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Livable Cities: Post-COVID-19 New Normal

Asian Development Bank

ABBREVIATIONS

ADB	Asian Development Bank
COVID-19	coronavirus disease
DMC	developing member country
ICT	information and communication technology
MSMEs	micro, small, and medium enterprises
m²	square meter
WASH	water, sanitation, and hygiene

NOTE

In this Guidance Note, "$" refers to United States dollars.

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I. BACKGROUND

1. The coronavirus disease (COVID-19), which was declared a global pandemic by the World Health Organization (WHO) on 11 March 2020, has become the most urgent crisis of our time. It has affected the normal lives of citizens, disrupting their routines, and causing them severe physical, social, and economic distress. In Asia and the Pacific, the poor and the vulnerable people in cities are the most adversely affected by this pandemic. While various diseases and epidemics have influenced the development of cities over the centuries, a pandemic like COVID-19 has caused an unprecedented global impact on cities across the world.

2. This livable cities guidance note aims to support cities in developing member countries (DMCs) of the Asian Development Bank (ADB) to effectively respond to the crisis in the immediate term, and to 'build back better' in the short- and medium-term while continuously adapting to a 'new normal' with respect to human behaviors, social interactions, and business practices. The note is anchored on the core principles outlined under ADB's Strategy 2030 Operational Plan for Priority 4: Making Cities More Livable (OP4)[1], and also considers the public health and economic impacts of the pandemic. Related sector and thematic areas (e.g., transport, education, health, regional cooperation and integration) are covered by similar notes in the ADB's COVID-19 guidance series.

3. Specifically, key approaches for livable cities in the immediate term are to (i) remodel public spaces, commercial, office, industrial buildings, and civic institutions to adapt to COVID-19; (ii) ensure continued smooth operations of urban water and wastewater utilities; provide essential water, sanitation, and hygiene (WASH) services; and address environmental problems of increased solid waste and medical waste management; (iii) address the special needs of informal settlements and vulnerable people; (iv) address the changing travel needs of the residents during COVID-19; and (v) effectively use Information and Communication Technology (ICT) and digital solutions. These immediate actions are part of the short- and medium-term efforts to (i) enhance inclusivity through greater social protection measures for the most vulnerable groups in cities; (ii) improve urban services and infrastructure and effectively use technologies and digital solutions; (iii) revisit urban planning to strategically incorporate lessons from COVID-19; (iv) strengthen financial sustainability of local governments, and build capacities of urban institutions and other stakeholders; (v) focus on healthy and environmentally sustainable cities; and (vi) build resilient cities with the ability to absorb shocks and stresses due to pandemics, disasters, and climate change. ADB will continue to support cities in DMCs and align its livable cities portfolio to address COVID-19 impacts in DMCs.

II. ISSUES AND CHALLENGES

4. Cities in DMCs are facing challenges that have been further aggravated by COVID-19. Some of these are elaborated here.

5. **Inadequate urban and social infrastructure.** Most cities in DMCs face inadequate urban services and deficits in basic urban infrastructure (e.g., transport, water supply, sanitation and wastewater management, solid waste management, energy, and telecommunications) and social infrastructure (e.g., health care, education, public and community facilities, including affordable

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[1] ADB. 2019. *Strategy 2030 Operational Plan for Priority 4: Making Cities More Livable, 2019-2024*. Manila.

housing)[2]. Already a huge challenge before COVID-19, this lack of adequate urban services has placed outbreak-affected areas at a greater disadvantage due to disruptions in regular operations.

6.   **Intensified impacts on vulnerable population.** Cities in DMCs with high-density environments, especially in informal settlements and slums, face high exposure to the risks of COVID-19. The impact of the crisis, which exacerbates existing inequalities, is the highest among the urban poor, who face dual challenges of increased vulnerabilities to the disease and reduced opportunities of livelihoods due to economic restrictions. Living in overcrowded, unsafe, and unhealthy conditions, vulnerable people (e.g., slum residents, pavement dwellers, squatters, homeless persons, informal sector workers, and migrant workers) find it difficult to comply with the prescribed social distancing measures. Their problems are aggravated by substandard housing and a lack of access to safe water, sanitation, and hygiene (WASH) facilities. There are also reports of increased gender-based violence and elevated stress due to living within small and confined spaces during the enforced stay-at-home period.[3] The inability to stock food supplies by residents in informal settlements and the closed street markets due to the quarantine restrictions further deteriorate vulnerable people's living and health conditions.

7.   **Ineffective ICT System**. Despite the high penetration of internet and personal mobile phones in DMCs, cities often lack integrated systems and equal access to ICT that are required to effectively address a crisis of this magnitude. Incomplete and, sometimes, asymmetric information due to inadequate local ICT systems trigger and aggravate citizens' anxiety and engender panic reactions, as seen in many cities in DMCs in the first few months of the pandemic. Irresponsible fake news and unsubstantiated messages through social media cause more harm as the ICT systems of several DMCs are not capable of countering such propaganda with factual and accurate information, which citizens need in these times. Availability of reliable data from service providers, who own and operate open source data, remains a challenge for governments to complement their own datasets, which are often seen as a critical requirement for fruitful and effective functioning of citizens-interface platforms.

8.   **Urban economic crisis at the macro and micro levels.** Cities, which contribute a substantial part of Gross Domestic Product in DMCs, have not been able to sufficiently withstand the economic shocks of COVID-19, gauging by the severe hardships faced by micro, small, and medium enterprises (MSMEs) and workers, especially in the low-income categories, who find it difficult to have jobs compatible with the work-from-home arrangements. Similarly, cities have felt economic impacts from the pandemic due to, among others, reduced revenues (e.g., taxes, tariffs, and inter-governmental transfers) of local governments, irregular and reduced remittances from overseas workers, and disruptions in value chains and production networks that are connected across countries. Considering the inadequate social protection systems, supporting MSMEs, workers, and the vulnerable people in cities is a challenge. The existing political, economic, and regulatory systems in DMCs often limit cities' systemic and holistic response to support workers and MSMEs and revitalize economies.

