ASEAN AUSTRALIA SMART CITIES TRUST FUND
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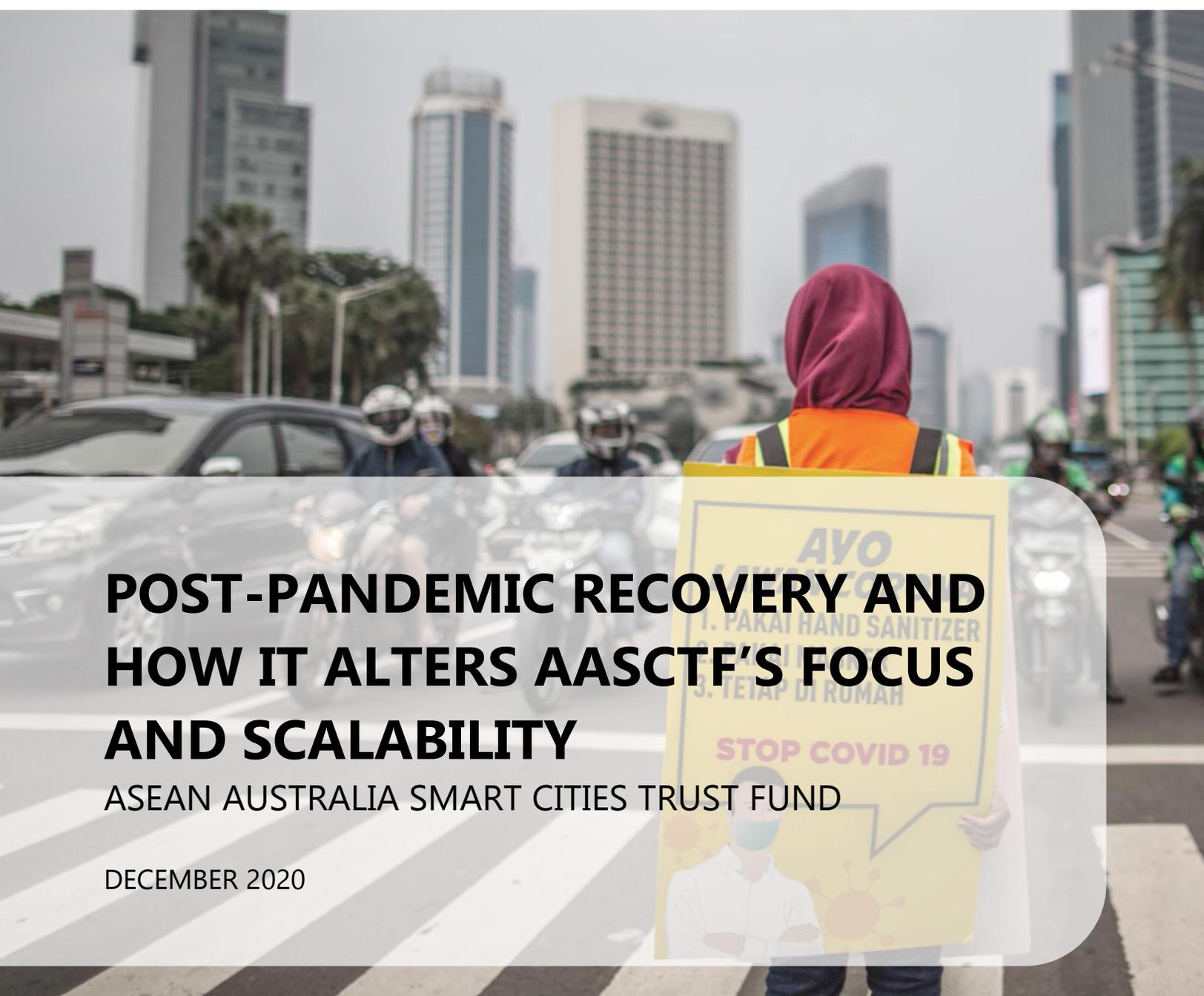
POST-PANDEMIC RECOVERY AND HOW IT ALTERS AASCTF'S FOCUS AND SCALABILITY

