissemination of City Resilience Profile in Bagerhat and Patuakhali in
June provided platforms for awareness-raising and further dialogue with key city decision-makers on assessment, planning, and actions for city resilience. Lessons from these activities will be documented and taken forward in succeeding rollout and wider UCCRTF engagements.

Subproject 2 has continued its momentum on Output 3 work in this reporting period, particularly in the development of the City Resilience Profiles (CRPs) and the quality of content and the design of the newsletter. This period saw the completion of draft CRPs for five cities in Bangladesh, three cities in Pakistan, three cities in Pakistan, and two cities in the Philippines. The CRPs have also been rolled out in Dong Hoi, Viet Nam and in Bagerhat, Bangladesh, which were both well-engaged and well-received by city stakeholders. The team delivered two UCCRTF newsletters, focused on key themes around combined challenges of climate shock and COVID-19 in UCCRTF cities and Nature-based Solutions for Urban Resilience in Asia’s Cities. As of April 2020, the newsletter has maintained 210 average open rate (percentage of recipients who opened the newsletter/email) in subscriptions.

Through the TA, UCCRTF is implementing community-led projects that empower poor and vulnerable communities in development planning and investment programming to strengthen their resilience from the impacts of climate change. In the Philippines, the construction of small-scale civil works commenced in December 2020 and have reached 35% to almost 100% completion to date. The Waste Recycling and Recycling Program in Del Carmen now stands at 35% level, the Community Managed Level III Water Supply System and Rainwater Harvesting Facility in Janiuay, Iloilo is at 70% level, the Multi-Purpose Evacuation Center and Bio-Engineering Measures to Mitigate Floods and Landslides in Malay, Aklan is now at 70% level, while the Flood Mitigation and Drainage Improvement Project in La Trinidad, Benguet is now heading towards full completion level.
In Bangladesh, the implementation of the Community-based Solid Waste Management System in Patuakhali has started while in Faridpur will commence soon. The feasibility study for the Faridpur Skills and Livelihoods Center was recently completed. Meanwhile, the feasibility study will soon be commissioned for the proposed Faridpur Climate Smart Park.

In Pakistan, the feasibility studies of the Community-based Solid Waste Management System and Rehabilitation of Water Supply Distribution Pipes and Tanks in Abbottabad and Community Green Park in Sialkot have been completed and are now heading for advertisement for implementation. These community-led projects will be complemented with capacity building, livelihoods, and enterprise development to ensure that the communities will be able to sustain the operations and maintenance of these initiatives.

**Regional: Strengthening Knowledge and Actions on Air Quality Improvement**
**UCCRTF TA Support: $1,200,000**

Following the installation of air quality monitoring equipment in 5 out of the 7 cities between November 2020 and March 2021, continuous monitoring across the sites is on-going and initial results are subject to further analysis. In La Trinidad (Philippines), NO2 levels are below WHO Guidelines but PM 2.5 and PM10 concentrations exceed the WHO Guideline. In Faridpur (Bangladesh), initial results show 24-hr mean concentration for PM2.5 is 87 µg/m³ as compared to WHO Guideline of 10 µg/m³. In Pakistan, the TA has supported the Ministry of Climate Change in the preparation of the new Pakistan Clean Air Plan (PCAP). Launched on 2 June 2021, PCAPS aims to address the growing concern of air pollution in the country through systematic monitoring and implementation of various policy, technological, and management-based measures. It includes a set of priorities to be implemented in a phased manner with short (1–3 years), medium- (4–10 years) and long-term (10–20 years) targets through a framework of shared responsibilities between federal, provincial, and city levels.

**Regional: Strengthening Integrated Flood Risk Management**
**UCCRTF TA Support: $3,000,000**

The project aims to strengthen the design and implementation of Integrated Flood Risk Management (IFRM) solutions, enhancing knowledge and application of IFRM strategies in DMCs. It promotes more holistic, basin-scale IFRM solutions, incorporating non-structural and nature-based solutions and is composed of three outputs: (i) knowledge to implement IFRM projects enhanced; (ii) evaluations of DMC flood risk management and investment strategies conducted; and (iii) IFRM concepts integrated into ADB investments.
A range of technical support has been provided for multiple projects in preparation, including National Flood Risk Management Roadmap for Indonesia; Flood Forecasting Procurement Support for Nepal; Assessment of coastal flood risk in the Indus Delta; and Flood management investments (Phase 1) of the Quang Nam Climate Resilient Urban Services Project, Viet Nam.

In addition, capacity building activities and consultation workshops have been held in Indonesia and Viet Nam through close coordination with relevant investment projects.

**Viet Nam: Mainstreaming Climate Resilience and Environmental Protection for Secondary Green Cities Development**
UCCRTF TA Support: $2,000,000

Initial findings recommend indemnity insurance for public buildings and single site property, and parametric insurance for historic monuments and critical infrastructure. The city was assisted in determining cost-benefit of different levels of cover and structuring options for the public assets. Flood modelling using KatRisk has been augmented with a CLIMADA-based tropical cyclone wind model. A parametric pricing tool was likewise developed which will allow full flexibility to interactively price other parametric options. Cover for indemnity insurance for assets excluding historic monuments has an assessed premium of $597,654 which will need to be market tested if the insurer accepts the modelling used, the valuation of the assets, and the rebuilding cost estimates. Parametric insurance premium is estimated at $614,479. On the institutional set-up, it has been determined that the city government could procure the insurance from a local reinsurer who will pass the majority of the risk on to a local reinsurer (ViNaRe) who then will cede the majority of the risk to international reinsurance markets.

