Key Findings and Messages

Chapter 1 Urbanization and Cities: Trends of a New Global Force

The year 2020 marks a turning point in the global battle for sustainable development, with cities once again at the centre as home to a growing majority of the world's population. On the one hand, the world is entering the Decade of Action, the ten-year period during which national and local governments, the private sector and civil society must accelerate their efforts to deliver on the promise of the Sustainable Development Goals (SDGs) for accelerating sustainable solutions to the world's biggest challenges—ranging from poverty and gender-based discrimination to climate change, inequality and closing the finance gap. By 2030, countless local actions, the vast majority taken in cities or by city leaders, must collectively add up to a global shift toward a more sustainable future that reduces poverty, improves health outcomes, expands access to education and reduces carbon emissions, among other societal challenges.

On the other hand, all of humanity is concurrently facing the coronavirus pandemic, the worst public health crisis in a century that has triggered the worst economic prospects since the Great Depression. In our globalized world, a highly contagious virus has spread to nearly every corner of the globe, first among globally connected cities and then to even remote rural areas. The impact shuttered economies as nations scrambled to put their populations on lockdown. The rapid pace of international travel ground to a halt. White-collar workers shifted operations to working from home, leaving behind empty offices in central business districts from New York City to London to Sydney. So-called essential workers from nurses to bus drivers to grocery clerks suddenly found themselves on the frontlines

of a new, poorly understood disease. Facing lockdown and rising unemployment, millions of people in countries like India and Peru migrated from cities back to rural areas, villages and smaller towns, some perhaps permanently.

In the wake of these unexpected disruptions, the United Nations estimates that 71 million people will be pushed back into extreme poverty this year, the first rise in global poverty since 1998. Some 1.6 billion informal workers, half the global workforce, have seen their wages affected. School closures have prevented 1.57 billion children, 90 per cent of the global student population, from attending in-person school at some point this year.

Amidst this unprecedented backdrop, the World Cities Report 2020 makes the case that cities remain central to the sustainable development story. Their role was solidified in the last five years by the suite of United Nations agreements that collectively form the global development agenda. Chief among them, the New Urban Agenda makes the case for the value of sustainable urbanization, or how people choosing to make their lives in cities can contribute to economic prosperity, environmental quality, social equity and strengthened civic and cultural institutions. Sustainable urbanization will be essential to the global effort to build back better from the impacts of the COVID-19 pandemic and get the world back on track to achieve the SDGs and meet the ambitious targets of the Paris Agreement on climate change.

Key Findings

The importance of cities is enshrined in global development policy: Since 2015, the international community has adopted several key agreements to guide development. The 2030 Agenda for Sustainable Development, Paris Agreement,

New Urban Agenda, Sendai Framework for Disaster Risk Reduction and Addis Ababa Action Agenda collectively form the backbone of international development policy, recommendations, goals, targets and indicators for Member States. In each of these documents, local governments are recognized as important partners in the drive to a more sustainable future. The role of cities is woven throughout this tapestry of agreements, most prominently in SDG 11 and the urban dimension of the SDGs.

The New Urban Agenda is linked to the 2030 Agenda for Sustainable Development: Acknowledging that the SDGs are an overarching set of goals that require a more detailed roadmap, the New Urban Agenda provides a spatial framework for how to achieve a number of the goals and targets. The New Urban Agenda's expands on the relatively limited means of implementation for SDG 11 by delving into the processes that produce better urban outcomes, like national urban policies, legislation, spatial planning and local finance frameworks.

The world continues to urbanize: It is too soon to know if the pandemic experience of 2020 will lead to lasting demographic changes, but the long-term prospects continue to predict that the world will further urbanize over the next decade, from 56.2 per cent today to 60.4 per cent by 2030. Every region is expected to become more urbanized in the next 10 years, although highly urbanized areas are expected to slow their rate of urban growth. Ninety-six per cent of urban growth will occur in the less developed regions of East Asia, South Asia and Africa with three countries—India, China and Nigeria—accounting for 35 per cent of the total increase in global urban population from 2018 to 2050.

Cities are consuming land faster than they grow in population:

Urban sprawl is an increasingly common phenomenon. Once associated with the land-rich developed countries of North America and Australia, it is now occurring in cities all over the world. Whether horizontal spreading, dispersed urbanization or peri-urbanization, the physical extent of urban areas is growing much faster than their population, thereby consuming more land for urban development. The unbridled expansion of urban areas has profound implications for energy consumption, greenhouse gas emissions, climate change and environmental degradation. Findings from a global sample of cities show that between 1990 and 2015, cities in developed countries increased their



Bonifacio Global City skyline and surrounding cityscape, Metro Manila, Philippines. © Michael D Edwards/Shutterstock

urban land area by 1.8-fold while the urban population increased by 1.2-fold; thus, implying that the expansion of urban areas in relation to urban population growth increased by a ratio of 1.5.