9.   **Strained local government planning and management.** Local governments, which are at the forefront of tackling the crisis on the ground, are required to immediately respond to emergency situations which, at times, overwhelm their capacities in terms of resources, financing, personnel, and systems and logistics. Their performance in emergency preparedness, crisis

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[2] UNESCAP. 2019. *The Future of Asian and Pacific Cities*. Bangkok. The addition of 1.2 billion new residents in Asia-Pacific cities between 2019 and 2050 will have profound implications for the region's economy, society and environment.

[3] UN Women. 2020. *The First 100 Days of the COVID-19 Outbreak in Asia and the Pacific: A Gender Lens*. New York.

management, and operational readiness has been put to the test to meet the demands of their national governments, regulatory systems, and numerous other stakeholders.

III. KEY APPROACHES FOR CITIES DURING AND AFTER THE PANDEMIC

10.   Cities in DMCs can draw lessons from other cities around the world on how to implement more effective emergency responses and proactively plan their immediate actions. While pursuing such immediate actions to recover from the initial pandemic shocks, cities should not lose sight of short- and medium-term goals of enhancing safety, resilience, and livability. Cities can consider the following approaches:

(i)   Cities experience varying impacts from COVID-19 and are not equal in their capacity to respond to the crisis. Therefore, while learning from others and planning their response, they should consider socioeconomic and political factors, such as but not limited to demographic profile and population characteristics; economic capabilities and income levels; geographic features; urban infrastructure and pre-COVID-19 service standards; and regulatory frameworks, devolution of powers, available resources, and personnel requirements.

(ii)   Cities are undertaking a wide range of decisions that impact immediate prevention and protection measures (e.g., testing and tracking of COVID-19 cases, distributing food and subsistence allowances to the most vulnerable people) and longer-term paths to recovery. Such long-term view should be factored into the immediate response as much as possible to achieve more strategic goals and objectives that will enable cities to 'build back better'.

(iii)   COVID-19 provides a unique opportunity for cities to upscale innovation and use online tools and digital solutions through proven and new technologies, such as Internet of Things-based systems; artificial intelligence (e.g., for contact tracing and identifying potential COVID-19 cases); blockchain (e.g., for more secure communications and transactions); mobile applications (e.g., for citizens' awareness and education); teleworking (e.g., for work-from-home, distance learning, and skills development[4]); and network management technologies (e.g., for operation of municipal infrastructure utilities, networks, and services).

(iv)   Cities should continue to work in an inclusive manner to plan and prioritize their immediate actions to take care of the most vulnerable people (e.g., low-income residents, slum residents, informal sector workers, migrant workers, pavement dwellers, homeless people, single-parent households, the elderly, women and children, persons with disabilities, minorities, and migrants), reflecting their needs and abilities. Local governments can adopt differentiated approaches for such groups to support them in complying with the prescribed public health and safety measures.

(v)   Cities in consultation with private sector and civil society need to carefully balance the health and well-being of their citizens with the potential of realizing livelihood opportunities considering the drivers for local economic development and the specific strengths possible under the constrained quarantine conditions and restrictions.

(vi)   Cities need to work with national governments to ensure effective implementation of nationwide (or statewide, as appropriate) measures (e.g., quarantine directions, fiscal stimulus packages for workers and MSMEs, special social protection
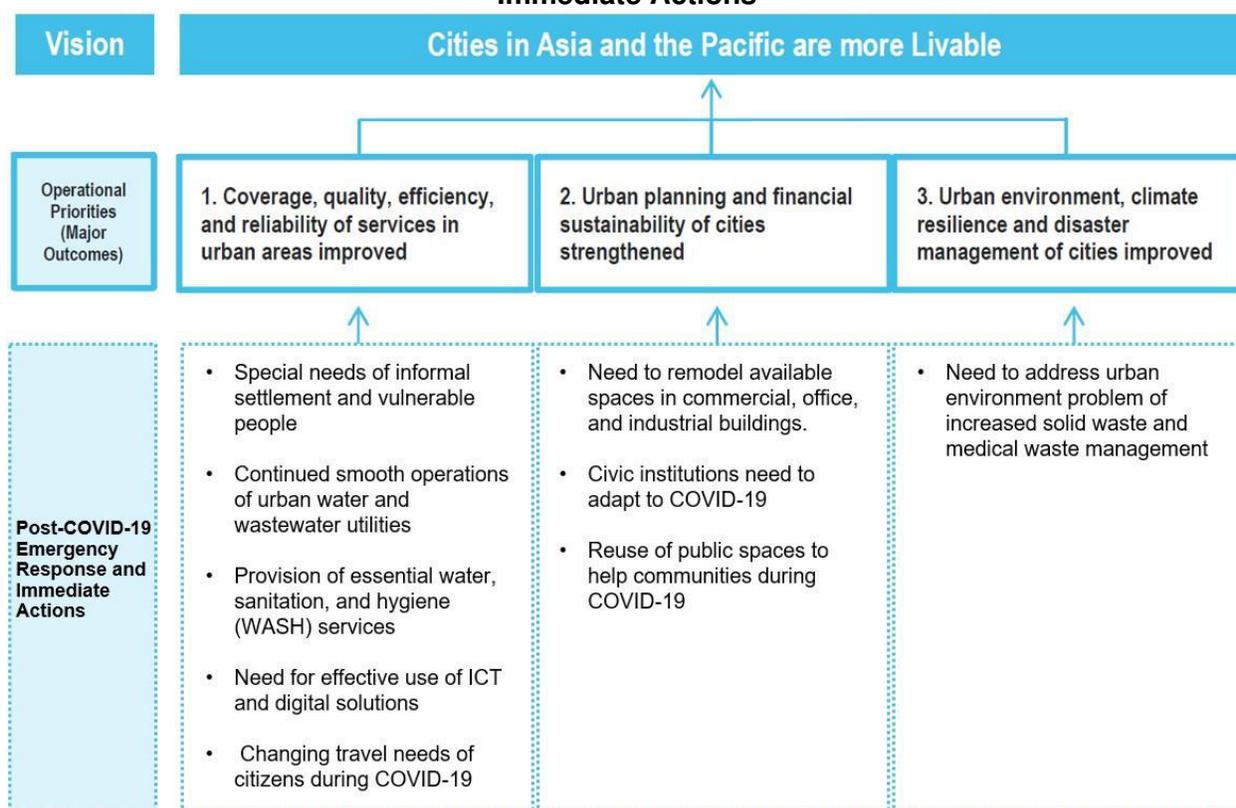
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[4] The New York Times. 2020. *Manhattan Faces a Reckoning if Working from Home Becomes the Norm.* 13 May.