**Viet Nam: Southeast Asia Energy Sector Development, Investment Planning and Capacity Building Facility – Smart and Energy Efficient Cities Project (SEECP)**
UCCRTF TA Support: $1,500,000

Six Energy Efficiency Action Plans (EEAPs) have been completed for the cities of Can Tho, Da Nang, Haiphong, and Hanoi and the provinces of Quang Nam and Quang Ninh. These EEAPs, which also contain sector-specific targets have been consequently approved by the respective local authorities. On 16 April 2021, ADB and the Ministry of Industry and Trade hosted the final workshop attended by more than 60
representatives from local authorities, ministries, and development partners. Following findings on the enormous potential for monetary savings and low-carbon development through energy efficiency in streetlighting and public building, the TA is conducting ongoing energy audits which will help inform project proposals for downstream ADB financing and private sector involvement. The SEECP was likewise presented at the Asia Clean Energy Forum (ACEF) on 14-18 June 2021, highlighting the value of smart city services and renewable energy installation in the public sector, and how these are aligned with post-COVID green recovery and climate targets of Viet Nam.

Direct Charge

Philippines: Mainstreaming Resilience in the Philippine Health System
UCCRTF DC Support: $225,000

At the Philippine Department of Health (DOH), the UCCRTF has been providing technical assistance in formulating guidelines and plan for setting up climate-resilient health facilities throughout the country. The plan includes provisions for ensuring climate and disaster resilience of the facilities. Climate change and resilience concepts were incorporated in a decision guide developed for local government units, with a separate chapter in the plan specifically devoted to resilience to serve as guide in health facility prioritization and investments. After the plan was approved by DOH in late 2020 and subsequently issued as a department order for adoption, the department has been working with its communication bureau for disseminating the plan to its officials and staff. A follow-up study is being organized to enhance disaster preparedness. The follow-up study will focus on guidance and procedures for DOH on business continuity planning for readiness in the event of major disruptions and not limited to extreme weather events.
APPENDIX 2

Status of Ongoing CDIA TF Project Preparatory Support Activities

**Tajikistan: Dushanbe Water Supply and Sanitation Project – Additional Financing**

UCCRTF IG Support: $6,000,000

Dushanbe City is currently implementing the Dushanbe Water Supply and Sanitation Project (DWSSP) with the support of a $41.22 million grant from the ADB. The purpose of the DWSSP is to improve inclusive and sustainable access to safe and resilient water supply and sanitation (WSS) services in the city. The DWSSP is based on the PPS prepared by CDIA and submitted to Dushanbe City in June 2018. The CDIA PPS prepared 20-year road maps for water supply and sanitation, together with a road map for institutional capacity development having short-, medium- and long-term interventions. Based on the two road maps, CDIA prepared a priority project, which aimed at reducing nonrevenue water (NRW) in Shomansur district, improving the sanitary condition in the south-eastern part of Dushanbe and key capacity development measures. The estimated value of the priority project was $75.58 million. With a value of $41.22 million, the DWSSP covers approximately 55% of the CDIA prepared priority project.

Dushanbe City is currently discussing the potential for a further grant from the ADB with a value of $35 million. The purpose of the new grant, which will be termed the Additional Financing - Dushanbe Water Supply and Sanitation Project (AF-DWSSP) is to continue with the implementation of the CDIA priority project and will support the implementation of the critical WSS interventions which were not included in the original project due to the limited funds.

The primary objective of the new CDIA-financed PPS is therefore to prepare updated technical feasibility and preliminary engineering designs of the WSS infrastructure elements of the AF-DWSSP for ADB grant financing. This will ensure that the WSS infrastructure investments identified under the original CDIA prepared priority project can be completed such as: (i) the rehabilitation and expansion of the urban water supply infrastructure including water transmission, pumping stations, storage, distribution system and customer connections; and (ii) the rehabilitation of portions of sewerage main pipeline as well as the expansion of the sewerage system to unserved areas in Shomansur district. A key factor leading to CDIA’s involvement in the project was the city’s familiarity and trust with CDIA’s work.

**Armenia: Yerevan Sustainable Urban Transport Implementation Project**

CDIA TF PPS Amount: $520,000

Mobility patterns in Yerevan, which has 1.2 million inhabitants, have radically changed with the evolution of the economy in the early 1990s and the closure of large industrial plants. It has significantly affected the ridership on the public transport networks, necessitating a major reorganization of the transport system. The transport sector is also a major source of air pollutants in the capital city. The Yerevan Municipality has embarked on the implementation of a local sustainability agenda that emphasizes a shift to sustainable urban mobility. With support from ADB, along-term plan has been prepared in 2019. This
plan sets out a comprehensive renewal of the public transport system, a fully integrated public transport network, supported by an integrated tariff system and a modern flexible ticketing system. With CDIA support, representatives of the Yerevan municipal government visited Tbilisi, Georgia to discuss with its counterparts about challenges and lessons learnt in the public bus sub-sector. Through this site visit, representatives of the Yerevan Municipality understood the extent and results of CDIA assistance in the city. Yerevan Municipality then requested CDIA to provide advisory services to build their overall capacity on urban mobility and to support the municipality to start implementing the new integrated urban transport network.

