DEVELOPMENT PATHWAYS FOR A SUSTAINABLE URBAN FUTURE

The Future of Asian & Pacific Cities

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An Asia-Pacific mayor faces a dire forecast of a cyclone set to make landfall in her city. Per the city's resilience strategy, the local government established a central operations centre with monitoring and communication capacity to reach citizens in the event of an emergency. Fortunately, most of the low-lying areas that historically flooded in the event of cyclones were rezoned following the city's last comprehensive plan, and they are not densely settled. One coastal area is a concern, however. Years ago, a private real estate developer wanted to construct a residential complex near a popular beach. After much negotiation, the developer agreed to setbacks as established by the city from the high-tide mark projected for 2100 in an effort to future-proof ahead of sea level rise. Still, the risk of near-term flooding was great enough that the city opted to build a seawall in some areas and plant a natural defence barrier of water-absorbing mangrove in other areas. To pay for this expensive infrastructure investment, the city initiated a value capture scheme and charged the owners of the beachfront property, who saw their property values increase once the coastal protections were completed, as the design also included new waterfront public space.

This hypothetical story weaves together the four elements reviewed here – urban and territorial planning, urban resilience, smart and inclusive cities, and urban finance – in the face of the report's four overarching challenges: natural resource management; climate change; disaster risk; and inequalities. While natural disasters are a dramatic and easily visualized scenario for which local leaders must prepare, the complexities of the modern city involve a host of other challenges for which this report's future policy pathways offer interlocking solutions.

The future of urban & territorial planning

Integrate sustainability and quality-of-life targets into urban planning to future-proof public and private investment in cities

Co-produce with citizens urban planning solutions that align technological investment with adequate local government capacities

Identify specific urban regeneration and growth strategies that optimize urban-rural and city-region collaborations that spur sustainability and investment

The future of urban resilience

Scale up the use of nature-based solutions and resilient infrastructure in integrated urban and climate change planning

Understand the informal economy and support urban poor groups to be change agents for implementing city resilience actions

Create and strengthen partnerships to bring more attention and resources to long-term urban resilience strategies that break siloes between national, state and local actors

Utilize big data sources to connect communities, cities and regions and to improve local government technological literacy

The future of smart & inclusive cities

Improve smart city governance across urban systems, institutions and actors to overcome inequalities and make more informed and integrated planning decisions

Encourage technology firms to become more civic minded and create sustainable smart city solutions with social enterprises

Adopt cybersecurity safeguards in both digital and physical urban infrastructure development planning

Develop smart mobility investment plans that prioritize sustainable urban mobility options for citizens

Expand viable smart city funding mechanisms by enabling cross-sector sustainable partnerships and business matching platforms

The future of urban finance

Scale up public-private partnerships and community schemes to transition to localized housing finance solutions

Adopt land-linked financing mechanisms that leverage urban growth to build people-centred urban infrastructure

Introduce congestion-charging and environmental user fees to improve urban air quality

"A sustainable future occurs when planning lays a foundation; resilience guards against future risk; smart cities deploy the best technology for the job; and financing tools help pay for it all."

The cities of 2030, 2050 and 2100 will be very different from today. They will be cities transformed: in their demographic composition, in their implementation of technology and in their wider ecological contexts. The challenges of building cities sustainable enough to meet the changing needs of the future will require new ways of thinking and working, as well as new kinds of multi-stakeholder initiatives and partnerships. Learning to ask new and better questions, and building new approaches to tackling old problems, will be the role of any stakeholder, private or public, looking to be part of solutions to these challenges.

As presented here, the report makes the case for four priorities and four approaches to realize a sustainable urban future in Asia and the Pacific. A sustainable future occurs when planning lays a foundation; resilience guards against future risk; smart cities deploy the best technology for the job; and financing tools help pay for it all. Getting these essentials right in cities today is vital in order to adapt to the demands of tomorrow.

Technology is crucial for connecting people and disparate urban systems, but technology alone cannot solve the social, environmental and economic issues that growing cities face. The future is in the hands of those Governments, civil society actors and entrepreneurs who will work together to create citizen-centric, sustainable cities.

Urban and territorial planning is the bedrock of the sustainable future city. At whatever stage of a city's development, whether an entirely new urban extension or a city with ancient roots, a single-plan vision is essential to create an agreed road map for a city's future growth or shrinkage. National planning practices and statutes vary widely, but the International Guidelines on Urban and Territorial Planning [31] offer a template for basic planning principles. Thoughtful planning has been key for the Asian and Pacific cities that rank among indices of the world's most liveable, sustainable and economically successful cities. The city planners of the future will need to make sure that the cities they design can withstand what the world throws at them, particularly when it comes to environmental challenges, by integrating sustainability and quality of life into their spatial plans, visions and strategies. Aided by new forms of planning technologies, they will need to co-produce solutions with citizens to promote urban growth and regeneration and optimize urban-rural and city-region collaborations.