Migration is a driving force in urbanization: One in every seven people on the planet is a migrant. Currently, there are 763 million internal migrants and 272 million international migrants in the world. This demographic force has been a major contributor to urbanization, whether rural-tourban movement within countries or the clustering of international migrants in global cities. International migration accounts for about one-third of urban growth in developed countries and is increasingly transforming urban areas into heterogenous, multi-ethnic, multicultural and multilingual spaces. In migration hubs like Brussels, Dubai and Miami, foreign migrants outnumber the local population. But cities are also on the frontlines of irregular migration, from Middle Eastern and African refugees in boats crossing the Mediterranean to Central American migrants crossing the U.S.-Mexico border to Rohingya living in refugee camps in Bangladesh.

Inequality remains a persistent trend in urban areas: Growing levels of inequality and exclusion are becoming persistent trends in urban areas. For more than two-thirds of the world's urban population, income inequality has increased since 1980. This widening gap means that about 2.9 billion people are living in cities where income inequalities are currently more pronounced than they were a generation ago. In a rapidly urbanizing world, the nature of inequality will largely depend on what happens in cities. Today, many US, UK, Latin American, Caribbean and African cities have levels of inequality higher than their respective countries. Inequality can fuel social unrest, as witnessed in Chile in 2019.

Affordable housing remains elusive: Housing affordability is not confined to a handful of expensive cities; it is a global challenge that affects virtually all households. Globally, prospective homeowners are compelled to save more than five times their annual income to afford the price of a standard house. Renter households often spend more than 25 per cent of their monthly income on rent. High levels of unaffordability mean that inadequate housing and slums remain the only housing choice for low-income households.

Currently, 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. In developed countries, unsheltered or homeless populations are a small but significant feature of the urban landscape.

Urban areas bore the initial brunt of the COVID-19 pandemic: Even as coronavirus has now hit rural areas, the pandemic was initially an urban phenomenon as epicentres flared in Wuhan, Milan, Madrid, New York City, Guayaquil and Manaus among other cities. As the world slips into a severe recession, urban areas, which account for more than 80 per cent of global GDP, will be affected in several ways. First, the shrinking of the global economy implies that less funds will be available for urban development projects like water, sanitation, public transport systems, adequate and affordable housing, slum upgrading, poverty eradication and healthcare improvements to respond to both this and future pandemics. It is expected that revenue to local authorities will decline by 15-25 per cent in 2021 and will likely lead to reduced municipal service delivery. The envisaged decline in revenue is likely to hit developing world cities the hardest even as these are the places where critical infrastructure and health systems are already grossly inadequate.

Key Messages

Implementing the New Urban Agenda should be a global priority: Amidst unprecedented challenges, the New Urban Agenda as a means of implementing SDG 11 and the urban dimension of the other SDGs offers a roadmap to equitable growth and prosperity. Four years since the New Urban Agenda was adopted in Quito, UN-Habitat has prepared tools and methods to guide national governments, local governments, the private sector and civil society on how to create the framework for well-planned, managed, governed, regulated and financed cities.

Well-planned cities and urban extensions can curb excessive land consumption: Flexible zoning regimes that are in consonance with the prevailing socioeconomic milieu as well as building permits and master plans are among the regulatory tools that cities can adopt to address sprawl. Cities can and must grow their built environment footprint to accommodate growing populations, but they do not have to grow their footprint disproportionately.

Cities can respond to the enduring threat of climate change with local action: Urbanization offers many opportunities to deploy mitigation and adaptation strategies to limit the average global temperature increase to 1.5°C. Cities generate 70 per cent of global carbon emissions and consume two-thirds of the world's energy. To respond proactively, cities have undertaken emissions inventories and adopted reduction targets. Urban areas that have adopted compact and mixed land uses are able to reduce per capita rates of resource use and greenhouse gas emissions. When nature-based solutions are incorporated into design and management, urban areas can benefit from multiple ecosystem services including carbon sequestration, local climate regulation, stormwater capture and water and air purification.

Host cities should integrate migrants to spur diversity, prosperity and entrepreneurship: Migrants should not be seen as a burden to cities but rather, as an opportunity to be harnessed. Both educated foreign migrants with high intellectual capital and less educated migrants, whether internal or foreign, can bring an entrepreneurial spirit, cultural vibrancy and spur new opportunities if given the chance to thrive. A growing urban population does not mean that native-born workers will be squeezed out of the employment market. There is not some maximum number of available jobs for which workers compete. Rather, migrants bring a diverse set of skills, tools, perspectives, connections and capital that will ultimately "grow the pie" and create more opportunities for all.