measures) or develop location-specific responses in line with national frameworks and initiatives.[5]

IV.   POST-COVID-19 EMERGENCY RESPONSE AND IMMEDIATE ACTIONS FOR LIVABLE CITIES

11.   **Adapting to the crisis to sustain urban services.** Sustaining and improving the provision of and access to urban infrastructure and services are essential to tackling the risks posed by any pandemic. More than ever, effective services and quality infrastructure are required in cities, especially in slums and informal settlements and for the poor and vulnerable communities. The issues and areas of intervention for emergency response and immediate actions are in line with OP4's three major outcomes (Figure 1). The details of specific actions that cities should consider implementing are summarized in Table 1.

Figure 1: Making Cities More Livable: Post-COVID-19 Emergency Response and Immediate Actions

Source: ADB.

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5 OECD. 2020. *Tackling Coronavirus (COVID-19) Contributing to a Global Effort: Cities Policy Responses*.

Table 1: Emergency Response and Immediate Actions Required for Livable Cities

Issues and Areas of Intervention	Actions to be Taken
Livable Cities Pillar 1: Coverage, Quality, Efficiency, and Reliability of Services in Urban Areas Improved	
Special needs of informal settlements and vulnerable people Since a one-size-fits-all approach is not recommended for cities, similar omnibus measures for all informal settlements are not effective. Measures and policies (e.g., resource provision, communication strategy, training, and support) need to be adapted based on the characteristics of the groups of vulnerable people and informal settlement, such as physical environment, climate, population size, cultural and linguistic factors, crime rates, and relationship with the state.	• Consult with people in informal settlements, community leaders, nongovernment organizations, and urban poor networks to identify the vulnerable people (e.g., slum residents, pavement dwellers, squatters, homeless persons, informal sector workers, and migrant workers) and collaborate on developing and implementing response plans. • Calculate overcrowding of informal settlements to account for physical distancing. • Develop an appropriate communication strategy and implementation mechanism, allocate resources, and monitor for effective results. • Customize communication messages to different target groups in informal settlements to stimulate required behavioral changes. • Operationalize a temporary COVID-19 information center in each community to disseminate the communication messages, illustrate and remind people of preventive tips, and assess the availability of core urban services along with health checkups. • Take measures to continuously monitor the health and nutrition status and access to basic services of communities (e.g., nutrition status of mothers, infants, and children, likely to be most affected due to supply chain disruptions) using technology and digital solutions, particularly for areas with high infection rates, for quick response and recovery.
Continued smooth operations of urban water and wastewater utilities Water and wastewater utilities need to provide uninterrupted and quality services during the pandemic and ensure a safe and healthy environment for all residents.	• Adapt and provide solutions in real-time and in a dynamic fashion to address evolving issues and challenges (e.g., in terms of significantly different demands across different parts of the networks in contrast to normal usage). • Conduct regular analysis of virus RNA concentrations in sewage samples to establish early warning systems for tracking the spread of COVID-19 in the catchment communities.[a] • Communicate regularly and effectively with customers to provide assurance, get feedback, and make appropriate changes (e.g., disruptions or resumption of services). • Focus on human resource plans with possible incentives to motivate and inspire the workforce, who are also considered as frontline workers providing an essential service. • Provide adequate personal protective equipment (PPE) for the workers. • Continue regular utility operations and implement scheduled asset management plans of treatment plants, pumping stations, valves, meters, distribution networks, nonrevenue water (NRW), billing and collection systems.

Issues and Areas of Intervention	Actions to be Taken
	• Maintain operational efficiency despite reduced workforce and decreased on-site visits with innovative methods and use of technologies for sustained investigations of leakages and reduction of NRW and clearance of backlogs of repairs. • Consider temporary suspension of non-essential expansion works and home call outs. • Learn from experiences of utilities with centralized control and command centers and supervisory control and data acquisition (SCADA) systems that are more effective in tackling the disruption of services.
Provision of essential water, sanitation, and hygiene (WASH) services WASH is central to preventing the spread of COVID-19 as well as other diseases. Handwashing with water and soap kills the virus but requires the provision of uninterrupted water in sufficient quantities. It is also critical to have effective sanitation and proper hygiene for all the people in pandemic-affected areas.	• Establish and operationalize proper governmental structures (e.g., inter-ministerial committees) to coordinate and monitor response to COVID-19 with due focus on WASH. • Remove cost barriers to access water to ensure adequate water for WASH. • Extend financial and technical support to service providers to implement the necessary measures for WASH (as required): provide financial support to water utilities; engage public and private water service providers to cover low-coverage areas; exempt WASH-related products imported into the country from taxes; and open credit lines to WASH-related enterprises to help them survive. • Implement targeted measures for vulnerable people given their higher exposure and vulnerability to COVID-19.[b]
Need for effective use of ICT and digital solutions Cities should use ICT and digital solutions to respond to urgent needs and demands from their respective communities. They can use available technologies and solutions and quickly adapt their own systems considering the local context to enable more informed decision making. Such an approach would also support external coherence and harmonization of processes and workflows.	• Create and lead an organized system of coordination, data management, and research on the impacts of COVID-19 on urban populations. • Establish, within national coordination structures, a mechanism to share relevant findings and key recommendations to inform and adjust the multisectoral local and national response (e.g., online tax and tariff management system, online administrative approvals, and grievance redress system). • Support national approach of local data management systems and platforms, considering affordability and reliability, along with the national statistical offices and data teams from the relevant ministries (e.g., health, transport, education, technology, national development and trade) that oversee case management statistics. • Produce city-level tracking system for levels of preparedness and response to COVID-19.[c] • Coordinate with national and local governments to support solutions for consistent urban services during periods of restricted movement (e.g., movement of essential logistics, scale and location of necessary health care facilities, required specific region and period of community quarantine, planning of public transport considering flexible working hours, online or mobile communication with residents to ensure timely information and minimize physical contact).