The primary objective of the CDIA-financed PPS is to prepare strategic and operational recommendations, and the preliminary design to facilitate the implementation of the new transport network by the Yerevan Municipality. The project will consist of a combination of advisory services to build local capacity on integrated and sustainable urban mobility, and specific outputs to develop the key features of the new network. Specifically, the project aims to (i) enhance the capacity of the municipality for the new bus network implementation, as well as air pollution monitoring; (ii) recommend strategic measures for a phased implementation of the integrated network; and (iii) conduct preliminary engineering design for key facilities that will allow efficient operation of the newly purchased buses.

The study will directly contribute to the implementation of the new bus network and will enable the newly purchased fleet (under procurement with EBRD support) to operate on an adequate and efficient system. Related investments will be supported by the municipal and national governments. The identified sub-projects could feed into the project readiness preparation of ADB’s future investment program loan documentation.

Urbanization has been one of the main drivers of economic growth in Viet Nam since the 1990s. But to date, secondary cities located in mountainous areas such as Bac Kan, or in deltas such as Phu Ly, have yet to fully develop their potential. In parallel, Viet Nam is one of the world’s most vulnerable countries to the effects of climate change and, as yet, insufficient protective measures have been taken, particularly in the smaller cities. In order to meet both economic
development and climate adaptation objectives, the Government of Viet Nam plans to improve and upgrade infrastructure and urban services in secondary cities.

The PPS will prepare a project to improve the resilience and livability of Bac Kan and Phu Ly cities. In particular, the PPS will support the promotion of good quality urban development that is respectful of the environmental to reduce the cities’ vulnerability and mitigate greenhouse gas emissions. The PPS will also promote integrated water resource management to anticipate the risks of flooding, drought, and erosion. Furthermore, the urban development component of the project in Bac Kan will increase the city’s resilience to future pandemics through improved sanitation and city design.

**Viet Nam: Urban Development, Green Growth and Climate Resilience in Đồng Hà**

CDIA TF PPS Amount: $450,000

Đồng Hà is a coastal secondary city in the central region of Viet Nam, with an economy that is highly vulnerable to the impact of climate change. The city faces severe climate-related challenges and needs to tackle the consequences of increased flooding, riverbank erosion, increased rainfall intensity and sea-level rise. Đồng Hà is located on key transport and commercial corridors but has not fully benefited from the past years’ growth. The overriding goal of the project is to support the city to adopt a climate resilient city model, while pursuing green and inclusive economic growth. The objectives are: (i) to improve urban services for the local population and the quality of life, in particular for the most vulnerable; (ii) to anticipate and mitigate the impacts of climate change; and (iii) to improve the economic and tourism attractiveness of the city by improving its landscape and services.

The CDIA-financed PPS primarily aims to identify and prepare, to preliminary design level, priority infrastructure sub-projects to improve the resilience and livability of Đồng Hà. The specific sectors targeted by the CDIA technical assistance will be flood management (embankments and stormwater systems), urban parks, improvement of basic services in vulnerable areas, climate change adaptation and integrated capacity development with a focus on low-income areas, adaptation to climate change and city livability. A key factor leading to CDIA TF’s involvement in the project was CDIA’s ability to respond quickly and hold discussions with the downstream funder, Central Government, the Province and the city with a clear agenda to assist the through grant technical assistance and with a city focus.

The study will recommend priority interventions to inform future project preparation work for an urban development, green growth and climate resilience project in Đồng Hà, to be financed by an AFD loan, pending AFD’s due diligence process and an official request from the Government of Viet Nam. When fully implemented, the project will support the promotion of good quality urban development with a focus on climate resilience, helping reduce the cities’ vulnerability and greenhouse gas emissions. Similarly, the project will help ensure the promotion of integrated water resource management.
Lao PDR: Livable Cities Investment Project  
CDIA TF PPS Amount: $650,000

The Government of Lao PDR recently authorized the upgrade of three provincial capitals to city status in order to advance the administration and development of these urban areas. CDIA’s technical assistance will extend to the following ‘elevated’ cities: Kaysone Phomvihane – the capital of Savannakhet Province, Pakse – the capital of Champasack Province, and Luang Prabang – the capital of Luang Prabang Province. All three cities are currently covered under Lao PDR’s 8th Five-Year National Socioeconomic Development Plan (2016–2020).

The primary objective of the PPS is to help Lao PDR’s Ministry of Public Works and Transport prepare a pre-feasibility study that will lead into an investment loan package of $120 million under coverage of ADB’s Livable Cities Investment Program in Lao PDR programmed for 2021. The PPS will address urgent urban development challenges in the three ‘elevated’ cities and will provide broad technical, environmental, social and economic analysis in investment gaps across pre-identified priority sectors: solid waste management, wastewater management and urban planning/“streetlife” improvements. Furthermore, the PPS will prepare capacity development road maps for each city. Through CDIA’s intervention, the proposed project has been able to proceed much quicker than would otherwise have been the case. Government’s familiarity with CDIA, particularly in the case of Pakse, enabled an excellent working relationship to be established at an early stage.