Tackling urban inequality and unaffordable housing remain urgent priorities: Cities will not be able to offer opportunity and create value if workers do not earn liveable wages that permit them access to adequate housing and other services. Policy tools like minimum wages and formalization of informal employment can help boost incomes, although some of the most powerful tools, such as conditional cash transfer programmes, are within the purview of national government. Inadequate affordable housing can be addressed by changing regulatory frameworks to address the cost of land, building materials and housing finance that prevent urban dwellers from owning their homes or paying affordable rents with strong tenant protections. Pathways to this goal include increasing supply where there is a housing deficit, subsidizing access to formal housing

where there is adequate supply and regulating housing markets to prevent improper speculative activity.

The COVID-19 pandemic does not signify the end of cities: Despite early fears that urban density correlates with the spread of the disease, the relatively successful ability of very dense places like Seoul, Singapore, Tokyo and even New York City, an early epicentre, to manage the virus is encouraging, even as it ravages rural and smaller communities. As epidemiologists have come to better understand COVID-19, a consensus has emerged that overcrowding, not density, is the chief culprit. In urban areas, addressing overcrowding and maintaining acceptable levels of hygiene in houses, shops, places of employment and on public transport are crucial to surviving the pandemic. These public health guidelines are a challenge in informal settlements, which are more prone to overcrowding and inadequate sanitation. In these cases, local governments must work to provide sanitation infrastructure in public spaces in order to mitigate the health risk. Health should become a new guiding principle in urban planning and governance. In turn, the pandemic has spurred innovations in cities like closing streets to cars and opening them to people to allow more room to walk, cycle and dine.

Chapter 2 Unpacking the Value of Sustainable Urbanization

When well-planned and managed, cities create value, which is the totality of the economic, social, environmental and intangible conditions (institutional, governance, political, cultural and civic perception) outcomes that have the potential to improve quality of life of residents in meaningful and tangible ways. As is increasingly understood by policymakers at all levels of government, planned urbanization leads to positive development outcomes and can be leveraged for improved quality of life and overall prosperity. Cities are not simply incidental geographies where people congregate, but rather are the loci of economic and cultural production and spaces of environmental and social development.

Urban areas are places of opportunity where aspirations are realized. This sense of possibility motivates people to

migrate from rural areas to urban areas and to leave their countries of origin for global cities. Consequently, the discourse on cities has shifted from the perspective that they are challenges to address to the view that they are key to improving development outcomes. There is an increased understanding that cities create and sustain value.

Key Findings

The value of urbanization should be inclusive of all groups that live in cities: Urban areas are heterogeneous places home to extremely diverse groups of people. Wealthy elites may live a short distance from poor slum dwellers. Youth looking for new economic opportunity might ride the bus next to older persons seeking good quality health care. Indigenous people, refugees, migrants and those with differing identity and orientation all coexist in urban areas. The value of urbanization should respond to the specific of each of these groups, as each group finds a different type of value in the city, which are sometimes at odds and sometimes in harmony.

Urban economies drive the performance of national economies: The global economy is increasingly a function of goods and services produced in or traded among cities and metropolitan areas. Resource-based economies require urban ports and logistics hubs to move goods. Consumption-based economies cluster their economic activities in cities. The knowledge economy continues to thrive on the basis of proximity to urban areas.

Urbanization does not constitute an intrinsic threat to the natural environment: Well-planned, compact urban development generates immense environmental value. Greater resource efficiency means less energy use. Avoiding sprawling land consumption protects natural and agricultural areas. Cities themselves can promote biodiversity through urban greening. Ultimately, urban areas cover just two per cent of global land area, meaning that the majority of humanity is able to live with a relatively light planetary footprint that allows for wildlife conservation and biodiversity hotspots to remain undisturbed.

Urban areas can enhance social inclusion and reduce poverty: Transformative commitments in cities, like embracing the framework of ensuring the "right to the city" or

"cities for all," build the social value of urbanization. For centuries, people have congregated in cities to pursue their aspirations and dreams, leading to increased individual and collective wellbeing. However, realizing the social value of sustainable urbanization is not a natural consequence of a city's economic growth, as increasing investment in urban areas does not automatically address poverty and inequality. Mounting evidence suggests that economic growth in itself will not reduce poverty or increase wellbeing if it is not accompanied by equitable polices that allow low-income or disadvantaged groups to benefit from such growth.

Strong civic and cultural institutions are crucial for the realization of sustainable urbanization: Sound institutions—a constitution, laws, regulations, social norms, customs and traditions—provide the superstructure for the value of urbanization to be fully realized and lead to inclusive prosperity and improved quality of life. This more intangible value of urbanization generates a sense of pride in the overall perception of the city. When these institutions function well, city dwellers have a sense of civic identity as urban residents.