Issues and Areas of Intervention	Actions to be Taken
Changing travel needs of citizens during COVID-19 Transportation during the COVID-19 crisis resulted in significant changes since travel demand focuses more on essential travels, while space are constrained due to the physical distancing requirement.	• Reallocate space to allow for physically more spaced out for non-motorized and low carbon modes (e.g., walking and cycling) or resilience-enhancing services (e.g., health care, food, and other essential services). • Explore and strengthen measures to manage excess post-quarantine personal car traffic. • Relax administrative rules regarding emergency light individual transport lanes and consider incentive schemes on shared micro-mobility. • Prioritize logistics in road and rail transportation to ensure continued supply of essential goods. • Keep public mass transit open for essential workers' mobility considering physical distancing measures. • Provide funding for the deployment of more light individual transport lanes.
Livable Cities Pillar 2: Urban Planning and Financial Sustainability of Cities Strengthened	
Need to remodel available spaces in commercial, office, and industrial buildings These spaces need to adjust or limit gatherings and commercial activities, except for essential activities such as in supermarkets, pharmacies, banks, insurance, and postal services, which should apply stringent distancing measures, before gradually shifting to overall confinement or vice versa.	• Recalculate the occupancy rate to account for social distancing and complement this with flexible work-time arrangements (e.g., considering the short- to medium-term plans regarding more staggered commuting, gathering patterns, and softened rush hour times). • Recalibrate building designs and systems to be more efficient, safe, and virus-free by establishing protocols for cleaning, maintenance, sanitization, and disinfection; auditing existing heating, ventilating, and air conditioning systems; and, maximizing outdoor air intake to increase the supply of fresh air.[d] Companies and building management can also use or install safety and protective features, such as infrared forehead thermometers, thermal scanners, disinfectant mats, protective covering, and wayfinding and information signs. • Review the legal and regulatory systems of building plan approvals to enhance, wherever possible, requirements for public health and social protection (e.g., housing, health care, open spaces, education, amenities). • Review plans of buildings scheduled for construction, demolition, renovation, or reconstruction in the light of new systems.
Civic institutions need to adapt to COVID-19 Similar to commercial spaces, civic institutions pose a high risk for COVID-19 transmission due to the concentration of people in such places. Complying with social distancing is critical in these areas to address COVID-19.	• Identify non-essential facilities to be closed. • Prepare protocols for entry and exit and designate the number of people allowed during meetings and activities for core civic institutions (e.g., places of worship, museums, concert halls or cultural centers, community centers) to follow the physical distance and safety requirements. • Consider changing operating hours to stretch out activities and avoid large volume of people. • Organize some activities online to allow regular access and programs to continue, especially for vulnerable people who may only have these services as their sole option (free) for religious, education, or cultural activities (e.g., prayer or masses, workshops or classes, theatrical performances, art exhibitions).

Issues and Areas of Intervention	Actions to be Taken
Reuse of public spaces to help communities during COVID-19 Public spaces become valuable in enabling emergency response to dense populations in cities.	• Identify and classify public spaces (e.g., open spaces, parks, community centers, reserved sites, roads, government buildings) to be utilized for public health care (e.g., additional medical facilities for testing, treatment, and containment), communal activities (e.g., mobile markets, distribution centers, parks, sports and wellness areas), and for temporary housing and working spaces for daily functions during the quarantine period (e.g., community kitchens, housing for medical and repatriated workers). • Repurpose and restructure spaces for wet markets considering human infection by animal-borne diseases and expand outside spaces to enable social distancing. • Consider pedestrians and cyclists as important stakeholders and allow wider-spaced walking and cycling paths within the existing infrastructure for a walkable and bike-friendly city. • Introduce temporary barriers and fences and entry and exit procedures to limit and organize the number of people present in certain public spaces (e.g., parks or playgrounds). • Through community engagement, develop and separate infrastructure and spaces for the provision of temporary or alternative public transportation or logistics for daily needs (e.g., food) and critical items (e.g., health care equipment).
Livable Cities Pillar 3: Urban Environment, Climate Resilience, and Disaster Management of Cities Improved	
Need to address urban environment problem of increased solid waste and medical waste management WHO advises that any system exercising best practices for infectious waste will also be able to manage waste potentially infected with the virus causing COVID-19.[e] For medical waste management, it is recommended that all countries consider reviewing their infectious medical waste management system and refine their protocols as appropriate.	• Identify and implement the best collection, treatment, and management approaches according to the prevailing national system (e.g., considering both incineration and non-incineration methods, as appropriate). • Review existing national standards and systems and make quick amendments wherever appropriate. • Identify and monitor infectious waste, including medical waste at source (e.g., from hospitals, laboratories, quarantine facilities) and secure locations and availability of intermediate storage as much as possible and when safe to do so.[f] • Considering huge increases in infectious medical waste, arrange temporary storage (e.g., refrigerated shipping containers) with a suitably color-coded liner, while the usual collection and treatment systems get implemented. • Collect and transport the infectious waste in leakproof containers with labels of biohazard symbol. • Send the waste for disposal or recycling after disinfection. Any infectious material that could potentially be reused should be destroyed or rendered unusable. • Consider strict entry, exit, and operation procedures at public recycling facilities to prevent overcrowding. • Collaborate with civil society organizations in the informal waste recycling sector to distribute face masks and other personal protective equipment to waste pickers.