Georgia: Livable Cities Investment Project  
CDIA TF PPS Amount: $500,000

In cooperation with the Government of Georgia, ADB is currently formulating the proposed Georgia Livable Cities Investment Program as included in the ADB’s Country Operations Business Plans 2020-2022. The proposed loan will include a Tbilisi-specific tranche having a value of $50 million. Over recent years, and with the strong support of its development partners, Tbilisi Municipality City Hall (TMCH) has been implementing improvements in the urban transport sector and is steadily achieving the target of a shift to sustainable urban mobility in the Tbilisi urban area. The city has been addressing key issues including reducing road congestion, improving the bus network, introducing bus priority measures, bus and metro fleet renewal, improving the safety of the Tbilisi metro system, taxi regulation and the introduction of a parking strategy.

The primary objective of the CDIA PPS is to prepare, to pre-feasibility level, an investment program to achieve universal access and inclusive mobility to the Tbilisi Metro System. CDIA was able to effectively respond to TMCH’s request for assistance due to the long-term relationship that CDIA has established with the city and our clear understanding of city priorities. In preparing the project, CDIA will be working closely with the Austrian Institute of Technology to prepare current and future passenger movement models for the Akhmeteli Theatre, Marjanishvili and Liberty Square metro stations. The outcome of these models will inform the development of the investment program and subsequent project design.
APPENDIX 3

Status of Ongoing

AASTC-supported Projects

Regional: Southeast Asia Urban Services Facility (SURF)
AASTC TA/Grant: $10 million

More than half of the Association of Southeast Asian Nations (ASEAN) Member States’ population reside in urban areas and an additional 70 million are expected to live in ASEAN cities by 2025. While rapid and unplanned urbanization can undermine quality of life, exacerbate inequality, and cause environment stress, it also gives ASEAN’s cities and utilities an opportunity to mitigate the associated risks by capitalizing on the exponential growth of technology.

Out of the total support of A$20 million (approximately $14.04 million) from the ASEAN Australia Smart Cities Trust Fund (AASCTF), $10 million is provided for the SURF transactional technical assistance. The Fund has an operational focus on building livable cities that are green, competitive, inclusive, and resilient. In total, 26 cities across eight ASEAN countries are participating in the AASCTF program. The main goal of the Fund is to improve the three key functional areas within participating cities in the ASEAN region – Planning, Service Delivery and Financial Management. Across all the Fund’s work lies three important cross-cutting themes that are addressed and embedded within every activity – Gender, Climate Change, and Private Sector.

Description of Trust Fund Support

The Trust Fund is supporting participating cities with differing levels of engagement from broader networking and capacity building to targeted pilot and investment grant projects. The AASCTF team is working to identify entry points and develop/implement pilot projects on innovative smart and digital solutions within select participating cities, with the aim of identifying scalable and replicable best and next practice smart solutions to be applied within the ASEAN context. Within the reporting period, five task orders/pilot projects have commenced:

- Task Order No. 5 – Philippines: Gender Transformative Approach for Strengthened Development, Application, and Replication of the Baguio City Smart Flood Early Warning System (FEWS). The project is targeted to complement the existing task order for Baguio City to ensure that appropriate, applicable, and timely early warning systems reaches the last mile, including the most vulnerable, recognizing that effective FEWS are people-centric.

- Task Order No. 6 – Malaysia: Penang Smart Mobility Micro-simulation Model Development. The project will provide Penang with a calibrated VISSIM micro-simulation model of the core historic city center of Georgetown, and further use this model to test existing Smart Mobility strategies.
• Task Order No. 7 – Cambodia: Battambang Smart Solid Waste Financial Management (Phase 1). The project will deliver, through diagnostics, readiness assessment and options analysis, and a pilot project (2nd phase) scoping report. The project aims to support Battambang to serve as a national model for reform of the solid waste management sector.

• Task Order No. 8 – Regional: Baseline Development and Capacity Building for AASCTF Participating Cities. The project aims to establish a solid and defendable baseline and activate the 26 participating bronze cities through a dedicated regional capacity building program, including twinning and networking activities.

• Task Order No. 4 – Myanmar: Yangon City Smart Water Management and Resilience Project was endorsed during the reporting period but has been indefinitely postponed due to the current situation in Myanmar.

Beyond city intervention pilot projects, the Fund has a keen focus on communication, knowledge sharing, and capacity development. Within the reporting period, the Fund has initiated a number of activities, including but not limited to conducting of four webinars as part of the ‘ASEAN Australia Smart Cities Webinar Series’; development of four digital solutions briefs on topics related to the webinar series; and management of dedicated social media channels. The Fund also initiated during this reporting period a regional innovation challenge: ‘Smart Cities Datathon 2021 – Building Back Smarter: Digital Solutions for Livable Cities’.

Status of Physical Progress

Task Order No. 3 – Lao PDR: Enhanced Employment Service Platform and Matching Tool and E-Learning Modules Phase 1 was completed within the reporting period. This task order delivered, as part of the Pre-Feasibility Study Report, a second phase pilot project scoping, which is currently being elaborated and discussed.