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How Recovery from the COVID-19 Pandemic alters the Focus and Scalability of the ASEAN Australia Smart Cities Trust Fund

The COVID-19 pandemic has exposed and magnified the underlying vulnerability of our rapidly urbanizing and highly interconnected world. As cities and governmental bodies worldwide shift from immediate response to long-term recovery, calls to "build back better" grow louder. The key to building back better is to 'build back smarter.' Digital smart and evidence-based solutions support cities to expediently move from best practices (retrospective thinking) to next practices (preparatory thinking), enabling cities to tunnel through learning curves on their path to achieving truly green, inclusive, competitive, and resilient societies.

Introduction

Cities are at the frontline of safeguarding citizens from unforeseen shocks and challenges – including economic, physical, and environmental. The current COVID-19 pandemic is emblematic of this sort of shock and has amplified the vulnerability of our cities, systems, and societies, while further entrenching socioeconomic and gender inequalities in city ecosystems. Addressing these vulnerabilities and inequalities demands the development of holistic and integrated solutions that enhance city-wide urban resilience and prioritize the expansion of adaptive capacities of the most vulnerable citizens who are typically most adversely impacted during stress and shock events.

The COVID-19 pandemic is a serious and defining global crisis, but it is also a temporary one. New and more effective treatments, and now the approved vaccines will help normalize societies in the near future, although concerns persist over a large number of issues and challenges – e.g., ownership, pricing, production, distribution, management, and immunization distribution. In the meantime, containment measures such as contact tracing, face coverings, physical distancing, water, sanitation, and hygiene (WASH) interventions, measures in public transportation, effective ventilation of living spaces in buildings, etc., are

proving effective in infection prevention, shielding vulnerable sectors of society, and instilling controls on human activity. These measures are, however, short-term solutions, somewhat singularly targeted toward responding to COVID-19 and, as such, ultimately not entirely sustainable on their own.

COVID-19 will not be the only global threat that cities are – *and will be facing* – today and in the years to come. Risks to cities could include global recessions, climate change, and food security. As such, urban planners and infrastructure experts are constantly devising solutions that respond to expected and foreseen stresses. Among the challenges city planners face are infrastructure longevity and an inability to anticipate future events and crises. Indeed, cities and infrastructure planned and built today will define the city's physical development structure for many years. Thus, genuinely future-proofed, responsive, and far-reaching solutions to rethink and redesign cities need to go further than current best practices, which from a city development perspective can be viewed as the 'best of the past' and is in urgent need of updating. Historical precedence suggests that a holistic approach to crises can, in fact, act as a catalyst for large-scale change, i.e., the generation of *next practices*. Although the pandemic highlights the vulnerabilities and inequalities inherent in city ecosystems, it has also revealed critical paths towards addressing these, including the vital role of digitization and smart solutions in supporting and accelerating cities on a path toward urban resilience and sustainability. Evidence of the role of digital solutions in augmenting and amplifying human-centric sustainability and inclusivity in cities is growing, e.g. contactless services and payment, digital tracking of possible contagion, warning of crowding in public transport, temperature checking, etc.

A new set of priorities for development, investments, and decision making is emerging. As a result of new COVID-19 policies the operational complexity of for example cities' mobility systems has increased by introducing social distancing and WASH interventions. Preventive measures towards the spreading of COVID-19 in societies have also changed peoples' behaviors and priorities towards several services in the cities, such as transport, with the increased demand for individual modes of transportation. This is, on the one hand, an unforeseen setback away from public transportation, which is unsustainable given the environmental benefits of mass transit and the fact that the passenger demand is fast growing. But, on the other hand, the shift towards individual transport modes has re-emphasized the qualities of soft modes of transportation in the urban environment. In many cities, such as Manila, pop-up bike lanes have appeared as a response to social distancing and restrictions imposed on modes of public transportation. These new measures may, with the right planning, become lasting benefits and a new normal when the COVID-19 crisis ends. However, it will take a coordinated planning and communication effort to retain the benefits and avoid returning to the unsustainable past behavior with even more car traffic which will only further exacerbate the socio-economic inequality in many cities.