Key Messages

Urbanization will continue to be the driving force for global growth: However, given the pace of urbanization, this process requires effective planning, management and governance if the value of urbanization is to be fully realized as a truly transformative process. Internationally-developed policies like the global development agenda can guide this process, but it must be adapted to the local context in order to ensure policy coherence. The perspectives of local governments should be integrated into international discussions, given their role in implementing such agendas.

Urban economic prosperity will provide the basis by which countries can contribute to achieving the SDGs and New Urban Agenda, as well as recovering from the COVID-19 induced global recession: In the absence of healthy urban economies and pro-poor economic development policies, the goals of the 2030 Agenda for Sustainable Development will be difficult to attain, especially enhancing economic opportunities for the urban poor. With the appropriate macroeconomic policies, well-planned and managed urbanization can help

countries accelerate their economic growth and serve as a channel to global markets by creating productive environments that attract international investment and increase economic efficiency. Recovering urban economies will be essential to lift countries out of the global recession occasioned by the COVID-19 pandemic.

Integrate environmental sustainability into urban development: Sustainable cities offer environment value through both the built and natural urban environments. When designed with climate adaptation, mitigation and resiliency, components of cities from buildings to public spaces can create communities that enhance environmental values like biodiversity and carbon sequestration. Combined, such efforts not only improve quality of life, but put cities at the forefront of solutions to climate change.

The social value of urbanization can be enhanced by protecting the rights of vulnerable groups: Cities exhibit social value when they promote gender equality and ensure broadbased civic participation. Empowering marginalized groups like slum dwellers, the homeless, indigenous people, LGBTQ2+ and youth makes cities equitable for all. Ultimately, sustainable urbanization is experienced through the intangible value of urban culture. As the world's cities become more heterogeneous, there are ever increasing opportunities to incorporate cultural diversity as part of a city's brand or identity thereby attracting the best and the brightest. Such intangible value, in turn, supports the economic, environmental and social value of urbanization in a virtuous cycle.

Chapter 3 The Economic Value of Sustainable Urbanization: Inclusive Prosperity and Opportunities for All

Cities do not merely symbolize the dreams, aspirations and hopes of individuals and communities, they are the primary catalysts or drivers of economic development and prosperity across the world. Urban areas generate enormous economic value as they are the world's platforms for production, innovation and trade, generating both formal and informal employment. This chapter, while

providing a recap of the foundational mechanisms that enable cities to serve as growth accelerators, highlights the risks embedded within the very structure that enable cities to generate economic value. These risks have been magnified by the coronavirus pandemic and its adverse socioeconomic impacts.

Key Findings

Urban areas are accelerators of economic growth: Urban areas generate economic value across a range of spatial scales—local, regional and national. Cities are "advertisers" for foreign-direct investment in their countries because they are where the biggest factors attracting such investment—trade regimes, quality institutions, labour force and infrastructure—are located. Through urban-rural linkages, urban economic activities have a profound impact across the urban-rural continuum. Urban systems are also integrated knowledge creation and diffusion networks, which raises productivity in the aggregate. Positive spillovers such as diffusion of innovation and technologies from urban areas to their surrounding regions promote regional and national growth.

Sustainable urbanization is a generator of inclusive prosperity: The value of sustainable urbanization lies in its contribution to productive employment. Sustainable cities allow for more economic opportunities for all, including marginalized groups and people with disabilities, thus ensuring that the productive potential of all residents is realized.

COVID-19 shutdown measures in urban areas have had economic impacts far beyond their boundaries: Urban and national economies have been hit hard, resulting in substantial losses in productive jobs and loss of revenue for economic units, particularly the informal sector. Populations living in informal settlements and slums have been more economically vulnerable because of their reliance on daily earnings from the informal sector. For example, millions of informal workers in India returned to their villages when urban jobs dried up. As of May 2020, at least 170,000 Peruvians in urban areas requested assistance from local governments to return to the countryside. In Kenya, the economic hardship associated with the pandemic has forced urban households unable to afford rents to downgrade to cheaper housing or relocate to rural areas.

The very dense interaction networks of people, which are the factor behind cities' potential as economic growth accelerators, also carry embedded risks, as evidenced by the COVID-19 pandemic: These risks require both the ability to adapt quickly as well as more complex responses at the local, national and global levels for the long term. The capacity to rapidly respond to such unexpected risks is driven by good governance as well as the financial health of the local and national governments. Well-planned and managed cities are uniquely well-equipped to respond to all hazards, including public health threats.