Status of progress in the six ongoing task order/pilot projects:

• In Makassar, extensive engagement with key city stakeholders led to the finalization of the Situation Assessment Report in February 2021. In July 2021, the Urban Development Scenarios Report was finalized. Development of a digital stakeholder engagement tool was finalized in the reporting period and citizen surveys are currently being conducted. The final deliverable, Makassar Livable City Plan, is currently being conceptualized and planned to be developed as a digital toolbox to enable prioritization and informed decision-making surrounding proposed and planned interventions.

• In Baguio, the Baseline Assessment Report, was finalized in January 2021. The second deliverable, Hydraulic Model and Hazard Risk Assessment Report was issued in draft in June 2021 and finalized in early July 2021. Following discussions within the reporting period, it was agreed to extend the finalizations/calibration of the FEWS until 2022 and delay some activities accordingly. At the beginning of July, the ‘Baguio City Flood Early Warning System Architecture – ‘Offline’ Setup’, was delivered in draft.

• In Baguio, Penang, and Battambang, activities have commenced in the reporting period, but no major outputs/milestones have yet been achieved.

• In the regional task order, activities have commenced with two networking introduction workshops (in Baguio and Luang Prabang) completed within the reporting period. The Fund is currently scheduled to close on or before 30 June 2024. Key perceived implementation risks and challenges include: (i) change in political support and priorities of local governments; (ii) delays incurred due to COVID-19 pandemic (and other shocks and stresses such as typhoons, etc.), as well as alignment and direction of Task Order preparation due to COVID-19 pandemic; and (iii) economic
disruption causing ripple effects on the ability and willingness of the key stakeholders, in particular private sector, to engage.

Regional: City Resource and Finance Tool (CRAFT)
AASCTF Direct Charge: $195,000

Emerging from COVID-19, cities in Asia and the Pacific are facing a perfect storm. At the same time that the pandemic has increased demands for increased social and municipal infrastructure, cities are facing declining GDPs, lost tourism and manufacturing revenue, and an increased risk profile of infrastructure for private sector participants. Together, these are severely impacting cities’ financial ability to provide healthcare, education, affordable housing and social services, especially for the urban poor.

Creating Investable Cities, a strategic priority of the PPP-Thematic Group Secretariat and the Asia Pacific Project Preparation Facility, improves cities’ financial resilience and efficiently mobilizes public and private sector resources for quality infrastructure to lead Asia and Pacific cities’ response and economic recovery. The initiative has also received financial support under the technical assistance special fund COVID-19 pool. Under the Creating Investable Cities TA, assistance will be provided to a pool of 15-20 partner cities across Asia over the next five years for: (i) early-stage planning of quality municipal infrastructure; (ii) increased resource mobilization and inter-agency coordination to support private sector participation; and (iii) improved capacity to implement this quality infrastructure.

The development of this framework is linked to AASCTF’s Output 3: Improvement of financial management of Asian cities and Outcome C: to improve the creditworthiness of participating cities. Closely tied to Strategy 2030’s Operational Priorities, the TA is a true One-ADB effort and brings resources from across the SDCC, Regional Departments, PSOD, and ORM. While the annual city selection will be done in close coordination with the Regional Departments and Resident Missions, this application supports the development of the City Resource and Finance Tool (CRAFT) to allow credit rating of cities and identification of strategies for resource mobilization.

Sharing knowledge to improve urban living. The ASEAN Australia Smart Cities Trust Fund has been organizing webinars to share experience and knowledge on how digital smart city solutions are being used to address the most pressing challenges across Asia in relation to urban development.
Description of Trust Fund Support

This is a standardized template for analysis and identification of strategies for domestic resource mobilization, both internally and externally, to meet a city’s medium-term investment needs. Internally, the analysis will focus on raising more revenues through elements of tax and tariff reform, improved tax administration, land value capture, fee pricing. For external resource mobilization, the analysis will develop a credit profile for the city by including and expanding on credit rating agencies’ financial assessment for cities.

Application of this framework and the resulting recommendations will then guide the city in:

- improving its financial management and creditworthiness; and
- determining a strategy for resource mobilization and/or prudent borrowing to meet medium-term infrastructure needs.

Status of Physical Progress

The model development for CRAFT is underway. The team has completed the development of the inception report and is in the process of building the template. Details on the design and architecture of CRAFT and its content and coverage are below.

- Design and architecture of CRAFT: CRAFT is being developed as an excel-based tool with a user-friendly interface, which would be easy to navigate and calibrate. CRAFT will have an in-built user guide tab to provide an overview of tabs, their interlinkages, and navigation related details. CRAFT will also have an input sheet for assumptions with input cells having a unique color code. CRAFT includes working sheets to use assumptions to project the key municipal financial statements and to calculate the key financial ratios. The output sheet then displays these key financial ratios through a dashboard of heat maps, charts, and bar graphs. CRAFT would have a calibration action sheet, listing the reforms that could be implemented. This calibration action sheet would be linked to the working sheets, and depending on the reforms selected, the working sheets would capture their impact on the financial health of the city government/municipality. The design, architecture, coding, and interface of the excel-based tool would be easy to convert into prototypes for hosting the tool on a website.

