Key Findings and Messages

Chapter 1

The Diversity and Vision for the Future of Cities

While the COVID-19 pandemic dominated the two years between editions of the World Cities Report and upended many aspects of urban life, this Report comes at a time when world events create ever more dynamic environments for urban actors. Although most of the world has lifted the public health restrictions and border closures that made COVID-19 such a dominant aspect of urban life, the virus continues to flare up periodically and some countries still have strict measures in place. Recently, the world has witnessed a sudden global spike in inflation and cost of living, alongside supply chain disruptions, which is severely affecting the recovery of urban economies. New and persistent armed conflicts have altered the geopolitical order and contributed to global economic uncertainty.

The disruptive nature of the COVID-19 pandemic is a stark reminder that urban areas need to be prepared for dynamic and unpredictable futures. Cities across the world were totally unprepared for the magnitude of the economic and social impacts of the pandemic. The pandemic revealed and amplified long-standing weaknesses in the social structure of cities, resulting in disproportionate impacts on vulnerable and marginalized groups. Key lessons emerging from the COVID-19 pandemic are that urban areas must invest in preparedness, which requires developing the economic, social, environmental and institutional resilience to respond to a wide range of shocks, including having contingency plans for the most vulnerable groups.

The foregoing raises key questions about the future of cities. What kind of cities do we envisage and reimagine in the aftermath of the pandemic? What kind of cities are needed to support humanity in a predominantly urban world? How do cities prepare for an uncertain world? Building economic, social and environmental resilience, including appropriate governance and institutional structures, must be at the heart of the future of cities. To meet this challenge, sustainable urban futures must prioritize reduction in poverty and inequality; foster productive and inclusive urban economies that provide opportunities for all; adopt environmental policies and actions that mitigate and adapt to climate change, promote clean energy and protect ecosystems; integrate public health into urban development; – facilitated by responsive urban planning and governance systems in which with finance, innovation and technology play overarching roles.

Key Findings

Cities are here to stay, and the future of humanity is undoubtedly urban: The experience in the early days of the COVID-19 pandemic, when some residents fled large cities was a temporary response that will not fundamentally change the course of global urbanization. We are witnessing a world that will continue to urbanize over the next three decades—from 56 per cent in 2021 to 68 per cent in 2050. This translates into an increase of 2.2 billion urban residents, living mostly in Africa and Asia. All regions of the world are expected to become more urbanized, although highly urbanized and more developed regions are expected to stabilize or experience a decline in urban growth. Unequivocally, this tells us that cities are here to stay, and that the future of humanity is undoubtedly urban, but not exclusively in large metropolitan areas.

The future of cities is not uniform across regions and can lead to a range of scenarios: While responding to climate change vulnerability and rising levels of inequality are global concerns, other issues are bifurcated by region. In developed countries, the key priorities for the future of cities also include managing cultural diversity, upgrading and modernizing ageing infrastructure, addressing shrinking and declining cities, and meeting the needs of an increasingly ageing population. In developing countries, urban priorities for the future are rising levels of poverty, providing adequate infrastructure, affordable and adequate housing and addressing challenge of slums, high levels of youth unemployment, and investing in secondary cities. How these challenges are addressed will lead to a range of future scenarios.

The worst-case scenario of urban futures is that of high damage: In a high damage scenario, extreme poverty could increase by 32 per cent or 213 million by 2030. Under this scenario, the impacts of the ongoing COVID-19 pandemic

as well as global economic uncertainties, environmental challenges, and wars and conflicts in different parts of the world could have long-term impacts on the future of cities. For instance, cities in Africa could lose up to two-thirds of their financial resources and the weak urban service delivery and governance systems in some of these cities could collapse. If global action against multiple urban challenges fails and this bleak scenario becomes a reality, the credibility of the multilateral system would be compromised, thereby undermining coordination efforts to address urgent and pressing global issues.

Business as usual will result in a pessimistic scenario: Returning to the pre-pandemic state of affairs, also known as the Bad Old Deal, is characterized by the systemic discrimination and exclusion of the poor in urban agendas including the exclusion of informal sector workers, overreliance on fossil fuels, poorly planned and managed urbanization, low prioritization of public health in urban development, and entrenched digital inequalities, which collectively undermine the vision of achieving inclusive, resilient, and sustainable cities where no one is left behind. Globally, 1.6 billion people or 20 per cent of the world's population live in inadequate housing, of which one billion reside in slums and informal settlements. Under these conditions, the goal of eradicating poverty in all its forms by 2030 and leave no one behind will not be achieved. Without concerted efforts, the pessimistic scenario could lead to new forms of urban vulnerabilities in the future that would disproportionately affect already disadvantaged and vulnerable groups.

Changing course to a sustainable path can lead to an optimistic scenario: With concerted policy action through the effective implementation of the New Urban Agenda as a framework for achieving the SDGs, it is possible for cities to avoid either of the high damage or pessimistic scenarios and instead emerge into a more optimistic future. This scenario involves collaborative, well-coordinated and effective multilateral interventions to leverage the opportunities and address the challenges of urbanization. With appropriately implemented measures, the response to the current urban crisis can lead to a collective reprioritization of cities across the world towards shared prosperity and inclusion.

Key Messages

Urbanization is intertwined with several existential global challenges: Cities do not exist in isolation from global challenges. The emergence of urbanization as a global mega-trend is intertwined with the existential challenges that the world has faced in the last 50 years, including climate change, rising inequality and the rise in zoonotic viruses with the latest being the novel coronavirus pandemic, which triggered the worst public health crisis in a century and the worst economic recession since the Great Depression. These challenges will in different ways, leave their imprints on the future of cities.

Building resilience must be at the heart of the future of cities: Building economic, social and environmental resilience, including appropriate governance and institutional structures, must be at the heart of the future of cities.

Economic resilience with new fiscal sustainability frameworks, societal resilience with universal social protection schemes, climate resilience with greener investments and stronger multilevel collaboration to confront future shocks must be the building blocks of a resilient urban future.

Urban areas need to be prepared for dynamic and unpredictable futures: The disruptive nature of COVID-19, supply chain disruptions, high inflation, climate change and armed conflicts are all reminders that urban areas need to be prepared for an ever-changing and unpredictable future. Our urbanizing world must be adequately equipped for effective response to a broad range of shocks, and at the same time, transition to more sustainable, just, green, resilient and healthy futures. Global threats require concerted action, which can only be achieved in the spirit of solidarity and cooperation, as no single government or multilateral agency can address such threats alone.