In a world of increasing climate change threats, however, planning must serve more than just charting needs against future population growth or decline. Urban resilience is the next principle that must be layered atop planning in order to ensure the future prosperity of Asia-Pacific cities. The resilient cities of the future will need to be effective at breaking down siloes among entrenched city government departments by encouraging collaboration to address transversal challenges, such as economic downturns, migration crises and natural disasters. Cities will need to do this while employing nature-based

[31] Produced by UN-Habitat, these are available at www.uclg.org/sites/default/files/ig-utp_english.pdf.
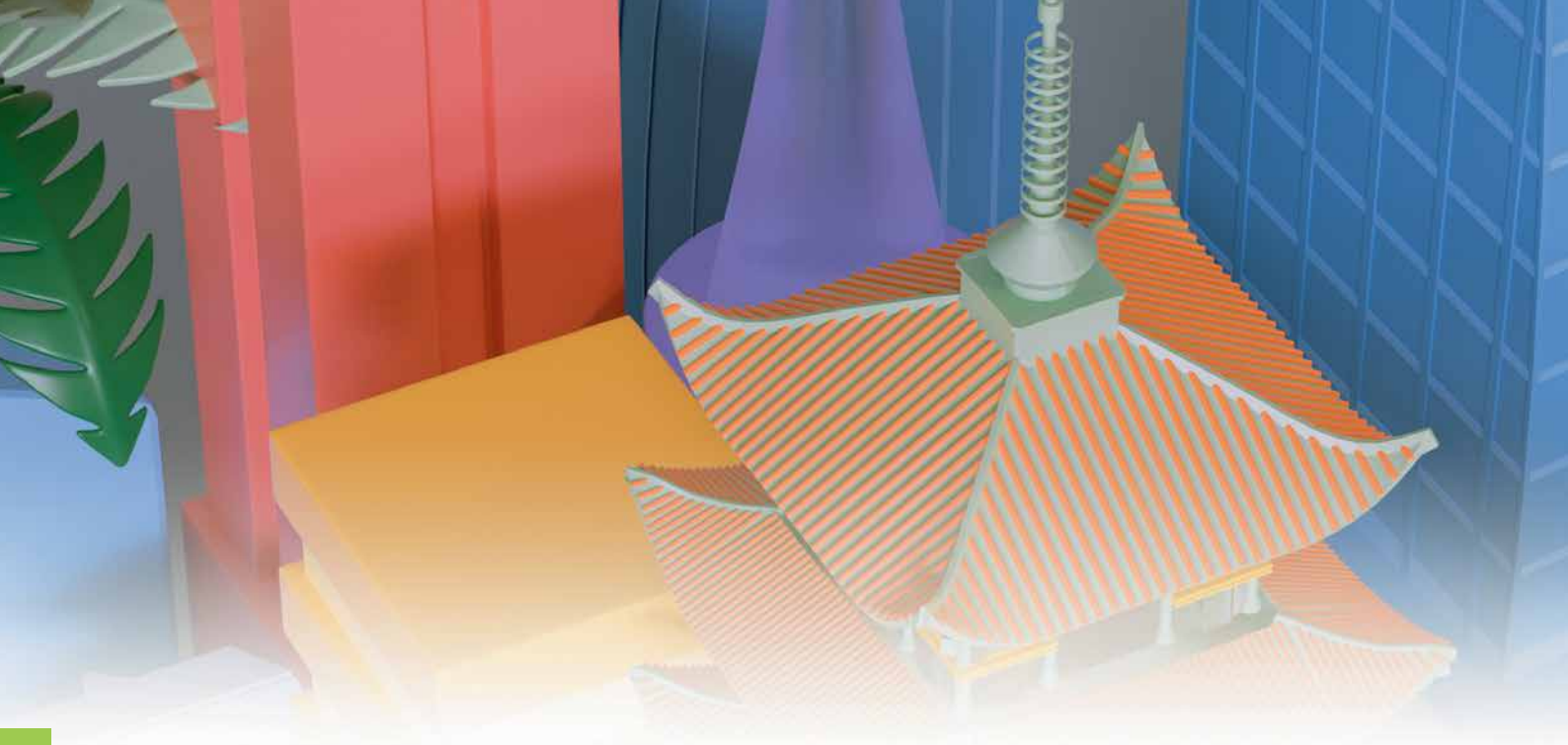
infrastructure solutions and the dynamism of the informal economy as particularly potent tools to create sustainable and resilient outcomes for all.