- Content and coverage of CRAFT: CRAFT would include inputs and assessment for the revenue account, the capital account, and the extra-ordinary account (if any) for the city government/municipality. It would include inputs for demand-side assessment on the capital investment projects (intended to be procured through both PPP and the public procurement route) for assessing the funding requirement on a year-on-year basis for the next five years. The tool would include an assessment of the existing debt exposure and the available municipal borrowing capacity. The tool would project key municipal financial statements over the next five years and calculate the key financial ratios. The tool would also include a set of policy and reform actions categorized as no-cost, low-cost, new asset, revenue enhancement, and cost optimization to select from and assess the impact on the municipal financial health. Finally, the tool would calculate key ratios, which along with the qualitative assessment criteria could be used to arrive at the credit assessment score for the city government/municipality.

The major risk related to the implementation of CRAFT is COVID-19. Implementation of CRAFT in Makassar requires an assessment of the project pipeline of the city and developing proformas and affordability assessments for the priority infrastructure. While the development of CRAFT is well underway, implementation of CRAFT requires extensive on-site data collection, interviews, and field assessments to be able to develop reasonable five-year projections and scenario analyses. We are in discussions with the AASCTF team to see how we can accommodate data collection under these difficult circumstances such that we can hit the ground running as soon as conditions improve.
APPENDIX 4

Status of Ongoing UEIF-supported Projects

† India: Karnataka Integrated Urban Water Management Investment Program - Tranche 1
UEIF DC Support: $1,800,000

ADB is helping the Indian state of Karnataka improve water resources management in selected urban areas of the Upper Tunga Bhadra subbasin. Assistance under the first phase will be used to expand and upgrade water supply and sanitation infrastructure in three towns: Byadagi, Davangere, and Harihar. The project will also improve water resource planning, monitoring, and service delivery.

Description of Trust Fund Support

The investment grant supports the activities of the Karnataka Integrated Urban Water Management Investment Program – Tranche 1 (Loan 3148), specifically in engaging a nongovernment organization that will develop community-based sanitation interventions (e.g., toilets) using an output-based modality. The goal of the output-based toilet and connection program is to install new toilets for poor and vulnerable households.

Status of Physical Progress

To date, the project has built 5,368 individual household toilets (IHHTs) while 171 more IHHTs are expected to be completed by 31 August. Meanwhile, 53 school toilets are now at the advanced stage of construction and are expected to be completed by 30 September.

† Philippines: Water District Development Sector Project
UEIF IG Support: $2,000,000

The Local Water Utilities Administration (LWUA) has requested a loan of $60 million from ADB’s ordinary capital resources under the Water District Development Sector Project (WDDSP). The sector loan will help finance the extension and rehabilitation of water supply systems and the construction of new sanitation facilities of less established water districts (WDs). Apart from the loan, a $2 million investment grant to subsidize the construction of new sanitation systems and a capacity development technical assistance (CDTA) were likewise provided.

Description of Trust Fund Support

The $2 million investment grant from UEIF is intended to subsidize up to 20% of the cost of septage management facilities to motivate local government units and water districts by making sanitation investments more affordable.

Status of Physical Progress

Two water districts have proposed sanitation subprojects: Norzagaray and Zamboanga. For Norzagaray, the contract for vacuum trucks has been awarded, and the package for the septage treatment plant is undergoing the bidding process. For Zamboanga, the bidding documents are being prepared and contract is expected to be awarded in the first quarter of 2022. The remaining of the funds will be used for consulting services to support project implementation and construction supervision.
Expected completion date is Q1 2023. Activities are delayed due to (i) changes in the selection of the water districts, which was finalized in late 2019; (ii) Zamboanga water district proposed a tariff increase as a precondition for their investment, for which approval was only obtained in March 2021; and (iii) the recruitment of consultants is subject to a signed grant agreement amendment. However, the administrative process for the signing is time consuming.

Lao PDR: Greater Mekong Subregion East-West Economic Corridor Towns Development Project
UEIF IG Support: $638,000

ADB is helping the Lao PDR transform three towns along the East-West Economic Corridor into economic hubs. The project will improve urban environmental infrastructure and strengthen the institutional capacity of provincial and local authorities in Kaysone Phomvihane, Phine, and Dansavanh. It includes flood control measures and improvements in waste management and roads.

Description of Trust Fund Support
The investment grant intends to support Loan 2931: GMS East-West Economic Corridor Towns Development Project and will be used for the construction of a materials recovery facility (MRF) for Kaysone Phomvihane, a border town considered as a major commercial, service, and agricultural center. The MRF will complement the proposed sanitary landfill in the area.

Status of Physical Progress
Supply for the MRF equipment in Kaysone Phomvihane is 100% completed, including the delivery and installation of equipment and conduct of hands-on training on equipment use. All equipment were handed over to the relevant government authority. The MRF is scheduled to be in operation by beginning of August. The plan to close the project on 31 December 2021 is on schedule.

People’s Republic of China: Supporting Project Preparation
UEIF TA Support: $300,000

A transaction technical assistance facility (F-TrTA) was established to provide project preparation support to a series of ensuing projects for the People’s Republic of China. There are 11 subprojects under the said F-TrTA (TA 9437), namely: i) Green Finance Catalyzing Facility; ii) Xiangyang Elderly Care Service Development (public private partnership [PPP]); iii) Jilin Yanji Low-carbon Climate-resilient Urban Development; iv) Multimodal Passenger Hubs Development, v) Guangxi Elderly Care Demonstration (PPP); vi) Xiangtan Low-carbon City Transformation Sector Development Program; vii) Jiangxi Shangrao Preschool Education Demonstration Project; viii) Shenzhen Water Project (PPP); ix) Guizhou Gui’an New Urban Area Smart Transport; x) Shanxi Changzhi Industrial Transformation and Economic Upgrading Demonstration Project; and xi) PPP/non sovereign Project Development.