Any vision for an optimistic future of cities must embody a new social contract with universal basic income, health coverage and housing: Following the disruptions wrought by the COVID-19 pandemic, an emerging vision for an optimistic future in cities is one that embodies a new social contract in the form of universal basic income, universal health coverage and universal housing and basic services. The emerging vision should seek to make cities more equitable, one that is greener and more knowledge-based and is resilient across multiple dimensions.

Localizing the New Urban Agenda and SDG 11 is the most promising pathway to the optimistic scenario of urban futures: The global impacts and disruption triggered by the coronavirus pandemic, much of which played out in urban areas, have simply added a sense of urgency and the demand for a change to some of the unsustainable practices in the journey towards more sustainable urban futures. The path to sustainable urban futures will be determined by inclusive and transformative policies to eradicate poverty and inequality; produce urban economies that provide opportunities for all; generate greener investment for sustainable consumption and production patterns; set the framework for responsive urban and territorial planning; implement collaborative and integrated systems of urban governance; prioritize public health; deploy inclusive innovation and technology; and build resilience, which enables cities to respond to and withstand a wide range of shocks. The localization and effective implementation of the New Urban Agenda serves as a framework for integrating the interrelated components that constitute these pathways.

Chapter 2

Scenarios of Urban Futures: Degree of Urbanization

A new harmonized definition, called the Degree of Urbanization, facilitates international comparisons of urbanization. By defining three main classes of human settlements (cities, towns and semi-dense areas, and rural areas), the Degree of Urbanization captures the urban-rural continuum as recommended by research. It provides a pathway to overcoming the fundamental challenge linked to monitoring urban trends and the development agendas that has lingered over the years: the lack of a unified definition of what constitutes "urban" and its precise measurement.

This chapter provides a unique perspective on future trends using Degree of Urbanization and data emanating from this new harmonized approach. Specifically, it provides scenarios that allow us to understand the anticipated demographic and spatial changes across the urban-rural continuum in various regions as well as their drivers.

Key findings

Fast-paced global growth in city population is behind us and a future slowdown is in the offing across the urban-rural continuum: New research using the harmonized definition "Degree of Urbanization" indicates that demographic growth has already started to slow down and is projected to continue over the coming decades. While the city population share doubled from 25 per cent in 1950 to about 50 per cent in 2020, it is projected to slowly increase to 58 per cent over the next 50 years. The share of other settlements in the urban-rural continuum (towns and semi-dense areas as well as rural areas) is expected to decrease; towns and semi-dense areas are expected to drop to 24 per cent (from 29 per cent in 2020) and that of rural areas to 18 per cent (from 22 per cent).

A slowdown does not indicate no growth—the population of cities in low-income countries is projected to grow nearly two and a half times by 2070: Low-income countries have much higher absolute and relative city population growth than higher income countries. From 1975 to 2020, their city population grew fourfold to about 300 million. By 2070, their population is projected to exceed 700 million. Additionally, projections show that, between 2020 and 2070, the number of cities in low-income countries will grow far more than in the rest of the world—an increase of 76 per cent, compared to 6 per cent in upper-middle-income

countries. High-income and lower-middle-income countries will see an increase of about 20 per cent.

Most expansion of city land area will occur in low-income countries—without effective planning, urban sprawl might become a low-income country phenomenon: The new data show that changes over the next five decades—in terms of growth of city land area from 2020 levels—will mostly take place in low-income countries (141 per cent), lower-middle-income (44 per cent) and high-income countries (34 per cent). Changes in upper-middle-income countries is projected to be relatively small (13 per cent). This growth is projected to be highest in Oceania and Sub-Saharan Africa, where it is estimated to (almost) double. Growth in city land will be relatively lower in Eastern and South-Eastern Asia (10 per cent), Latin America and the Caribbean (14 per cent) and Europe (16 per cent).

Small cities and towns remain critical to achieving sustainable urban futures in low-income countries: Small cities (less than 250,000 inhabitants) cover almost half of city land (about 45 per cent) in low-income countries, a trend that will persist over the coming decades. Therefore, adequate territorial planning and enhanced capacities in these settlements can strengthen the pivotal role they play in realizing sustainable futures in these countries.

Key Messages

Managing city density is the key future sustainability challenge for low-income countries: While density scenarios play out differently cities in various regions of the world, the fast-paced growth in city population in low-income countries sets them apart. City densities in these countries need to be planned for and managed in ways that do not exert pressure on existing open land, infrastructure and services, resulting in crowding on one hand or leading to unsustainable sprawl on the other. In these countries, a high-density scenario, for instance, would see the already high population density in cities reach 14,000 by 2050 while a low-density scenario would mean cities need five times the amount of land to accommodate growth. In contrast, growth in city population in upper-middle- and high-income countries is lower and cities are less dense. As a result, they can accommodate future growth of population without any need to increase the amount of land. In some cases, the amount of city land is projected to shrink, such as in Eastern Asia.

Enhanced planning capacities are needed in low-income countries, especially for smaller and new cities: Urban and territorial planning that is responsive, anticipates and effectively addresses the demand for city expansion is imperative for sustainable futures in low-income countries. City land in these countries is projected to increase nearly one and a half times over the next 50 years. Notably, a significant share of this expansion will come from smaller and new cities, which may struggle to plan for this growth. Enhanced capacities in these settlements will strengthen the important role they play across the urban-rural continuum in achieving sustainable futures.

Various levels of government need to plan for greying cities and towns: Demographic changes mean that in the future cities will have a larger share of elderly and a smaller share of children. It is therefore vital to plan for age-friendly cities and towns that afford good quality of life for all its inhabitants across all generations. Already, the ageing of population is a reality in urban areas of high- and upper-middle-income countries.

Urbanization is inevitable, planning for urban growth is critical for sustainable futures: Effective urban and territorial planning is critical to mitigate the negative social, economic and environmental associated with future urban growth. The growth of city land in low-income countries, for instance, will require substantial efforts in terms of both planning and infrastructure investments. Planning should be undertaken ahead of this expansion of cities to halt informality and ensure that there is policy coherence at various scales guiding the needed investments.

Chapter 3

Poverty and Inequality: Enduring Features of an Urban Future?

Cities generate wealth but also concentrate poverty and inequality. From the overcrowded slums in the developing world to homelessness and pockets of destitution in the developed world, urban poverty and inequality take many forms. We cannot envision a bright future for cities when inequality appears to be on the rise globally and poverty in certain regions. How to tackle poverty and inequality are among the most pressing challenges facing urban areas; and improving income and a wide range of opportunities for all is essential to achieving an optimistic urban future. The global development agenda gives prime of place to the issue, with SDG 1, which calls for a world in which we "end poverty in all its forms everywhere." If urban poverty is not addressed, then this goal will remain elusive.