[a] Stannard. E and J. Papp. 2020.Sewage Reveals COVID-19 Totals: New Haven Register. *Yale Global Online.* 28 May.
[b] Sanitation and Water for All. 2020. *Global Ministerial Webinar on Making WASH a Political and Financial Priority in the Time of COVID-19*. 9 April.
[c] UNICEF Data. 2020. *How COVID-19 is Changing the World: A Statistical Perspective*.
[d] AECOM. 2020. *The Future of Workplace Re-occupancy*.
[e] Health Care Without Harm. 2020. *Health Care Waste Management: Coronavirus Update*. 24 March.
[f] ADB. 2020. *Managing Infectious Medical Waste During the COVID-19 Pandemic*. Manila.

V. BUILD BACK BETTER: POST-PANDEMIC LIVABLE CITIES

12. Redesign cities for resilience, inclusivity, and well-being. The COVID-19 pandemic is exposing existing fault lines with respect to poor physical infrastructure, unequal access to core urban services, and suboptimal densities resulting in overcrowded cities. It is time to revisit the urban strategies and revise the urbanization process and practices to build back better post-pandemic cities. For example, there is a debate on what is the optimal density for cities in the wake of the pandemic. There is no straightforward answer, however, cities with higher levels of access and quality of services, and more public spaces can better handle greater densities. Higher densities with lower levels of access and quality of services and limited public spaces cause overcrowded localities in cities. With respect to an optimum population density, each locality in city needs to be examined carefully. Each city can use its specific context and right parameters to assess if it has a livable and healthy density in each of its localities (i.e., appropriate number of dwelling units and people, and adequate urban services per unit area in each locality of the city) or risky overcrowding condition (e.g., excessive number of dwelling units and people, and inadequate urban services per unit area in each locality of the city).[6] Each city needs to consider its own context and the elements of livability (e.g., green, competitive, inclusive and resilient city) and the focus areas (low-carbon development, climate resilience, energy efficiency city) while determining optimum density for each of its locality.
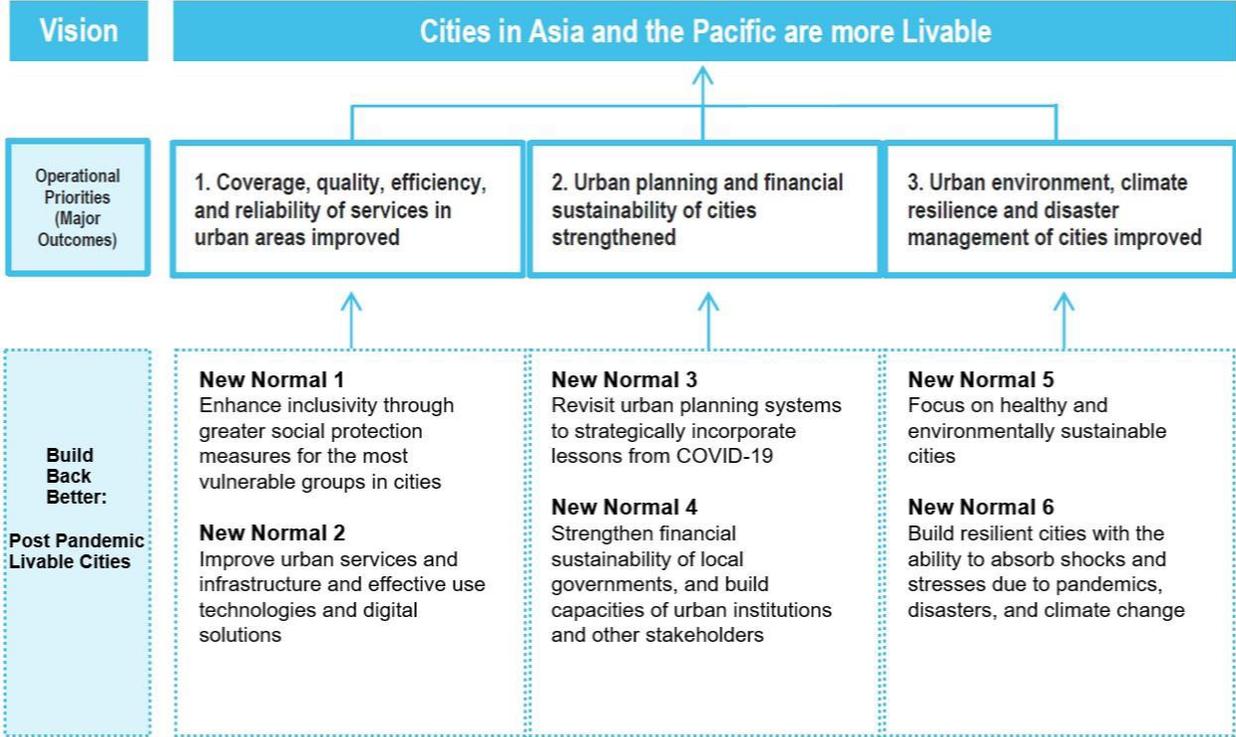
13. Cities are economic powerhouse and innovation hubs that improve livelihoods and trigger prosperity. As cities work to mitigate the immediate crisis and think about recovery, it is important that they prioritize investments that will build resilience and inclusivity in the short- and medium-term so that governments, households, and firms can weather future shocks and stresses, while increasing healthy urban lives.[7] To help cities become more healthy, environmentally sustainable and resilient, urban infrastructure and development projects have to provide support on building resilience for disasters and climate change as well as for pandemics and diseases. Similarly, to accelerate recovery of the economy in an inclusive manner, cities should aim for integrating labor markets with transport and economic sectors while not losing sight of MSMEs and social protection for vulnerable people. Finally, cities should plan for spatial areas that have been particularly impacted by COVID-19 (e.g., public markets, business districts, public transport systems, health and waste facilities) and for vulnerable people who have been most adversely affected in the current crisis (e.g., low-income residents, slum residents, informal sector workers and migrant workers, pavement dwellers, homeless residents, single-parent households, the elderly, women and children, people with disabilities, minorities). Such projects should also reflect lessons learned from the pandemic in terms of everyday and emergency uses of public spaces and infrastructure services and recommended design approaches, building standards, and flexibility to respond to changing conditions and needs.