In turn, technology has become an irreplaceable component of 21st century lifestyles, one that extends to city management. So-called smart cities that rely on advanced technology now have endlessly customizable tools at their disposal to monitor and model nearly every aspect of urban life. Such technology can be empowering, but also paralysing. Clear regulations and cybersecurity policies are essential to managing the digital future of urban policymaking. Such regulations can also temper the potential data collection excesses of such tools by enshrining privacy rights that build trust with everyday citizens. The smart cities of the future support infrastructure and innovative technology with governance and security systems to improve the quality of life of citizens and enhance their interactions with the urban environment while protecting everyone's safety. Becoming a smart city is not a goal but a means towards achieving sustainability. To respond more effectively and dynamically to the needs and desires of

residents, technology is simply a tool to optimize the infrastructure, resources and spaces that people share. Future smart cities need to focus on improving outcomes for residents and harness the creativity of the technology sector in shaping the integration between the physical and digital environment in the Asia-Pacific region.

Ultimately a vision for a well-planned, resilient and sustainable city that employs inclusive technology will not be realized without a means to pay for everything ranging from robust planning capacity to resilient infrastructure to smart city toolkits. Urban finance is the lynchpin that ties together the previous three components of sustainable cities. The world of municipal finance is vast and complex, but there are concrete areas, such as land-linked financing and pollution pricing, where cities can seize the fiscal reins in order to achieve discrete objectives. Innovative urban finance has been pursued by cities of all sizes, even smaller towns, showing that urban financing options are available to all types of local governments. The sustainable cities of the future will employ more creative financing solutions needed for infrastructure improvement

projects. With costs increasingly too great for one company – or even one government – to afford alone, and with projects increasingly dependent on other, related work, cross-sector collaboration and coordination is becoming the norm. Building the right networks – through PPPs or community finance initiatives – learning how to measure risk and returns, and making the right funding available to achieve sustainable outcomes, will be critical to help these cities improve their operations.

However, how can these four broad themes be turned into action? This report has distilled the common solutions to common problems facing Asian and Pacific cities, enumerating critical policy pathways that are essential to ensure a better urban future. Not all local leaders will find that all policy pathways are appropriate to their context, but some pathways will be. Figuring out which combination of pathways is the right mix for a given city will be the task of local authorities in collaboration with national authorities, the private sector, stakeholders and everyday urban citizens, as they seek to apply the lessons drawn from this report. How to elicit the right combination and the priority with which to pursue them? That is a question only a city itself can answer through analysis and self-reflection of its strengths, weaknesses, vulnerabilities and resources.

The future of Asian and Pacific cities need not be destined to rapid and unplanned urbanization, congestion, resource depletion, ever-rising consumption patterns and emissions, polluted air and waterways, and rising inequalities. Adopting the policy pathways identified in this report will enable the region's cities to not only overcome these existing realities but also to set future development patterns that will assure sustainable urban development for decades to come while meeting the needs of growing urban populations.

To realize the future vision of inclusive, safe, resilient and sustainable cities will require focused efforts on the thematic priorities in this report. The approaches to which all urban stakeholders must contribute are clear:

1. Plan the foundations of a sustainable future. All cities must strengthen their capacities, adopt inclusive planning processes and develop long-term spatial and investment plans that effectively consider urban growth, quality-of-life goals, resource implications and smart approaches.

2. Guard against future risks. To ensure sustainable growth and development, it is critical that cities

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adopt resilience strategies that break down governance siloes to improve policy efficacy, provide opportunities to scale up nature-based infrastructure solutions, and engage the creativity of the urban poor as solution providers to guard against potential shocks and stresses, including natural disasters.

3. *Capitalize on frontier technologies to develop people-centred smart cities.* City leaders must develop smart cities road maps across different urban systems that capture the innovation of technological entrepreneurs, bridge the digital divide, support smart mobility and include the perspectives of local stakeholders, while ensuring their safety.

4. *Mobilize financing to invest in sustainable urban solutions.* Local governments must access or adopt innovative investment tools, such as land value capture instruments, PPPs and environmental user fee models. These can serve as important levers to catalyse economically impactful capital investments that create long-term value for citizens, businesses and the city as a whole.

In this context, the report can be used to launch a dialogue in the city. If there are no mechanisms for stakeholders to come together and discuss the local urban future, one should be created, such as a local urban forum, an online platform to discuss sustainability pathways for their city or a media campaign that promotes civic conversation. No city will fare well with a top-down, go-it-alone approach. To that end, this report will serve as a vital road map to the next decade of urbanization in Asia and the Pacific, from booming intermediate cities to ageing legacy cities, and serve as a reference of how to shape urbanization while heading into the crucial 2020-2030 window.

The depth of these concepts can at first appear overwhelming in their scope, but this report endeavours to cut through the noise of sustainable urban development and focus on the four major areas that cities must get right if they wish to deliver on the Sustainable Development Goals and the New Urban Agenda in the coming decade.

Wherever a city is on its progression, it is never too late to embark on the path to a sustainable city.