Key Findings

Urban poverty and inequality remain one of the most intractable challenges confronting cities: Urban poverty and inequality are highly complex and multidimensional challenges whose manifestation go beyond lack of income. Urban poverty and inequality are intertwined; they reinforce each other to create conditions of disadvantage that constrain the poor from enjoying the benefits of sustainable urbanization. The multidimensionality of urban poverty and inequality should be at the centre of interventions to create inclusive and equitable urban futures globally.

Without concerted action at all levels, poverty and inequality could become the face of the future of cities: Poverty and inequality are increasingly becoming pervasive in our cities. In developing countries, slums and informal settlements are the most enduring spatial manifestation of poverty and inequality. For the millions living in slums, access to essential services remains elusive; thus, preventing the realization of a better urban future. In cities of developed countries, pockets of poverty and destitution have become entrenched, where minority groups endure marginalization and stigmatization coupled with underinvestment in urban infrastructure. If decisive actions are not taken, urban poverty and inequality will become endemic.

Most countries in Sub-Saharan Africa are off-track from ending poverty by 2030: Most countries in Sub-

Saharan Africa are off-track in achieving the goal of ending poverty by 2030. The region has the highest incidence of urban poverty globally with about 23 per cent of the urban population living below the international poverty line and 29 per cent experiencing multidimensional poverty. The rate of multidimensional urban poverty in Sub-Saharan Africa is 11 times higher than in Latin America and the Caribbean. Indeed, poverty is on the rise in close to one-third of the countries in Sub-Saharan African. Unless governments at all levels act decisively, poverty could become an entrenched feature of the future of cities in the region.

The COVID-19 pandemic has resulted in the emergence of newly poor people: The COVID-19 pandemic has reversed years of remarkable progress made in the fight against poverty. The pandemic has resulted in the emergence of newly poor people—that is, those who would have exited poverty in the absence of the pandemic but remain poor; and those who have fallen into poverty on account of the pandemic. In 2020, the pandemic-induced new poor globally was between 119 and 124 million people; this is projected to have risen to between 143 and 163 million in 2021. A majority of the new poor will be living in urban areas; thereby, presenting additional burden to already overstretched local governments especially in developing countries.

Key Messages

Tackling urban poverty and inequality are urgent global priorities: The current COVID-19 pandemic is a reminder that the vision of equitable urban futures will not be achieved unless cities and subnational governments take bold actions to address the pervasive presence of urban poverty and inequality. Without urgent and transformative policy action at all levels, the current situation will only worsen. The long-term costs of each incremental policy choice may not be clear, but each decision could shape the future of cities for generations. Wrong decisions by city leaders could entrench poverty, deny opportunity for millions and widen urban disparities in ways that will become increasingly difficult to reverse.

A multidimensional approach is key to an inclusive urban future: Within the Decade of Action window (2020-2030), cities and subnational governments should adopt a multidimensional approach to addressing poverty and inequality by investing in infrastructure and essential services, while addressing the multiple spatial, social and economic barriers that foster exclusion. Narrow, sectoral approaches have proved ineffective amid the social, economic, political,

and environmental crises that trap most residents in poverty. As part of building sustainable urban futures, the following dimensions are critical: spatial dimension—access to land, housing, and infrastructure; social dimension—rights and participation; and economic dimension—opportunities for all. Collectively, these factors can lift millions of people out of poverty and create more equitable and inclusive urban futures.

Governments must extend infrastructure and urban services to underserved communities: Investing in and extending infrastructure and services to deprived urban neighbourhoods is a critical policy lever to address poverty and inequality. Access to water and sanitation can be a matter of life and death for poor urban dwellers. Targeting improvements in quality, coverage and affordability to zones of disadvantage and poverty should be a matter of policy priority. If these transformative measures are implemented, they can change the current negative trends and galvanize actions towards achieving equitable, inclusive and resilient urban futures.

Supporting informal employment is critical for building inclusive urban futures: Informality is a reality of urbanization especially in developing countries. Looking into the future, cities should halt the exclusion of informal sector workers in all spheres of urban endeavour. Cities and subnational governments should acknowledge the legitimate contributions of informal workers and stop their harassment and penalization. The rights of informal workers should be guaranteed. These rights include legal recognition, economic and social rights, access to essential services and better representation in policymaking. Cities will not be able to offer a bright urban future if their informal sector workers are perpetually excluded from urban development processes.

Gender transformative approaches are crucial for building inclusive urban futures: Going forward, cities and subnational governments should prioritize inclusive and gender-transformative responses that are co-produced with vulnerable urban populations. Cities should focus on developing inclusive urban governance processes that promote transformative resilience to multiple risks by using local knowledge in the face of uncertainty. Urban leaders should draw on grassroots, civil society and private-sector efforts and build local alliances to deliver more effective strategies and co-design solutions to urban poverty and inequality.

Chapter 4

Resilient Urban Economies: A Catalyst for Productive Futures

The urban economy is integral to the future of cities. Given the size of the contribution of cities to the national economy, the future of many countries will be determined by the productivity of its urban areas. People first gathered in denser human settlements for the purpose of trading at markets, and this fundamental aspect of urban life has evolved over time. Today's urban economies are complex systems tied to global trade and capital flows, in which foreign entities can own the property next door and distant events can affect the prices for local goods. Cities must be smarter than ever about how they position their economies for the maximum benefit of all residents while also safeguarding the environment and improving their city's quality of life.

Key Findings

When planning their economic future, cities cannot overlook the informal sector: Recognizing and supporting the informal sector is vital for urban economic resilience and productive urban futures, particularly in developing countries*.* Given the contribution of the informal sector, cities should adopt a transformative urban economic agenda that is inclusive and equitable. Approaches to urban planning, governance and international development should be reformed to make them responsive to the needs of informal sector workers. This should be backed by the necessary support mechanisms such as access to finance (and relief during crises), markets and infrastructure to boost the resilience of informal economy actors to shocks and strengthen their contribution to productive urban futures.

Future economic growth and resilience cannot be sustained without bridging the infrastructure gaps across the urban-rural continuum: Cities and subnational governments should prioritize infrastructure investments towards building resilient urban economies and prosperous urban futures. This includes targeting underserved neighbourhoods such as slums and informal settlements and marginalized neighbourhoods who bear the brunt of underinvestment in infrastructure. Investments should also be directed towards transport infrastructure systems to enhance the competitiveness of cities and enable urban productivity.