14. Cities to adapt to the 'new normal' in the short- and medium-term in line with OP4 as detailed out in Figure 2.

[6] The City Fix. 2020. *After the Crisis: How COVID-19 Can Drive Transformational Change in Cities*. 28 April and The City Fix. 2020. *How Will COVID-19 Affect Urban Planning?* 10 April.
[7] The New Climate Economy. 2020. *NCE Key Message Pack-Special Edition on COVID-19*.

Figure 2: Making Cities More Livable: Post-COVID-19 Short- and Medium-Term Actions for the New Normal

Vision	Cities in Asia and the Pacific are more Livable		
Operational Priorities (Major Outcomes)	1. Coverage, quality, efficiency, and reliability of services in urban areas improved	2. Urban planning and financial sustainability of cities strengthened	3. Urban environment, climate resilience and disaster management of cities improved
Build Back Better: Post Pandemic Livable Cities	**New Normal 1** Enhance inclusivity through greater social protection measures for the most vulnerable groups in cities **New Normal 2** Improve urban services and infrastructure and effective use technologies and digital solutions	**New Normal 3** Revisit urban planning systems to strategically incorporate lessons from COVID-19 **New Normal 4** Strengthen financial sustainability of local governments, and build capacities of urban institutions and other stakeholders	**New Normal 5** Focus on healthy and environmentally sustainable cities **New Normal 6** Build resilient cities with the ability to absorb shocks and stresses due to pandemics, disasters, and climate change

Source: ADB.

15.   Details of these specific areas of interventions and actions for consideration are in Table 2.

Table 2: Short- and Medium-Term Actions for Post-Pandemic Livable Cities

Areas of Intervention	Actions for Consideration
Livable Cities Pillar 1: Coverage, Quality, Efficiency, and Reliability of Services in Urban Areas Improved	
Enhance inclusivity though greater social protection measures for the most vulnerable groups in cities	• Identify the special needs of different groups of vulnerable people (e.g., low-income residents, slum residents, informal sector workers and migrant workers, pavement dwellers, homeless residents, single-parent households, the elderly, women and children, people with disabilities, minorities), and prepare special programs focusing on social protection and economic needs of each group. • Provide adequate resources and devise implementation mechanisms to implement special programs for each group of the vulnerable people (e.g., provision of affordable rental housing and legal protection measures against exploitation for informal sector workers and migrant workers or adequate urbans services for slum residents). • Conduct regular census of people in vulnerable groups and establish digital social registers or data banks linked with their unique identification numbers (e.g., social security number or Aadhar number in India) and bank accounts for financial inclusion, and plan for

Areas of Intervention	Actions for Consideration
	implementation of fast and transparent direct benefit transfer schemes. • Promote economic activities, jobs, and entrepreneurships for eligible and willing vulnerable groups through special measures, as appropriate, such as support for project development and financing of investments and working capital, tax relief measures, lower development charges, and streamlined administrative processes. • Ensure that adequate and affordable core urban services (Table 3) are available to all groups of the vulnerable people at the same standards available to the general population. • Reconsider the use of overcrowded public transport allowing medium-dense (not overcrowded) residential (re)development, including affordable housing for the vulnerable people in cities where economic activities exist.[a] • Reconsider the use of overcrowded public transport for redesigning multi-modal integrated transport giving priority to non-motorized and low-carbon modes (e.g., walking and cycling). • Conduct research and development of prototypes and techniques for cost-effective projects for the vulnerable people.
Improve urban services and infrastructure and effectively use technologies and digital solutions	• Improve access to quality infrastructure and services (e.g., water supply, sanitation, power, transport, and social services) that are energy-efficient, pro-poor, gender-responsive, disabilities-inclusive, and sustainable while promoting a smart and digitalized city. • Review, assess, and develop a comprehensive policy and regulatory framework on data governance, including data acquisition, processing, sharing, and ownership. • Identify and support innovative ideas for urban improvement and new smart city solutions through incubator labs, knowledge hubs, and hackathons, that, among others, engage citizens and the private sector. • Consider government budgets as well as financial support from private sector financing for smart city initiatives (e.g., public-private partnership (PPP) for funding, technical expertise, and innovation). • Attract and upskill digital capacities through knowledge sharing between cities (e.g. twinning arrangements with more developed cities, partnerships with technology providers, academia or NGOs). • Implement a program management unit with sufficient capacity for planning, coordination, and implementation of a smart city initiative.[b] • Integrate hard and soft digital infrastructures in urban planning and development to improve urban services (e.g., early monitoring system for disaster and disease, medical consultation, remote supervision by utilizing SCADA, decentralized one-stop-shop service facilities, leveraging the mobile big data).