Cities are rapidly assessing the opportunity to invest in digital and smart infrastructure for a robust, resilient, and inclusive recovery with economic and social stability, and, as well, to pursue the opportunities to collaborate through digital and smart technologies with the private sector through public private partnerships. Across ASEAN, cities have already developed new digital frontlines to protect citizens and economies. Governments have deployed smart technology for emergency response, administration of on-going services, and planning for the "day after." These deployments are demonstrating the value of smart technology and helping shape the future of smart cities. The ASEAN Australia Smart Cities Trust Fund (AASCTF) seeks to support cities to learn from this shock of COVID-19 to build greater resilience for future shocks, developing smart policy and planning, service delivery and financial management systems leveraged by digital interventions.

About the ASEAN Australia Smart Cities Trust Fund (AASCTF)

The ASEAN Australia Smart Cities Trust Fund (AASCTF) assists ASEAN cities in enhancing their planning systems, service delivery, and financial management by developing and testing appropriate digital solutions and systems. Digital solutions address vital cross-cutting themes such as social inclusiveness, gender equity & women's empowerment, climate change & environmental sustainability, and public-private partnerships. By working with cities, AASCTF facilitates their transformation to become more livable, resilient, and inclusive, while in the process identifying scalable best practices to be replicated across cities in Asia and the Pacific.

Pivoting AASCTF Focus

The rise of digital technology as a support during the COVID-19 pandemic (e.g. lockdown, entertainment, working remotely, regulating, trace-tracking, communicating, etc.) has been one of the globally recognized catalysts for accelerating positive change, including its relatively cheap cost, general ease of uptake, and immediate interventions. Some 'shovel-ready' smart city innovations and solutions exist but putting them in the long-term perspective of resilience across multiple shocks and stresses remains nascent or even absent and requires leveraging support from initiatives like AASCTF.

In addition to a continued focus on supporting partnering cities to improve their digital and smart infrastructure base, AASCTF interventions importantly integrate knowledge transfer and fully embrace diversity and inclusivity (from planning and design to implementation and decision making), thereby delivering more holistic and integrated solutions to address the broad range of opportunities and emerging challenges facing ASEAN cities.

Opportunities in ASEAN Countries

DIGITAL INFRASTRUCTURE

Improved digital infrastructure

To support immediate crisis response, to increase citizen engagement and gender inclusion, to enhance transition to e-governance and e-economy, to improve planning and regulation and to raise the quality of evidence-based decision-making.

INFRASTRUCTURE

Improved smart infrastructure

To enable smart financing vehicles, to invite investors through a cooperating partnership, to bring smart infrastructure up in pace following the urban development, to plan and build future oriented infrastructure securing quality service delivery, also where cities grow and citizens prosper.

KNOWLEDGE TRANSFER

Improved knowledge transfer

Through both digitally-enabled capacity building and swifter transferability of scalable technology to relatively impoverished cities.

INCLUSIVITY & DIVERSITY

Higher importance of inclusivity and diversity

Higher importance of inclusivity and diversity, as reflected during the pandemic. For instance, improvements in access to smartphones and broadband for vulnerable communities.

In the wake of COVID-19, AASCTF has developed and incorporated supporting initiatives in the existing and planned intervention concepts which seek to enhance a broader resilience and capacity of cities and citizens to respond to future shocks and stresses like, BUT not limited to, COVID-19.

A generalized need for improved data underpins changed priorities post-pandemic for cities, as decisions over how to plan/re-plan, implement/retrofit, finance/subsidize, etc., are expected to alter significantly. These decisions need to be data and knowledge-driven, and investments need to be made in both the short-term to react swiftly on the direct challenge and the long-term to enable insights for future-proofed, flexible, and resilient solutions.