Description of Trust Fund Support
UEIF funding assistance was requested to provide technical support to a proposed loan (Xiangtan Low-Carbon City Transformation Sector Development Program) for the municipality of Xiangtan. The proposed loan aims to support the Xiangtan municipal government’s efforts to transform Xiangtan from a carbon-intensive, heavily polluting city to a low-carbon, climate resilient, and livable one. It will combine project- and policy-based lending.

Status of Physical Progress
Activities completed under the TA include:

- Conducted due diligence work to prepare the project for ADB’s approval (project component, design, and feasibility studies);
- Prepared a detailed project scope on urban transport project components;
- Prepared a transport sector assessment in
Xiangtan including a review of urban planning and transport planning policies;

- Prepared detailed technical specifications (i) for median and curbside bus priority lanes and bus stations improvement options; and (ii) to improve cycling and pedestrian ways that are user-friendly and access easy. These were incorporated in the domestic feasibility study report;

- Carried out detailed assessment: (i) to improve urban road use for function improvement for multi-road users; and (ii) on potential modal share and shift effects from the better road usage for urban public transport and non-motorized transport systems;

- Conducted consultations and interviews to develop the needs assessment at key project sites identified within Xiangtan;

- Conducted stakeholder mapping and analysis to identify and segment key stakeholders in Xiangtan and conduct a qualitative behavior research through desk reviews and social surveys of past research on end-user attitudes and behavior on energy use and mobility in Xiangtan;

- Reviewed and assessed past low-carbon lifestyle communication activities by specific stakeholders and prepared a diagnosis of the communication dynamics among the key stakeholders;

- Developed the communication-related aspects of the project design and developed a behavior change communication strategy;

- Assessed Xiangtan municipal government’s (XMG) public finance management and supported the formulation of policies and reform initiatives in areas such as intergovernmental fiscal relations, subsidies and the pricing of utility services; sustainable debt financing; restructuring of financial obligations; and monitoring of contingent liabilities;

- Supported the preparation of cost estimates, financing plan, and financial projections and conducted financial analyses;

- Assessed the financial reporting, auditing, and public disclosure arrangements for the project; and

- Prepared a draft policy note and matrix with measures to improve the XMG’s public finance management.

The support extended by the TA helped in improving project design of the recently approved Xiangtan Low-Carbon City Transformation Sector Development Program (approved in October 2020; $200 million loan).

Expected TA completion date is on 31 December 2021.

**People’s Republic of China: Preparing Urban and Social Development Projects**

**UEIF TA Support: $100,000**

The transaction technical assistance (F-TrTA) facility will provide preparation support to four ensuing loans in the People’s Republic of China (PRC): (i) Guangxi Wuzhou Healthy City Development Program; (ii) Jilin Songhua Lake Integrated Ecological and Environmental Improvement Project; (iii) Shaanxi Xi’an Preschool Education Development Program; and (iv) Shandong Jiaxiang Smart Water Sector Development Program. The ensuing loans will be investments in urban services, green infrastructure, environmental improvement, and human capital development; these are well aligned with operational and strategic priorities of both the government and the ADB. The ensuing loans, all in the urban and social sectors, will require a similar set of safeguards, financial management, and economic assessments.

**Description of Trust Fund Support**

The technical assistance support will be used in conjunction with a $450,000 technical assistance special fund to enhance project preparation activities.
for the proposed Jilin Songhua Lake Integrated Ecological and Environmental Improvement Project.

UEIF support will provide technical and capacity development assistance in developing a cross-sector and participatory planning that will integrate (i) river rehabilitation and flood risk management to optimize types of crops and locations of new farming practices and (ii) wastewater collection and treatment system and solid waste management to reduce pollution. Specifically, UEIF will facilitate the introduction of international best practices in nature-based solutions for river management, nutrition recycling between feces and crop growing, and non-network sanitation and wastewater treatment and management.

**Status of Physical Progress**

The TA is currently supporting the development of a cross-sector and participatory planning that integrates (i) river rehabilitation and flood risk management to optimize types of crops and locations of the new farming practices and (ii) wastewater collection and treatment system and solid waste management to reduce pollution.

TA completion date is expected in December 2021. The implementation of the TRTA has been put on hold because the EA had difficulty in counterpart fund provision and has been seeking solutions to address the situation.

### Kazakhstan: Preparing a National Feasibility Study for Nur-Sultan Wastewater Treatment Plant

**UEIF DC Support:** $150,000

Technical Assistance (TA 9462-KAZ), approved on 12 December 2017 for $1 million, is helping the Government of Kazakhstan (GOK) prepare the Kazakhstan Urban Infrastructure Modernization Program and Finance Facility (KUIMPFF). KUIMPFF will help develop and finance critical urban infrastructure, focusing first on rehabilitating and/or constructing wastewater treatment plants (KOS’) and related infrastructure, through a phased approach and with private sector participation where possible.