Areas of Intervention	Actions for Consideration
	• Promote citizens' active engagement and empowerment respecting individual privacy and strengthen data security to address citizens' concerns on surveillance.
Livable Cities Pillar 2: Urban Planning and Financial Sustainability of Cities Strengthened	
Revisit urban planning systems to strategically incorporate lessons from COVID-19	• Coordinate with relevant authorities such as for transport, health, land resources, building and construction, energy, environment, water, park and public spaces, food, civil aviation, maritime and port, tourism, and labor and workplace to provide a solid baseline for the response and contingency plan (e.g., mainstream the additional precautions and safety standards to address the pandemic) so as to consider appropriate new government arrangements across different levels of governance. • Analyze the existing and planned population changes, demographic profiles, and economic capability of the cities considering the revised post-COVID-19 standards to determine the optimum urban density while not overcrowding urban spaces and overburdening urban infrastructure. • Coordinate with national and provincial governments for balanced regional development focusing on prioritizing and developing small and medium cities as alternate economic hubs to mega cities and metropolitan areas (e.g., shifting economic activities in manufacturing and services to the prioritized secondary cities or making secondary cities attractive for informal sector workers and migrant workers from rural areas). • Re-identify the required open and natural areas to provide healthy spaces for inhabitants' physical activities in the long run (e.g., urban sponge absorbing air pollution to improve urban environment quality and potential areas for response: shelter, temporary services, or supply delivery).[c] • Promote collaboration with governments and the private sector for efficient and innovative real estate and infrastructure projects (e.g., urban regeneration of business district or transit-oriented development through PPP, land-based financing, land-pooling system) for sustainable urban growth.
Strengthen financial sustainability of local governments, and build capacities of urban institutions and other stakeholders	• Considering the impacts of the pandemic, develop the strategy to strengthen financial sustainability of local governments through maximizing revenue (e.g., taxes, tariffs and intergovernmental transfers); developing more robust data-based collection system; catalyzing additional revenue sources (e.g., private-sector participation, PPPs, bonds, guarantees, municipal development funds and pooled financing, enhancing creditworthiness to raise capital on markets, and using infrastructure as an asset class); and rationalizing expenditures (e.g., improving efficiencies, cutting non-essential costs).[d] • Work closely with national government for creating or strengthening institutions such as financial intermediaries

Areas of Intervention	Actions for Consideration
	to support local authorities on preparing, appraising, and implementing projects for urban and social infrastructure.
	• Review existing urban institutions in cities considering their responses to COVID-19 and develop capacity building plans including revised organizational structure, if required, for each urban institution.
	• Learn and apply relevant lessons from cities that were successful during the COVID-19 crisis and other such disasters and pandemics in terms of institutional capacities; service delivery and stakeholder engagement; internal governance systems, processes, and documentation; human capital development and skills-building systems; project management, sustainable operation, and management of assets; and, use of technologies and digital solutions.
	• Provide adequate resources and design implementation and monitoring mechanisms to effectively execute such capacity building programs.
	• Ensure transparent and consistent coordination and coherence across different levels of governance.
	• Promote collaboration with external stakeholders such as other cities, academic institutions, and private development partners.
	• Establish partnerships with community-based groups and leaders to build capacities of communities and citizens, improve service delivery to citizens and complement top-down decision making.
	• Promote knowledge generation and innovation, especially localized approaches to urban development from local communities.
Livable Cities Pillar 3: Urban Environment, Climate Resilience, and Disaster Management of Cities Improved	
Focus on healthy and environmentally sustainable cities	• Develop locally relevant principles for a healthy and environmentally sustainable city (e.g. physical distancing in urban space, public health system and standard, business operations public transport operations, health impact assessments and healthy and age-friendly city action and management planning for pandemic and economic disruptive events) (footnote a).
	• Conduct systemic thinking on healthy and environmentally sustainable city and mainstream these principles in all aspects of urban governance—urban planning and design, infrastructure projects, cross-sector and cross-jurisdictional municipal functions, capacity building activities, operations of urban services, and engagement with citizens and other stakeholders.
	• Promote energy efficiency using renewable energy to reduce demand for energy and environment impacts and increase access to heating and cooling system for vulnerable groups in cities.
	• Review risk-sensitive land use management (e.g., change of land use), nature-based solution, circular economy practices and low-carbon transformation to encourage flexible and mixed-use (re)development for

Areas of Intervention	Actions for Consideration
	healthy and environmentally sustainable programs and facilities.
Build resilient cities with the ability to absorb shocks and stresses due to pandemics, disasters, and climate change	• Develop locally relevant principles for resilient cities (e.g., safe workplace principles, contingency plan for community quarantine) for disasters and climate change, and economic disruptive events. • Conduct systemic thinking on safe and resilient cities and mainstream these principles in all aspects of urban governance—urban planning and design, infrastructure projects, cross-sector and cross-jurisdictional municipal functions, capacity building activities, operations of urban services, and engagement with citizens and other stakeholders. • Promote climate resilient delivery of the core urban service standards (Table 3). • Prepare disaster preparedness and emergency response plans, including effective forecasting, early warning systems, proper communication and consultation strategies, and provide adequate resources for implementing such plans. • Utilize publicly owned land or revitalize obsolete or abandoned facilities (e.g., redevelopment of inefficient infrastructure and unsafe and dilapidated buildings) for resilient spaces and infrastructures.

NGO = nongovernment organization, PPP = public-private partnership.
[a] ADB. 2020. *Working Paper Series on Healthy and Age-friendly Cities in the PRC*. Manila.
[b] ADB. 2020. *Smart City Pathways for Developing Asia: An Analytical Framework and Guidance.* Manila.
[c] Heriland. 2020. Urban Planning in Times of COVID-19 – Resilience and Inclusiveness. 3 April.
[d] ADB. 2020. *Financial Sustainability of Cities.* Manila.