The informal economy has become the lifeblood of many cities in developing countries: Informal employment comprises more than half of non-agricultural employment in most regions of the developing world: 82 per cent in South Asia, 66 per cent in Sub-Sahara Africa, 65 per cent in East and South-East Asia, 51 per cent in Latin America and the Caribbean and 45 per cent in the Middle East and North Africa. However, the nature of informal economic activity is also a major challenge for workers' rights. For example, the informal micro and small enterprises that constitute 80 per cent of enterprises worldwide generally fly under the radar of public policy interventions, such as government

measures to save jobs, bankroll enterprises and provide workers with income support.

Property rights, land use regulations and poor transport systems are limiting value generation in cities of developing countries: In many developing and developed countries, poorly defined property rights and/or land use regulations have a huge economic impact that limits value generation. This institutional deficit results in higher housing prices and less inclusive cities. In the same vein, lack of sustainable urban transport systems results in higher commuting costs and less inclusive cities.

Subnational administrative structures can catalyse or hinder the full realization of agglomeration economies: Urban agglomerations, while part of a broader economic system linking them to other agglomerations, towns and villages, are usually their own independent economic entities. However, regional economic growth in most places is negatively impacted by overlapping functions, (dis) economies of scale and policy fragmentation. Enabling metropolitan governance structures and collaboration mechanisms, as appropriate, is thus key to enhancing the economic value of urbanization.



An overview of downtown Nairobi, Kenya. © UN-Habitat/Julius Mwelu

Key Messages

Urban and territorial planning supported by adequate governance structures will enhance the economic value of urbanization: How urban areas are spatially configured and organized is directly connected to their generation of economic value. Poorly planned and managed urbanization diminishes the potential to leverage economies of scale and agglomeration effects. It is therefore important that cities are spatially organized in the most efficient and sustainable way in order to increase their absorptive capacities and ensure sustained economic growth.

Local and national governments need to strengthen their urban productive capacities: Cities can enhance their productive capacities by reforming legal and regulatory frameworks as well as integrating urban planning and design with measures that provide greater security to workers, particularly those operating in the informal economy.

There needs to be a paradigm shift in how urban planning and governance frameworks view the informal economy: Sustainable and inclusive urban development will be hard to achieve in developing countries without adequate measures to facilitate the transition of workers and economic units from the informal to the formal economy.

As cities in all regions make progress toward realizing the SDGs and the New Urban Agenda, the more the economic value of urbanization is enhanced: Cities can become effective catalysts for inclusion, powerhouses of equitable economic growth and places where the productive potential of various population groups are realized and harnessed for the greater good of society. For this dynamic impact to be sustained, strengthening productive capacities is key. Cities must offer equal opportunities for all residents to access appropriate education and further develop their skills for productive participation in the local economy.

The economic growth and consumption potential of cities should be managed in ways that support the achievement of sustainable development outcomes and build resilience: Particularly in the wake of the COVID-19 pandemic that has disrupted business-as-usual patterns of consumption like short-haul air travel and carbon-intensive supply chains, governments can re-evaluate their growth and consumption patterns

going forward so as to ensure inclusive prosperity and opportunities for all.

Leverage density but protect against crowding: The COVID-19 pandemic has shown that urban density does not inevitably correlate with higher virus transmission. Cities are largely vulnerable as a result of how people live, work and travel in and around them. Density has enhanced the delivery of services in the wake of COVID-19; it supports economies of scale in the provision of critical public services like health care and other necessary infrastructure. On the other hand, unplanned density associated with crowding increases the risk of rapid virus transmission.

Cities can have sustained economic growth and higher levels of productivity even as they navigate demographic transitions: From youth booms to the "silver tsunamis" associated with ageing, cities are undergoing demographic change. It is therefore imperative that policies (such as family planning, education and labour force participation) and urban and territorial planning processes are data-driven—i.e. informed by disaggregated data. This method is key to harnessing the urban demographic dividend as well ensuring age-friendly cities that "leave no one behind."

Governance, institutional, policy and legal frameworks should be aligned to local realities and not be a hindrance to economic growth: Development controls should be assessed regularly to check their relevance and responsiveness to prevailing needs. Local governments should also establish clear property rights to facilitate the efficient functioning of land, housing and commercial real estate markets. These measures are key to achieving compact and integrated development.

Sustainability and productivity go hand in hand: While making cities more affordable and inclusive as well as increasing connectivity in cities and improving urban quality of life are desirable goals on their own, they also have important economic effects. On the other hand, cities that offer a low quality of life usually have limited growth relative to their potential. Local and national governments thus need to incentivize companies and residents to minimize the social costs they generate, for example their contributions to traffic congestion or pollution.