### Description of Trust Fund Support

KazCenter ZhKH has grouped the cities into phases based on project readiness i.e., State Expertise (Gosexpertiza)-approved technical and financial feasibility studies: (i) Phase 1 comprises 11 KOS’, of which 5 KOS’ (Stepnogorsk, Zhezkazgan, Satpaev, Balkash and Zhanatas) with an approximate investment cost of $90 million are to be financed by ADB (and 6 KOS’ to be financed by EBRD); (ii) Phase 2 comprises 25-29 KOS’, as well as Nur-Sultan KOS-2. Phase 2 and/or subsequent phases could also extend the GOK Program to include sewerage as well as water supply networks so as to improve water and wastewater systems in an integrated manner.

Supporting sustainable urban infrastructure. ADB is supporting projects that integrates river rehabilitation, flood risk management, and wastewater treatment system.
over the life cycle of the assets. This could open up opportunities for linking the Wastewater Treatment Plants Reconstruction and Construction Program to GOK’s Nurly Zher Program, and thereby efficiently utilizing public funding and subsidies going to the water and wastewater sector.

**Status of Physical Progress**

To date, the activity resulted in the preparation of the draft National Feasibility Study (NFS) and submission to the State Expertise for its endorsement. With the positive conclusion of the NFS and comments addressed, the FS will be finalized including inputs for potential public-private partnership arrangement.

**Regional: Knowledge Management Support Facility for Making Cities More Livable**  
UEIF DC Support: $225,000

ADB’s Strategy 2030 (S2030) envisions Asia and the Pacific as prosperous, inclusive, resilient and sustainable. It includes “Making Cities More Livable” as one of the seven important operational priorities and calls for making cities Green, Competitive, Inclusive, and Resilient.

**Description of Trust Fund Support**

This proposed Knowledge Management Support Facility for Making Cities More Livable will contribute to the Livable Cities operational priority of S2030 by building capacities and enhancing knowledge of DMC officials on important areas of livable cities. The facility will support DMCs to effectively plan, design, develop, and implement suitable programs for livable cities taking into consideration the perceived needs and unique challenges faced by cities. Specifically, the facility will support integrated urban and regional planning, municipal financing, urban governance improvement, inclusive urban development, environmental sustainability and climate resilience, urban transport, social inclusion, and adoption smart city concept, including the use of information and communication technologies (ICT), among others.

**Status of Physical Progress**

The direct charge activity has resulted in the following deliverables:

- Production of Knowledge Products
  - Screening Tool for Energy Evaluation of Projects (STEEP)
  - Rajasthan Rising: A Partnership for Strong Institutions and More Livable Cities
  - COVID-19 and Livable Cities in Asia and the Pacific: Guidance Note
- Knowledge Product Preparation – Tianjin Smart Water Publication
- Engagement of ADB Staff as Resource Persons
  - Asia Smart City Conference, Yokohama (8-11 October 2019)

Target completion date is being considered for extension until December 2021.
Regional: Towards Gender-sensitive and Socially-inclusive Smart and Safe Cities
UEIF DC Support: $225,000

Through this proposed stand-alone Subregional Conference, the South Asia Department (SARD) aims to apply the successful approach adopted in 2016 in documenting and profiling ADB-related and other emerging practices in promoting inclusive and sustainable energy access to the urban development sector, including urban transport. In April 2016, SARD conducted the sub-regional conference Going Beyond the Meter: Inclusive Energy Solutions in South Asia in Jaipur in partnership with the International Network on Gender and Energy (ENERGIA), the University of Melbourne (School of Engineering), the Society on Social Implications of Technology of the Institute of Electrical and Electronics Engineers (SSIT-IEEE), and UN Women. Based on the positive feedback of all participants, the conference attained its objectives. Among the key features of the successful energy conference were the use of iterative consultative process with sector practitioners in preparing the sub-regional conference concept note and background paper; the good selection of participants (practitioners and experts representing governments, private sector, academia, and civil society organizations) from six DMCs in South Asia; and the interactive sessions where feature speakers and a panel of experts shared their ideas, experiences and lessons in promoting Gender Equality and Social Inclusion (GESI) approaches in the energy sector.

Description of Trust Fund Support

Patterned from the sub-regional conference on inclusive energy solutions, UEIF funding assistance (direct charge) was requested for the conduct of a sub-regional conference on smart and safe cities. The activity aims to enable the urban infrastructure development and social development practitioners and experts to: (i) showcase innovative practices in pro-poor, gender and socially inclusive urban development sector (including urban transport and communication) policy development, and program and project design and implementation; (ii) demonstrate how good practices and workable solutions in GESI-responsive delivery mechanisms can enhance the overall effectiveness of urban development, including urban transport and communication programs and projects in contributing to the development of smart and safe cities; and (iii) enhance the capacities of executing and implementing agencies of ADB–financed projects on practical approaches to integrate GESI considerations in urban development policies and programs in a systematic and sustainable manner.

Status of Physical Progress

The direct charge activity has resulted in the following:

- Completion of stocktaking on smart and safe cities contract (summarizing the process and list of outputs) and development of concept note; and
- Completion of pre-conference activities.

Due to inordinate implementation delays in the conduct of the conference, funding for said activity has been cancelled. Undisbursed funds are requested to be refunded to UEIF. A memorandum to ADB’s Controller’s Department to facilitate write-off of advance payments was sent last 12 July 2021.