Sustainable urban and territorial planning supported by effective governance structures is critical for building resilient urban economies and productive urban futures: In developing countries, more focus should be on institutional capacity building to enable sustainable planning and management of urban development. Cities that are well planned and managed perform better in optimizing and reaping the benefits of economies of agglomeration. If cities continue to grow in a disconnected and fragmented manner, the opportunities of leveraging economies of scale and urban agglomeration will be missed.

Sustainable and innovative municipal finance is fundamental: Cities must diversify their revenue sources by mobilizing sustainable, innovative and resilient revenue sources. The COVID-19 pandemic has shown that overreliance on traditional revenue sources like property taxes could have potentially crippling effects on the fiscal health of cities. Revenue mobilization should be back by institutional reforms to grant cities adequate fiscal autonomy to experiment with new financing instruments such as land value capture and municipal bonds, as well as to provide them leverage to reform their tax systems in line with their economic bases. These innovative financing instruments (especially when aligned with sustainability ambitions) 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; thus, contributing to resilient and productive urban futures.

Key Messages

Economic diversification is a critical pillar for urban economic resilience and productive urban futures: The New Urban Agenda encourages governments to prioritize economic diversification by progressively supporting the transition to higher productivity through high-value-added sectors, technological innovations and creating quality, decent and productive jobs. In order to withstand future shocks and

stresses, cities should utilize existing and potential resources to diversify their economies. Diversification of urban economies should be supported by targeted investment and strategies to shift production structures towards new sources of growth. Failure to diversify urban economies will make cities extremely vulnerable to future shocks, especially in developing regions and in cities that heavily depend on single industries such as tourism, manufacturing or natural resource extraction.

Cities should embrace the circular economy as a new frontier in the pursuit of sustainability and resilience: The New Urban Agenda promotes the adoption of policies that lead to a circular urban economy in order to move consumption and production away from unsustainable patterns. Gazing into the future, cities must facilitate and promote greener recovery for resilient economies. Adopting the circular economy can potentially generate additional decent and productive jobs, which are catalysts for urban productivity.

Measures to achieve balanced and integrated urban and territorial economic development must be put in place today to avert skewed development tomorrow. In line with the call of the New Urban Agenda for balanced urban and territorial development, cities and subnational governments should put in place measures to ensure that economic growth is equitable across territories. Full implementation of national urban policies should be a priority. Other measures could include targeted infrastructure investments in secondary and intermediate cities that have been left behind. This focus will enhance the competitiveness of secondary cities, set their economies towards sustainable growth and build resilience to future shocks.

The accelerated pace of transformation in the world of work calls for continual talent and skills development to achieve urban economic resilience and productive futures: Cities should focus on investing in human capacity development to build skills and competences that are in sync with rapid transformations taking place and the emerging new urban economy. Developing skills and talent for human capital is vital for inclusive and sustainable urban growth as it aligns with SDG 8 on promoting productive employment and decent work for all. The new urban economy requires re-skilling of workers to adapt to technological changes. A well-trained workforce is a prerequisite for resilient urban economies and productive urban futures.

Chapter 5

Securing a Greener Urban Future

Climate change and environmental concerns increasingly dominate future scenarios. The increase in extreme weather events and natural disasters like flooding, heatwaves and landslides will impact urban areas the hardest, which makes climate change adaptation a paramount concern. Meanwhile, urban areas are responsible for the majority of the world's carbon emissions. As such, the transition to net zero greenhouse gas emissions must occur as soon as feasibly possible. Cities can do their part by embracing a wide range of options.

Key Findings

The transition to net zero GHG emissions has been marked by a lack of ambition and policy pitfalls: There has been a growth of interest in net zero policies to facilitate sustainability transitions at the local level. However, current net zero policies have pitfalls, including an overreliance on underdeveloped technologies that overlook local resources and the lack of integration of local governance strategies in national programmes for action. Meanwhile, the lack of ambition in the current national commitments to net zero also echoes a lack of imagination in defining alternative urban futures.

The twin crises of climate change and the loss of global biodiversity threaten the futures of cities: Climate impacts and other environmental crises interact with drivers of urban inequality, affecting people's capacity to anticipate the impact, then respond and recover from them. Dealing with future risks—including environmental risks— has become one of the main concerns for local governments and other urban-based actors, eliciting diverse responses.

Inclusive spaces to deliver green urban futures are necessary for sustainability transitions: There are many cases where significant infrastructure and transport projects are accomplished at the expense of various social groups in urban areas, in some cases entrenching existing inequalities and vulnerabilities. Transition and resilience agendas foreground the need to align social and environmental justice goals with the policy priorities of the SDGs and the New Urban Agenda. The interaction between global and local partnerships is further making broader inclusion possible. Additionally, there are also growing opportunities

for collective action to deliver low carbon and resilient urban futures at the local level.

The world is losing the opportunity to use the post-pandemic context as a catalytic moment to facilitate investment for a transition to net zero carbon emissions: While the COVID-19 pandemic represented a significant setback in achieving poverty reductions and the SDGs, it presented a potential inflection point for change toward sustainability. However, the window of opportunity opened by the crisis to rethink human-environmental relations and mobilize recovery funds for environmental sustainability is closing rapidly, with carbon emissions again soaring and the extinction crisis unabated.

Greener futures cannot be secured without just transitions: Alongside new technical possibilities to facilitate resource efficiency in sectors such as energy and transport, urban policies must recognize how the informal sector serves the needs of many urban residents. A well-documented example is informal motorized and non-motorized transport that serve many disadvantaged communities in urban areas. A just transition will need to incorporate the concerns of this sector, alongside technological improvements. Urban planning must be inclusive to effectively cater for the informal services sectors that work for the urban poor.

Key Messages

Policymakers at all levels must recognize and support the role of urban areas in the net zero transition: Besides actions at the national level, achieving net zero is also dependent on subnational and city-level action. There is, therefore, a need to develop policies to support action at the subnational level, limiting carbon emissions or reducing vulnerabilities. In addition, current instruments at the national level need to be aligned with local priorities. At the very least, there should be coordination between various levels of governance to ensure that national-level policy is designed in ways that does not curtail or limit local experimentation by multiple actors.

Nature-based solutions must be part of inclusive planning processes for sustainable urban futures: Nature-inspired approaches to urban planning, urban governance and urban design are revolutionizing current thinking about cities and urban services. To achieve sustainable urban futures, local action cannot overlook this trend. Nature-based solutions offer the opportunity to develop a wide range of responses to urban environmental

challenges that harness nature for urban sustainability. Many of these responses can be integrated into urban planning and are often low-cost.