In all AASCTF initiatives the longer-term resilience, including health security, is factored in. In Makassar (Indonesia), AASCTF is piloting a digital citizen engagement tool which supports to secure broad public engagement even in times where physical meetings are prohibited, and outreach means/activities

limited. In Yangon (Myanmar), the planned initiative will consider public health/WASH in the broader city smart water roadmap and intervention. In Hue (Vietnam), a suite of 6 intervention options have been discussed with the city government, including initiatives integrating options enhancing public health such as COVID-19 responses, resilience etc.

The AASCTF is addressing resilience by applying an integrated multi-disciplinary approach to encompass it's three functional areas of planning, service delivery, and financial management, that are key pivot points for the AASCTF:

AASCTF Key Pivot Points

Planning

Focus must be on resilience, livability, flexibility, and coherence while preparing the urban structures and spaces, infrastructure, and functionality on securing inclusive and equitable future-proof environments for sustainable growth.

Service delivery

Flexibility must be an incorporated principle for easy and quick implementation and transformation. Similarly, redundancies of essential services must be ensured to provide resilience and back-up capacity and safeguards for public health and wellbeing.

Financial management

Foresight and planning for changes in revenue streams as incentives change, is requisite. For instance, we may expect higher tariffs on road use and lower tariffs on access to green spaces, with prices set to incentivize healthy, livable cities.

The COVID-19 pandemic has sharpened the focus on digitally enabled change. The positives include a heightened willingness from cities to engage in longer-term arrangements to prevent the pandemic's adverse impact, which in turn sharpens focus on possible future stresses. Many historical barriers blocking investments in digital infrastructure have been eroded, and the business case is now looking economically irresistible as the basis for a growth-based transition. However, a number of challenges still remain to harvest the benefits of the digital transition. Leadership and the ability to be visionary and strategic in the new digital environment are two main obstacles that must be overcome in line with other obstacles such as limited financial and knowledge resources and ICT management, intersectoral coordination, cooperation, and, last but not least, a governance restructuring for the authorities to be able to drive the change towards the next digital practice.

Pivoting AASCTF Operations

The actual cooperating cities in the AASCTF programme are starting to address the issues of the longer-term implications of the current pandemic, and thus realizing the vulnerability towards large-scale effects of global and regional incidents influencing the local economic environment, tourism, health care system, transport systems, etc. The latest intervention development talks with Penang (Malaysia) are directly pivoting around, on the one hand, the economic and employment backlog following the pandemic and, on the other, how the vital tourism industry can be kick-started in the short-term and improved over the longer-term. Furthermore, Penang city is seeking to revitalize the heritage district of George Town to improve the attractiveness and livability for both residents and visitors alike, and thus create a more inclusive, diverse and ultimately vibrant district for all to enjoy and prosper.

In Hue (Vietnam), the intervention development together with the city government is focusing on the ability to utilize the urban growth to remediate the catastrophic implications of typhoons, fluvial and pluvial flooding and create a more resilient city and district as a whole both in terms of physical resilience and stability both physical, economic, and social.

El Nido and Coron (Philippines) have requested targeted support with Digital Payment and Tourism related initiatives responding to COVID-19. Quick recovery of the tourism industry from the COVID-19 lockdowns are vital to secure the wellbeing of the citizens keeping as many of the related jobs as possible and thus securing social stability and economic recovery.

In Kaysone (Lao PDR), developing an e-learning and job matching platform which has a gamification work skills training module is a direct response to the challenges the universities and vocational training schools are facing during the pandemic lock-down. The gamification module can directly train workers to act according to behavioural restrictions, social distancing, and appropriate working conditions.

As described above, the AASCTF program is, at its core, demand-driven, and, as such, all opportunities have been-, and will continue to be pursued in alignment with:

1) local context, needs and priorities (current and future);

2) principles for achieving future-proofed, resilient, sustainable and livable societies (embracing urban and demographic challenges and trends); and

3) COVID-19 immediate and mid-term implications and response needs of health security, stability and economic recovery[1].