Effective municipal financing is integral to equitable planning and development: Effective, innovative and sustainable financing frameworks and instruments strengthen municipal finance and local fiscal systems that create, sustain and share the economic value generated by sustainable urban development in an inclusive manner. Local governments in developing countries need to build productive capacities and leverage endogenous sources of finance as well as exercise prudent financial management practices to ensure sustained finances. In areas where taxation and fees are levied, equity considerations like progressive revenue must be considered to ensure inclusive prosperity.

Chapter 4 The Environmental Value of Sustainable Urbanization: Building Resilient Urban Development

Current international debates are characterized by urban optimism, as sustainable urbanization is recognized as a transformative force to harness environmental value. The implementation of the 2030 Agenda for Sustainable Development, the New Urban Agenda, the Paris Agreement and the Sendai Framework for Disaster Risk Reduction are embedded in this urban optimism. There is also the implicit agreement that actions at the local level will bridge the gap between intended contributions from countries and the actual emission reductions required to keep global average temperature change within safe levels. The adoption of these global development agendas as well as the ushering in of the Decade of Action to deliver the SDGs presents an opportunity for pragmatism whereby urban actors have to demonstrate the effectiveness of existing actions.

Unplanned and unmanaged urbanization represents a threat to environmental sustainability, including unbridled urban sprawl, irreversible land-use changes and biodiversity loss, resource and energy-intensive consumption patterns, and high levels of pollution and carbon emissions. However, when well-planned and managed, urbanization provides opportunities to address these challenges and contribute to environmental value through energy innovation, sustainable settlement patterns, changes in human behaviour and

lifestyles, environment-related improvements to health and wellbeing, and resource efficiencies.

Key Findings

Nature-based solutions represent an integrated approach to deliver environmental value across the urban-rural continuum, but there are challenges to overcome: In urban areas, nature-based solutions have been linked with positive effects on both urban nature and human health. However, when applying nature-based solutions to urban environments, there are still knowledge gaps regarding the effectiveness of solutions to address different environmental challenges, the involvement of various stakeholders and specific implementation challenges related to land competition, overlapping regulations and integration with existing infrastructure. In addition, there is a dearth of information on the extent and state of conservation of green and blue infrastructure across the various regions of the world.

Some green action and sustainability policies in urban areas are having unintended impacts: While environmental and conservation projects are adding value to the urban environment, marginalized groups are pushed out by the changing conditions for habitation, for example, because of an increase in housing prices and rents. Urban areas are finding a new challenge in these green and climate gentrification processes as people are excluded not only from housing and public space but also from safe and protected environments. For example, recent assessments of urban greening initiatives show that while they have resulted in positive environmental outcomes (increase in green space, reduction of pollution), they have also been associated with the displacement of low-income residents.

Multiple, interconnected environmental challenges affect life in rapidly growing urban areas: These include the ever-growing need to access resources and provide infrastructures and public services to sustain urban life, the increasing incidence of environmental risks linked with the impacts of climate change and air pollution, the threats to ecosystems and biodiversity, and the growing imperative to enable structural transformations to reduce emissions. In the US, the expansion of the wildland-urban interface is seen to contribute to ravaging wildfires as sprawling cities encroach on forests. In Europe, one in

every eight (or 13 per cent) of deaths is attributed to poor quality environments.

How environmental challenges are experienced and addressed largely depends on the living conditions and experiences of specific groups: Slums and informal settlements generally suffer the impacts of climate change and natural disasters disproportionately as compared to other settlements. While there have been improvements in global coverage of basic services over the past two decades, which have environmental benefits, particularly for slum dwellers, more action is still needed for this population most at risk of being left behind.

Recognizing the context and advancing principles of justice matters: Sustainability policies to unlock the environmental value of urbanization depend on the ability of different actors to tailor options to the context in which they operate. There are various ways in which planning, management and governance of urban areas can enhance the environmental value of urbanization. However, these measures need to be tailored to the specific conditions of an area, resources available and action potentials. Incorporating principles of justice entails taking into consideration the political and social implications of actions that are intended to unlock the environmental value of urbanization. In 400 sustainability initiatives in more than 200 urban areas, these principles are being embedded in current environmental action at the local level as cities make efforts to deliver on the NUA and the SDGs.

Despite its ravaging impacts, COVID-19 pandemic has shown that a green urban future is possible: The disruption caused by the COVID-19 pandemic has exacerbated some environmental challenges, for example, resulting in an increase of plastic waste. On the other hand, COVID-19-induced lockdowns led to a sudden fall in carbon emissions and improvements in air quality in cities, providing the world a brief window into the decarbonized, sustainable future environmental advocates have championed for decades.