Future-oriented thinking, such as scenario analysis, requires plural politics that ensure diverse voices are heard to minimize uncertainties in the pathways to securing greener urban futures: Building net zero scenarios can be challenging as it involves long time frames and detailed speculation on technological and social changes, with inferences across different sectors and processes. Ensuring that diverse voices are heard in such scenario-building approaches will minimize the perception of such scenarios as technocratic and limiting stakeholders' agency as well as eliminate simplified assumptions about social and political dynamics.

Various levels of government and institutions can harness the potential of international partnerships such as transnational networks and social movements in delivering greener urban futures: Social movements, for instance, are the new point of hope for climate and biodiversity action as new generations (supported by old ones) clarify that business as usual is not an option. Social movements can foster innovation and transitions towards net zero. There is increasing evidence of innovation and feasible responses coming from informal settlements and various community groups. The COVID-19 pandemic, in particular, has shown how local responses can support solidarity and resilience, primarily when invested in partnerships with local and regional governments.

Support diverse forms of knowledge in environmental decision-making to achieve sustainable urban futures: Today, hierarchies of knowledge persist, in which some forms of knowing are consistently valued above others. Local governments and local institutions can support diverse forms of knowledge—including indigenous knowledge, local knowledge and traditional knowledge—that respond to global demands and acknowledge specificity. This also requires redefining vulnerable groups from passive victims as active urban change agents (following the slogan "nothing for us, without us").

Chapter 6

Urban Planning for the Future of Cities

Cities are complex systems that grow, develop and even shrink based on a variety of forces. Planning is an essential tool for shaping the future of cities, as unplanned human settlements are prone to sprawl, inefficient land use, poor connectivity and a lack of adequate municipal services. Good urban planning is one of the three pillars of sustainable cities, without which cities are unlikely to achieve the optimistic scenario of urban futures.

Key Findings

Recovery to pre-COVID normal is likely to delay climate action in cities: While in many cities, emissions plunged to unprecedentedly low levels during the lockdowns, rapid recovery to pre-COVID levels was observed after easing mobility restrictions with an observed increase in car dependency. There are concerns that economic recovery actions could derail many activities aimed at urban climate change adaptation and mitigation. Interventions in the energy and transport sectors are key to the success or failure of climate action in cities.

Current planning approaches continue to enable vulnerable groups to be disproportionately affected by pandemics: Vulnerable groups such as ethnic minorities and the urban poor have been disproportionately affected by the worst impacts of the pandemic, making it difficult to contain the spread of infectious diseases in cities. Modern urban planning has achieved limited success in equitably distributing resources. Profound inequalities have existed in cities for several decades, persist in the present and will possibly continue into the future without urgent changes in the way cities are planned.

Urban indoor and outdoor spaces are not versatile and flexible enough: The pandemic revealed issues related to the lack of versatility and flexibility in the design of indoor and outdoor spaces. It increased the demand for multi-purpose and flexible spaces that can adapt to new situations, which is a significant shift from traditional urban planning practices like single-use zoning that often overlook flexibility and adaptability. Moving forward, there is a need for changes in the design of urban building layouts, working spaces, shopping malls, and open/public spaces to make them more flexible and adaptive to future shocks.

Compact cities are pandemic resilient: Concerns over density being a risk factor to the rise of pandemics has resulted in outmigration in some cities and could lead to new waves of suburbanization and urban sprawl with major socioeconomic and environmental implications. No compelling evidence has been reported on the role of density in virus transmission and mortality rates. However, there is consensus that density alone is not a major risk factor, and other factors such as income, infrastructure access and residential overcrowding could be more influential. A lack of access to health care and other services will increase vulnerability to pandemics and other future adverse events.

Urban-rural interlinkages are overlooked in urban planning and decision-making practices: Urban planning approaches continue to place limited emphasis on urban-rural linkages despite cities being dependent on their hinterlands for natural resources, commodities and multiple types of ecosystem services. Urban areas experience dynamic and non-linear flows both in and out of cities whether goods, trade, human movement or species migration. Such high connectivity levels have implications for resilience as shocks and disruptions in one part of the system could rapidly spread to the other parts.

Key Messages

Urban planning should urgently pursue climate action as a basis for greener urban futures: Measures taken to recover from the pandemic should help cities mitigate and better respond to climate change, which is a major threat looming over cities. There is need for a continued paradigm shift toward environmentally friendly and human-centric energy and mobility options. This can be achieved through efficient public transport and active mobility when integrated with energy-efficient modes such as electric vehicles powered by clean energy.

Post-COVID recovery should ensure a transition to more equitable and inclusive urban futures for all: Recovery programmes should prioritize addressing the needs of vulnerable and marginalized groups, including ethnic minorities, urban poor, immigrants, refugees, and those who are precariously employed or housed. To seize the pandemic as an opportunity to reform our cities and build back batter, it is essential to carefully assess the impacts on marginalized groups and ensure they are adequately engaged in planning processes.

City authorities should invest in the multiple co-benefits of green infrastructure development: Integrating green infrastructure into the design of streets, street networks and open spaces is an effective way to enhance their flexibility and multi-functionality. Indeed, creating networks of green areas and green spaces will allow better responses to future pandemics while also providing co-benefits for climate change mitigation, adaptation and health by restoring and regenerating natural ecosystems.

Embrace the "15-minute city" concept as a model for creating walkable, mixed-use and compact neighbourhoods: As a new planning approach, the "15-minute city" can guide the development of neighbourhoods where residents can meet most of their daily needs within a 15-minute travel time on foot, cycle, micro-mobility or public transport. Through the integration of green infrastructure, this model can also provide multiple co-benefits for health, equity, and climate change adaptation and mitigation. It is, however, necessary to make sure that 15-minute neighbourhoods do not exacerbate spatial inequalities in cities by becoming enclaves for wealthy urbanites that fail to integrate into the overall urban structure.

Urban actors must break down silos in pursuit of integrated urban and territorial planning: Planning should move away from silo-based approaches toward integrated plans and policies that consider interactions between multiple factors in a city region such as the hinterlands and surrounding ecosystems. Such socio-ecological approaches are more sustainable and resilient against present and future adverse events.

Chapter 7

Public Health and Sustainable Urban Futures

As history attests, the productivity and resilience of cities is undergirded by effective public health. Beyond hospitals, medicines and vaccines, equitable provision of health-promoting infrastructure such as green spaces, improved housing, clean and safe drinking water, and extensive sewer systems to safely dispose of human waste are necessary minimum components for securing public health in urban areas. While COVID-19 led to the first major global pandemic in a century, the future portends more epidemics and pandemics. Public health is now once again at the forefront in envisioning the future of cities.