COVID-19 is operationally influencing how the AASCTF team is working. This has resulted in a refined focus on digital communication and virtual collaboration, both internally and externally. Since mid-March, the AASCTF has been working largely remotely, both in the development of project concepts and in the start-up and implementation of pilot projects. Video meetings with city officials, to discuss and plan the city interventions and understand the particular local needs and constraints, have been initiated on several occasions, including simultaneous translation. Through utilisation of interactive and smart tools to facilitate virtual meetings and workshops, AASCTF managed to remain largely unimpeded operationally and

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[1] Australian Government. Department of Foreign Affairs and Trade. *Partnerships for Recovery: Australia's COVID-19 Development Response (dfat.gov.au).* 2020.

continues to pave the way for more enhanced and collaborative interaction with the beneficiaries, resulting in a closer relationship both while developing interventions and while implementing them.

Prior to the pandemic, the AASCTF was designed to comprehend, pilot, and monitor digital and technology investments that would address a range of development challenges for cities, from growth frameworks to slum upgrading and private sector financing. This has been done with due consideration of the need to integrate and address cross-cutting issues such as climate change and gender inequality. The COVID-19 pandemic has underlined the importance of innovative interventions based on a broader cross-sectoral and city-level resilience rather than on isolated sector-specific needle stick actions. For instance, it has elevated the development challenges of healthcare, economic stability, and social/gender inequality. The AASCTF team understands the importance of adapting its strategy to best support cities in this endeavor.

AASCTF is purposefully applying a human-centric approach in delivering smart solutions to partnering cities. A particular consequence of the COVID-19 pandemic has been a significantly reduced mobility of the AASCTF team. This has entailed a necessary rethinking and conceptualizing of the ways in which we will engage with stakeholders under AASCTF. To this end, AASCTF utilized online-based information dissemination and events platforms to continue its knowledge sharing activities, such as the ASEAN Australia Smart Cities Webinar Series, which was launched on 18 August 2020. During this time, the team has also embraced social media as a crucial platform in spreading awareness of AASCTF's activities, especially our webinars. The AASCTF team has also developed three videos showcasing the role of digital solutions in assisting local governments to effectively respond to the challenges brought about by the COVID-19 pandemic.

Other digital tools for stakeholder engagement at various stages of the process are currently under development. Similarly, efforts regarding the 'how' and 'when' we engage with partnering cities to deliver capacity building, networking, and twinning activities are underway and likely to be a continuously evolving and event/site-specific endeavor.

As described above the COVID-19 pandemic has exacerbated the need for re-thinking the planning, service delivery and financial management regimes all over the world to be able to comprehend and respond to the future shocks and stresses that will inevitably and frequently impact the livability and prosperity of cities and vulnerable populations. With the short experience we have had with the pandemic so far, AASCTF has undertaken concerted efforts to analyze and adapt to the new normal and to transform such learnings into action within an urban development perspective that is much longer than the immediate implications of the pandemic. The table below show some major operational actions implied by the pandemic on the AASCTF activities. However, all the considerations in this note will continuously be adapted and enhanced in all the future works coming out of the AASCTF's activities.

COVID-19 RESPONSES IN THE AASCTF ACTIVITIES	
SHORT-TERM	• Makassar, INO: Ur-scape (GIS)-tool) logging infection geographically and digital citizens remote engagement tool • 3x COVID-19 response videos (INO, PHI, VIE) • Webinar 1 – Big data and COVID-19 tracking and Digital Solutions Brief • Webinars 2-6, where COVID-19 is one of the discussions topics • Opinion poll on immediate impact of COVID-19 (social media, newsletter))
MEDIUM-TERM	• Capitalizing on opportunities to work with Digital payments in Battambang (CAM), El Nido (PHI), Coron (PHI) • Monitoring & Evaluation: Baselining all interventions to incorporate questions related to C-19 response • Documenting stories – how specific cities are responding/using digital tools, including COVID-19 responses
LONG-TERM	• Bulk of the AASCTF interventions are focused on resilience with longer-term outlook, including COVID-19 and other health issues. • Focus on broader urban resilience, shoring up cities to better address a whole range of shocks and stresses. • Utilization of ADB Smart City Analytical Framework which ties "smartness" to livability and to resilient, green, inclusive and competitive development.