Mobilizing all kinds of data: The recent shift towards evaluating the effectiveness of urban responses to harness environmental value has revealed an emerging interest in mobilizing all kinds of data. However, harnessing the environmental value of urbanization in a context of limited data and limited

resources also means delivering strategic action through mapping current capabilities, enrolling multiple actors and identifying critical knowledge gaps and information targeted towards specific forms of urban change.

Key Messages

Address the structural drivers of environmental degradation: Local governments and other actors operating in the urban environment need to recognize the structural drivers of environmental degradation and how they interact with people's lives (as they drive vulnerability and reduce urban resilience). Harnessing the environmental value of urbanization requires planning with people rather than for people. Urban dwellers have the knowledge to deliver sustainability and resilience and multiply governments' capacity to harness the environmental value of urbanization. Recognition of the multiple drivers of disadvantage and how they shape the urban experience (known as "intersectional analysis" in the urban governance literature) is a precondition for delivering environmental justice in urban settings. There is a need for developing intersectional environmental policies that question privilege as the root of current environmental problems and celebrate social diversity. An intersectional approach is also key to understanding the needs and concerns of different groups, hence facilitating authentic inclusiveness.

Urban greening initiatives enhance the overall value of urbanization, but adequate measures are needed to ensure that they do not exacerbate inequality and social vulnerability: Green initiatives have numerous added co-benefits that can support simultaneous achievement of multiple developmental goals and targets, thereby enhancing the overall value of urbanization. The New Urban Agenda and SDG 11 place an emphasis on inclusive settlements and provide frameworks for unlocking the environmental value of urbanization for all, rather than for a rarefied elite.

The environmental value of sustainable urbanization cannot be realized without prioritizing the needs of disadvantaged groups: Prioritizing the needs of the most disadvantaged means creating opportunities within local planning processes to represent their views, something already reflected in the 2030 Agenda for Sustainable Development. Harnessing the value of sustainable urbanization requires delivering

environmental benefits across urban areas in a manner that reaches every sector of the urban population, especially those who are most disadvantaged. The urban poor must be represented and their needs prioritized in any decision-making process, be it about the urban commons, atmospheric commons, public spaces or resource use.

Implementing the 2030 Agenda and the New Urban Agenda is key to enhancing the environmental value of urbanization: The 2030 Agenda for Sustainable Development and the New Urban Agenda provide the opportunity to deliver a truly innovative programme for urban action that harnesses the transformative power of urbanization for the delivery of environmental value at all scales. The 2030 Agenda provides targets to orient environmental action. The NUA provides guidelines to integrate development objectives into a holistic vision of a liveable, sustainable city.

There is an ample range of initiatives to deliver environmental value in urban environments, but outcomes are highly dependent on how these are implemented: The environmental value of urbanization depends on how cities are planned and managed. Ensuring due process and recognition of multiple points of view are conditions for delivering sustainable development for all, requirements already enshrined in the NUA. For example, increasing understanding of the potential of nature-based solutions and green and blue infrastructure to deliver environmental benefits alongside more conventional transport and waste management interventions needs to be balanced with the realization of how green gentrification is driving further processes of urban exclusion.

Recognize the urban commons as socio-ecological assets: Urbanization has transformative power because of its potential to enable the sharing of social, cultural and natural capital. The urban commons include shared resources, spaces and knowledge. It can be related to both providing specific services (flood protection, food, water and recreational areas) and protecting and enhancing urban ecosystems. Inventories of shared assets developed collectively help to identify and protect the commons. Local governments play a role in mediating the generation of a collective pool of knowledge that can be mobilized for the protection of the commons. The urban commons are the basis for collective design processes. For example,

in 2014, Bologna, Italy, adopted the Bologna Regulation on Civil Collaboration for the Urban Commons, whose primary tool was a collaboration pact whereby citizens, the local government and any other interested organizations would agree on care and regeneration actions to improve shared green areas and public spaces.

Leverage technologies for environmental action: Technology and open data have opened new opportunities to enable collaborative networks within and across cities. For example, UN-Habitat's Global Public Space Programme is harnessing technologies such as Kobo Toolbox and the Minecraft video game to engage a wider audience—e.g. children and youth—in urban planning and design processes for safe, inclusive and accessible public space. The potential offered by digital technologies should not be overlooked, but it should not distract from well-established processes of collaborative planning and their potential to deliver environmental action.

A green economic recovery from the COVID-19 pandemic can yield long-term environmental benefits: While COVID-19 induced lockdowns have been associated with short-term reductions in emissions and pollutants, these will have very little long-term effects, and will not change the trajectory of global greenhouse emissions unless they facilitate deeper and longer-term human, business and institutional change. Countries should seize this moment to deliver on their commitment to sustainable development by investing in cleaner and more resilient forms of renewable energy that will we create lasting solutions, reduce the risks of future crisis and adequately mitigate the impacts of climate change.