Key Findings

Urban health risks are multi-layered and change rapidly: Since 2020, cities have had to grapple with more than just COVID-19 as Ebola, bird flu, H1N1 flu, MERS, SARS and Zika outbreaks occurred at different times and in different cities. The HIV-AIDS epidemic continues to be of concern with elevated rates of infection amongst marginalized groups such as racial/ethnic minorities, migrants and intravenous drug users. Moreover, climate-related risks are now increasingly contributing to urban deaths and ill health. Annually, an estimated 7 million people die prematurely due to air pollution. Urban food system transformations towards ultra-processed foods with high levels of fat and sugar have led to the progressive increase of diet-related health risks and the rising toll of non-communicable diseases in both low-income and higher-income cities.

In many urban areas, the same health risks are experienced and acted upon in different ways: These differences are attributed to racial divides, gendered discrimination, xenophobia and other sources of disadvantage. If left unchecked, these health inequities could lead to the pessimistic or even high damage urban future scenario. An improved understanding of how multiple factors contribute to urban health disparities at several levels and sites (including homes, workplaces and neighbourhoods) is key to effective interventions that can avoid entrenching urban health inequities.

Climate change is the foremost urban health threat and risks leading to the high damage urban future scenario: Climate change manifests in more frequent, intense and longer-lasting extreme weather events, particularly floods and heatwaves. These and other disasters translate to complex overlapping urban health burdens, starting with immediate injuries, mortality, displacement and lost livelihoods amongst affected residents. Broader impacts include rising levels of urban water insecurity, increased rates of waterborne illness and escalating food prices and food insecurity. Unabated, these conditions create a fertile ground for the high damage urban future scenario where health vulnerabilities are amplified, and poverty and inequality persist over the long term.

The increase in mental related illnesses is a growing urban health concern: Mental disorders are in the top 10 leading causes of disease burdens globally, and the number of disability-adjusted life years (DALYs) lost due to mental illness has increased by over 55 per cent over the last two decades. Rising levels of depression, anxiety and other mental health impacts have been linked to COVID-19, particularly for essential workers, those with heightened caring duties (especially women), racial/ethnic minorities and other vulnerable groups.

The shift in armed conflicts to urban battlegrounds is another growing concern that could lead to the high damage scenario for urban futures: The use of heavy weaponry in towns and cities inevitably leads to heavier civilian casualties and destruction of interconnected basic infrastructure such as water, sanitation, gas and electricity lines leaving fragile communities highly susceptible to infectious diseases. Further, armed conflicts disrupt health systems including physical destruction of hospitals, flight of healthcare workers and interruption of child vaccination and communicable disease surveillance programmes. These health systems require intense time and resource investments to rebuild. Consequently, the occurrence of armed conflict can lead to prolonged instabilities and intractable poverty as resources are diverted away from development long after the weapons are silenced.

Key Messages

If cities take the Health in All Policies Approach, they can make progress on multiple SDGs: By mainstreaming the Health in All Policies (HiAP) approach, cities can realize multiple benefits and unlock synergies between health and sustainable development pathways. Adding a health perspective in urban decision-making can simultaneously improve health (SDG 3), tackle poverty (SDG 1), foster gender equality (SDG 5) and enhance access to clean energy and climate-resilient infrastructure (SDGs 7 and 9).

Local governments are best placed to design and implement multisectoral approaches to effectively realize healthy urban futures: A multisectoral approach is necessary because health is an essential component of sustainable urbanization given its impact on and interrelation with social, economic and environmental targets. Responsive, accountable local governments play a pivotal role in translating global and national targets to effective place-based interventions that generate multiple co-benefits for health, inclusion and climate change mitigation. Local governments, however, need stable funding, long-term political support and effective mechanisms for public engagement.

Ongoing disaggregated data collection is essential for effective responses to future urban health risks: Since urban health risks are multilayered and change rapidly, policymakers require ongoing data collection with attention to emerging and differentiated health challenges in urban areas. Using disaggregated data to inform inclusive interventions, policymakers can develop holistic multisectoral initiatives that address complex urban health inequities and support locally rooted solutions. City authorities can leverage digital technology such as telemedicine and drones, as well as community-led citizen science, to collect data from marginalized and hard-to-reach groups to ensure they leave no one behind.

Governments should provide universal health coverage to strengthen future health system preparedness: With the anticipation of future epidemics and pandemics, inequitable access to quality healthcare compromises the collective health and well-being for all. COVID-19 has unequivocally demonstrated that in an interconnected world, infectious diseases mock geographic, socioeconomic and other privilege boundaries. As part of the new social contract, governments should provide universal health coverage that secures equitable access as well as sufficient quality and affordability of healthcare for effective response to urban health crises in the future.

Addressing mental illness is an urgent priority not only for supporting health and dignity but also for continued economic and social development: Improving access to mental health programmes and developing holistic strategies to address mental illness remain a key concern globally, especially in the wake of COVID-19. Key priorities for equitable, inclusive mental health initiatives include additional investments that link mental health with universal health coverage and primary healthcare interventions. The new approach to mental health must move beyond biomedical techniques and instead seek to address the social determinants of health such as improving access to urban green spaces and enhancing social cohesion, as well as countering stigma facing those with mental illness.

Chapter 8

Rethinking Urban Governance for the Future of Cities

Whichever future urban challenge cities face, whether it is poverty, health, housing or the environment, urban governance always has a critical enabling role to ensure that the capacities and resources of institutions and people match their responsibilities and desires. Sustainable urban development is not possible without effective multilevel urban governance – including local governments, civil society and national governments. Governments have been severely tested since 2020, which means now is the time to rethink urban governance and put cities on the path to an optimistic future scenario.

Key Findings

A spatial justice approach is essential to respond to shocks: A spatial justice approach that includes vulnerable residents in decision-making has proven to be essential in responding to future global shocks. Cities with a more equitable and accessible distribution of basic services were better able to protect vulnerable and high-risk communities from the COVID-19 pandemic. Cities with more autonomy in local government are better positioned to respond to health care crisis with contextualized knowledge and experiment with different approaches and service delivery.

COVID-19 accelerated the digitalization of urban governance: Physical distancing and lockdowns required governments to rapidly scale up their use of digital technology to conduct basic functions. This trend provides opportunities for the future of urban governance as governments can use new technologies to make data collection more reliable, provide more open data, communicate better with residents and improve service delivery. But cities also have a responsibility to govern how new technologies are used and work to eliminate the digital divide while protecting the safety and privacy of residents.