16.   **Required core urban service standards.** As provided in Table 3, core urban service standards will help planning and implementation of required urban and social infrastructure facilities. Such standards will also ensure access to adequate, safe, and affordable housing and basic services. These will also support pro-poor and inclusive cities with a healthy urban environment, as well as resilient cities through the strengthened disaster preparedness and emergency response facilities. The detailed and required standards should take into consideration the nationwide status of urbanization, population, economic development, financial status, capacities of implementation, operation and management, applicable regulation and policy, and existing relationship and possible coordination among various tiers of governments. As these could be long-term ambitions with substantial budget requirements for some cities, it would be important to undertake prioritized planning for most optimal interventions (e.g., urban (re)development and infrastructure by innovative financial and regulatory supports) so that the proposed new norms could be achieved gradually and efficiently.

Table 3: Required Core Urban Service Standards

	Element	Required Core Urban Service Standards
Public health/ welfare	Primary health care services (clinic)/ medical services (hospital)	• Primary health care service within certain time and/or distance

	Element	Required Core Urban Service Standards
		• Primary health care service provision within certain square meter (m²), vehicles, beds, and/or officers per capita
	Emergency services	• Medical and firefighting treatment service by appropriate equipment within certain time (and/or distance) • Emergency response service provision within certain m²/vehicles/beds/officers per capita
	Water, sanitation, and hygiene (WASH)	• Distribution rate per capita (or household)
	Care for vulnerable groups	• Average area (m²) of care service for each vulnerable group (youth, children, women, elderly, persons with disabilities)
Education	Nursery/elementary school/middle school/high school/college	• Participation in compulsory education including home learning (% of age cohort)
	Continuing education and training	• Average area (m²) per capita (across all age categories)
Urban services/ urban infrastructure/ social infrastructure	Affordable housing	• Ratio of affordable housing to total number of housing
	Water supply	• Access (%) of total urban population (or household) • Water supply to consumers (duration, pressure, and quality of water)
	Wastewater management	• Proportion (%) of wastewater collection and treatment
	Solid waste management/ medical waste management	• Solid waste collected (%) and treated (%) • Medical waste collected (%) and treated (%) • Capacity of appropriate treatment facility (in remaining years and/or million cubic meters)
	Heating/cooling	• Distribution rate per capita (or household)
	Public transport	• Modal share between rail, bus, other public transport, individual car, motorcycle, cycling, and walking • Affordability and frequency (accessibility) • Available parking space per residential unit or business area
	Electricity	• Affordability, accessibility, and stability
	Internet	• Distribution rate per capita (or household) and the stability and speed of internet
Economic activity	Job training/ MSMEs consulting/ local investment/ job creation	• Number of entrepreneurs and MSMEs advised/supported through local business centers/programs • Growth of small business registrations • Availability of the number of job training and MSMEs consulting • Investments into local economy (year on year development in local currency, inflation-adjusted) • Number of jobs created (year on year % change, and absolute figure)
Culture/leisure/ community	Community facilities cultural facilities/ sports facilities/	• Average area (m²) per capita

	Element	Required Core Urban Service Standards
	libraries	
	Public *plazas*/ public parks/ playgrounds	• Average area (m²) per capita
	Corner shops/markets	• Average area (m²) per capita • Proximity of public areas in time or distance per neighborhood
Safety	Police facilities	• Number of police officers per capita
	Firefighting facilities	• Number of firefighting officers per capita
	Disaster emergency facilities	• Average area (m²) of disaster prevention facilities (e.g., for earthquake, flood, landslide) per capita (or household)

MSMEs = micro, small, and medium enterprises.
Source: ADB.

VI.   POTENTIAL ADB SUPPORT AND WAY FORWARD

17.   **Aligning ADB's urban sector portfolio to address COVID-19 impacts in DMCs.** The average project commitments in ADB's urban sector have been about $2 billion per year and are also expected to be about $2 billion in 2020. With the aim of addressing the impacts of COVID-19**,** ADB's livable cities projects will be designed to support cities in DMCs to be more healthy, inclusive, and resilient while supporting local economic development and creation of well-paying jobs for the citizens. Specifically, livable cities projects will include components to support, among others, (i) integrated urban planning process and coordination across departments and local administrative boundaries to strategically incorporate lessons from COVID-19 for safe and healthy cities; (ii) greater social protection measures for the most vulnerable groups, including affordable housing with integrated urban services, in cities; and (iii) improvement of urban environments, including more focus on uninterrupted utility operations, WASH, wastewater and fecal sludge management, and solid waste and medical waste management. The livable cities projects will also include greater focus on strengthening financial sustainability, supporting financial inclusion, use of technologies and digital solutions for improving urban services, and building capacities of urban institutions and other stakeholders including communities**.**

18.   **Way forward for post-pandemic cities**. Most cities in DMCs are currently focusing their resources on the immediate management and response to COVID-19**.** While this is critical, cities paying attention to how immediate actions align with the short- and medium-term measures will gain an advantage towards building back better. It will also be useful to understand how short- and medium-term actions synergize with other ongoing or planned investments and broader agendas (e.g., national development strategies, public investment plans, ADB's Strategy 2030**,** the Sustainable Development Goals and Agenda 2030, and nationally determined contributions in line with the Paris Climate Agreement). Not to discount the human toll and tragedy of the pandemic, but this crisis can be turned into an opportunity and momentum to reduce inequalities of access and make cities more safe, healthy, environmentally sustainable, resilient, and inclusive in a post-COVID**-**19 world. ADB will also help cities understand their challenges and opportunities from preparing their own visions, plans, and road maps to taking appropriate actions to address pandemics and implementing projects to become more livable