City diplomacy and international city networks are increasing in number and political potency: Cities and subnational governments are reasserting themselves on the international stage and supplementing national governments where national frameworks are lacking. City diplomacy and international city networks provide an emerging opportunity for cities of all sizes and geographies to address transnational issues, as well as exchange experience and learn from each other to adapt governance approaches to evolving future challenges.

A lack of human and financial capacity continues to strain sustainable urbanization: Cities, especially in developing countries, continue to lack adequate capacity to address current and future challenges. A lack of resources and trained professionals limits the capacity needed to implement transformative changes, while also creating conditions for corruption. The future of multilevel governance relies on effective decentralization of decision-making, enhancing local fiscal autonomy and stronger links between national urban policies and cities.

Civil society and participatory process are under threat: While many cities are engaging in innovative participatory processes, globally, the space for civil society is shrinking. State-initiated participation can be tokenistic and is often disregarded in crisis situations. Evidence of, or even the perception of corruption, or mishandling of finances undermines trust between the government and civil society. If this trend continues, the future of cities will be more authoritarian.

Key Messages

Future urban governance should institutionalize the mindset of planning for shocks and disruptions: For urban governance to be prepared for an age of global threats and disruptions it will require collaborative and concerted action to prepare processes and systems that can withstand and recover from shocks in an effective and inclusive way. There is a need to institutionalize planning frameworks that incorporate disruptions as a central element and learn from previous shocks and challenges. Effective multilevel governance for disruptions needs to balance clear legal frameworks with a flexible approach to new partnerships, cooperation, solidarity and collective action within and between state and non-state actors.

The need to build trust and legitimacy of institutions is crucial for the future of urban governance: With the anticipated rise in global shocks including climate, security and public health crises, the need for trust and legitimacy of institutions is crucial. With ever larger cities, the distance between governments and their citizens has increased. Effective communication, meaningful participation opportunities and accountability structures built into integrated governance relationships are all necessary

responses for addressing the trust equation. In light of the digitalization of urban governance, maintaining privacy and security of data should be a priority for maintaining trust.

The future of effective local government relies on well-coordinated metropolitan governance: Future urban areas are projected to grow far beyond the boundaries of any particular jurisdiction, which necessitates new and adaptable urban governance and management frameworks. Metropolitan governance with institutionalized frameworks has demonstrated an ability to optimize coordination, engage secondary and rural communities, and create collaborative approaches in mitigation, adaptation and recovery efforts. The future of metropolitan governance, however, is plural: there is no single metropolitan model of governance that works everywhere. Metropolitan governance needs to have adequate political and institutional legitimacy, clearly defined roles and need capacity and resources that meet their responsibilities.

National governments should enable better local government finances to respond to the challenges of urbanization: Effective models for collaborative governance, financing and integrated development should be responsive to ever-changing future conditions and needs. Financial managers should resist parachuting normative best practices into inappropriate contexts. Sustainable urban development requires comprehensive and context specific financial management that includes diverse sources of funding. Clearer national regulation and more decentralized governance plays an important enabling role to a financially solvent urban future, making transfers to local governments more regular and allowing cities to borrow and issues bonds.

The future of equitable service delivery relies on governance through modes of co-production with relevant stakeholders: Achieving equitable outcomes with respect for human rights and the well-being of residents will require urban policymakers to re-envision their relationship with the public. Governments need to fully acknowledge and invest in slum dwellers and their organizations as true development partners. Special attention must be paid to underrepresented groups and co-create strategies such as re-municipalization, community-led finance and forms of co-production of urban services. Civil society has different roles—as service providers, agents for civic engagement and enforcers of social accountability, and as financiers through philanthropy—and the future of urban governance needs to ensure regulation better reflects the different roles they play in society.

Chapter 9

Innovation and Technology: Towards Knowledge-Based Urban Futures

Advances in technology and urban futures are inextricably linked. The future of cities will be knowledge-based, driven largely by innovation and the widespread use of new technologies and digitization of virtually all facets of urban life. Technological innovations define the twenty-first century. Cities are going through a wave of digitalization that is reshaping how urban dwellers live, work, learn and play. Technology holds great promise for improving urban livelihoods, but there are also risks that smart city technology will invade privacy. Cities, meanwhile, are competing for innovation-based businesses in a race that will create both winners and losers in urban futures.

Key Findings

Innovation and technology play an increasingly central role in planning for urban futures: This arises from rapid advances in technological developments, the pace of urbanization, and the scale of urban challenges requiring systemic responses. Urban innovation extends beyond technology: it also encompasses social and organizational innovation, which recognizes the important contribution of civic organizations and community groups to urban development, and the benefits of more open and collaborative local government.

Digitalization and automation are transforming urban economies: Smaller cities and suburban areas may benefit from the shift towards hybrid working (accelerated by the COVID-19 pandemic). Larger cities may be less exposed to the impacts of automation, given the concentration of highly skilled professionals. Significant changes in the mix of job occupancies can be expected in the formal economy in both developed and developing countries. Some cities offer re-skilling programmes to prepare residents for the future of work. In informal economies, digitalization may provide significant opportunities.

The urgency to decarbonize urban economies is driving the convergence of green and smart technologies: A key feature of smart environmental technologies is their suitability for flexible, modular designs and local adaptations. The benefits include sustainable energy production, improved resilience and financial incentives (e.g. feed-in tariff) for

residents. The trend towards more localized applications highlights the importance of on-the-ground partnerships and community buy-in.

There is a rapid growth in the demand for smart city technology: The demand for smart city systems and solutions is estimated to increase annually by 25 per cent, with an overall market value of approximately US$517 billion. This is driven by governments investing in technology to meet the demands of an urbanizing world. This also based on rapid advancements in digital and connected technologies and their ubiquity in everyday life. The speed with which cities are adopting smart technology is illustrated by strong demand for Internet of Things technology, with over 20 per cent annual growth forecast for the coming years. Similarly, blockchain technology is predicted to grow by over 30 per cent in the next few years. Artificial Intelligence technologies are increasingly deployed by municipal governments in the form of virtual agents like chatbots.

Technological advances risk exacerbating existing, and generating new, socioeconomic inequalities: The digital divide tends to adversely affect women, the elderly, ethnic minorities and immigrants most acutely. Cities can mitigate this with measures include providing affordable Internet access, skills training and community support. An environmental divide occurs when urban sustainability initiatives disproportionally benefit middle-class residents. Cities are faced with a series of complex ethical, legal, and technical issues through the introduction of frontier technologies, such as drones and autonomous vehicles. This requires careful assessment. Several initiatives have been put in place to mitigate the risks of digitalization and other technological innovations.

Key Messages

Innovation practices need to be tailored to local contexts: Smaller cities, and cities in emerging and developing countries, may need alternative approaches to innovation than those pursued by world cities and major metropolitan regions. Cities can use their convening power to nurture a culture of innovation with a focus on addressing major urban challenges. Innovation should be approached more broadly than traditional research and development by involving a wider range of stakeholders, including civil society organizations and community groups. City governments can lead by example, by innovating in more open, collaborative, and inclusive planning and decision-making.

City governments should embrace low-carbon technology but mitigate negative environmental effects: The combination of green and smart technologies creates new opportunities for small-scale and small-grid, modular, and flexible systems and applications. Together with their relative affordability, this can benefit communities, towns and cities with limited financial and infrastructural resources. But cities need to consider the negative environmental externalities when investing in low carbon and digital and connected technologies. This includes environmental problems associated with the mining of rare earths (e.g. lithium for batteries), toxic electronic waste and high energy consumption of some technologies (e.g. blockchain).

Local governments need to prepare their economies for the effects of advancing automation and digitalization: This includes taking an active approach to digital (labour) platforms, if necessary, with appropriate regulation to address the problem of precarious work. There is an important agenda for skills development and training, to counter the risk of growing social inequalities and exclusion arising from technological advances. This should particularly focus on those on the wrong side of digital and environmental divides. Mobilizing community members as trainers can be useful, for example in informal settlements.

Cities can use digital tools innovatively to improve the provision of public services and local decision-making: To avoid top-down, one-way communication, digital tools need to be inclusive, collaborative and empowering. Their use needs to align with wider offline decision-making structures and processes. While full technological sovereignty may be out of reach, city governments have an opportunity and responsibility to co-determine how innovation and technology are designed for, and applied in, cities. They should initiate, and participate in, technology assessments, and involve other urban stakeholders in the process.

Chapter 10

Building Resilience for Sustainable Urban Futures

Any scenario of urban futures outlined in this Report will face unexpected shocks and stresses. Will a given city collapse like a house of cards or withstand whatever unpredictable future comes their way? The answer to that question lies in a city's resilience, a capacity that bookends all of the discussion up to this point. A key message running through this Report is that building economic, social and environmental resilience, including appropriate governance and institutional structures must be at the heart of the future of cities. Cities that are well-planned, managed, and financed have a strong foundation to prepare for such unknown future threats. Moreover, cities that are socially inclusive and work for all their residents are also better positioned to face environmental, public health, economic, social and any other variety of shock or stress, as cities are only as strong as their weakest link.

Key Findings

Resilience thinking has embraced the "building back differently" mentality: The schools of thought on urban resilience continue to evolve and now emphasize the importance of positive change in recovery processes to reduce urban poverty and inequality as key determinants of vulnerability and risk exposure. This means addressing the spatial and environmental as well as social inequality and injustice that are reflected in the urban built environment.

Resilience practitioners can benefit from several diagnostic, monitoring and evaluation frameworks: The most widely used of these tools is the City Resilience Index. These frameworks examine the economic, social, environmental and institutional dimensions of resilience. However, addressing these dimensions separately risks negative trade-offs. Maximizing added value and prospects for success therefor requires integrated and holistic policy and practice, as emphasized through the analysis of good governance and integrated, holistic policy and planning.

There is no either/or dividing line between incremental and transformational change in human settlements: If the current context has clearly prevented a step-change to transformational adaptation, it is unlikely suddenly to

become feasible and be initiated without substantive reform or realignment of governance institutions and processes. Moreover, such changes are often complex, messy and slow. Conversely, substantive gains can be made under broadly existing arrangements, promoted by appropriate champions among officials and elected representatives, and that do not demand unrealistic institutional reinventions as a prerequisite.

Science and technology are evolving rapidly and opening new possibilities for positive change: However, the equity and justice dimensions to such technological deployments are often overlooked. Who benefits and who suffers when constraints are introduced? The costs and benefits of specific technologies or an entire technology-driven package like smart cities, when introduced into particular contexts, need explicit inclusion in planning, decision-making and monitoring.

Effective urban resilience capacity building requires mainstreaming across local government: Proactive climate change, vulnerability and disaster risk reduction and pandemic response policies cannot be undertaken as add-ons to other work or concentrated in one specific department, but rather must be incorporated into the annual and multi-year workplans and design standards of all departments. In turn, this requires effective forward-looking design and planning frameworks that factor in local forecasts of future climatic, environmental and public health conditions so that infrastructure, buildings and services are built or retrofitted to appropriate standards to withstand best estimates of conditions that will prevail over the coming decades.

Key Messages

Governments already have a roadmap to urban resilience in the global sustainable development agenda: The multilateral system has laid out a framework for achieving urban resilience in the form of the SDGs, the New Urban Agenda, Sendai Framework for Disaster Risk Reduction, the Addis Ababa Action Agenda and the Paris Agreement on Climate Change. Together these documents provide a coherent framework for integrated, multi-level action that recognizes the importance of subnational entities, particularly local governments, in building resilience.

Building substantive urban resilience must be multisectoral, multidimensional and multi-stakeholder: The process of making cities more resilient only works if it is forward-looking, inclusive of all stakeholders (including

the marginalized and poor) and proactive. It also provides an integrated investment in preparedness and building back differently, not just building back, or building back better along the same lines that perpetuate existing inequalities and injustice. Hence, as with sustainability, resilience is about increasing equity while reducing poverty and injustice.

Policymakers must match urban risk assessments with appropriate solutions: Cities face a diverse range of hazards, including but not limited to pandemics and climate change, and must create accurate, localized and downscaled assessments of those threats. But without appropriate remedial steps, cities risk leaving their citizens despondent. Furthermore, short-term plans and interventions, such as those within a single planning, budget or electoral cycle, must align with those for the medium and longer terms, which are the relevant time horizons for addressing structural inequalities and so-called "wicked" challenges like building sustainability and resilience.

Visioning and implementation of urban resilience plans must prioritize the poorest and most vulnerable communities: These categories of urban residents face the brunt of hazards and risks due to their location, as frequently they are confined to less desirable and more risky urban land. Such populations are disproportionately experiencing cascades or chains of increasingly frequent and often severe impacts that are compounding their vulnerability by undermining their assets and resilience.

Building urban resilience will not succeed without public participation: Resilience is not a top-down process but rather a bottom-up one, and any effort to prepare resilience plans, draft policies or implement projects will have greater prospects for success if undertaken using active participatory methods so that all residents and stakeholders are involved in planning and decision-making. Through co-production and co-design of resilience, residents will develop a shared sense of ownership alongside local government.