Chapter 5 The Social Value of Sustainable Urbanization: Leaving No One and No Place Behind

The opportunities offered by cities lend a social value to urbanization. When cities are well-planned and managed, they can lift families out of poverty, liberate women from gender-based discrimination, point to bright futures for children and youth, offer comforts and supports to older persons in their golden years and welcome migrants looking for a better life. This wide-ranging value of urbanization is one of its most potent features. Cities are the crucible in which social outcomes will be improved for all types of marginalized and vulnerable groups.

But the social value of urbanization will only be realized alongside the intangible value of urbanization. This broad category encompasses the institutions—rule of law, property rights and democratic participatory systems, among others—that allow cities to function effectively. Embedded in this intangible value is the cultural element of cities, from the diverse backgrounds of their residents to the cultural heritage assets at their disposal.

Key Findings

The "right to the city" underpins the social value of urbanization: The "right to the city" means that all people, particularly vulnerable and marginalized groups, should have equal opportunities and access to urban resources, services and goods. The World Charter on the Right to the City recognizes that cities are at the core of wealth creation; social, political and cultural diversity; and environmental preservation efforts. Access to these opportunities is not equal for all inhabitants, but local governments that embrace the right to the city can create more equitable outcomes. For example, the right to the city is enshrined in Mexico City's constitution, which informed the local government's efforts to provide aid to Central American migrants as they travelled through the city.

Gender-based discrimination is a systematic problem: Women make up over half of the global population yet suffer systematic gender discrimination in cities. Women at the bottom of the economic ladder provide 12.5 billion hours of unpaid care work every day, which is three times more than men do. Worldwide, men own 50 per cent more wealth than women. To address this imbalance, several local governments have implemented a feminist approach to urban planning. In the Spanish cities of Girona, Gavà and Donosti, a gender perspective informs public spaces and housing projects, which has resulted in better lighting in common spaces and improved spaces for pedestrians. Gender equality in cities is also driven by grassroots organizations, as some cities are being transformed into

spaces of inclusion due to the efforts of community organizations and committed citizens.

Urban planning often overlooks the needs of children and youth: Urban planning does not adequately account for the needs of young people, largely because they are dependent on their parents and do not have the right to vote or participate in decision-making processes. Consequently, their needs are not prioritized, as clearly demonstrated in the COVID-19 pandemic, which has resulted in school closure and significant restrictions on their outdoor activities and socialization. However, cities like Calgary, Ghent, Antwerp and Rotterdam are taking proactive measures to create more child-friendly play opportunities.

Older persons are increasingly "ageing in place"—in cities: The 65 and over cohort is now the fastest growing age group, with an increasing proportion moving to or remaining in cities instead of retiring to the countryside or returning to an ancestral village. They have distinct needs, like retrofitted home to accommodate their physical limitations, ready access to health care, and safe and reliable public transport. The Hong Kong Special Administrative Region Government has adopted the principles of age-friendly cities by focusing on a multi-dimensional approach that includes medical care, community and residential support, transport and mobility, housing and the built environment, active ageing, more flexible employment and familyfriendly measures with local governments playing a key role. More than 700 cities are part of the Global Network for Age-friendly Cities and Communities to promote healthy, active ageing and improve quality of life for the elderly.

Poor migrants face an uncertain welcome in cities: At a time of nearly one billion migrants worldwide, national attitudes are increasingly hostile to migrants and foreigners. African, Middle Eastern and Latin American migrants brave the odds to cross deserts and seas without any guarantee of ever being socially integrated into their host countries. International migrants often lack even the most basic civil rights and face various forms of social and economic exclusion. In some cases, however, cities are opening their doors. Montréal recognizes cultural diversity as an asset that enriches the city's quality of life and the city government supports housing, education and

employment initiatives to integrate migrants. The city believes that immigrant integration rests on the principle of co-responsibilities shared by immigrants themselves and the host society, which has proven to be a positive and empowering approach.

Urbanization can be a pathway to eradicating poverty: Urban areas offer significant opportunities to generate prosperity, which in turn can be leveraged to eradicate poverty by filling the gaps in sustainable infrastructure, such as housing, water, sanitation and transport. Generally, higher levels of urbanization are associated with lower levels of poverty. When well-planned and managed, cities can be "real poverty fighters," if adequate policies are implemented like the multiyear roadmap to improve water supply and sanitation in the urban areas of Surkhandarya Province in Uzbekistan. A major predicament is that policies designed to achieve economic growth-and thus the prosperity of cities—do not necessarily result in improved economic and social opportunities for the poor, and could indeed worsen existing poverty even while improving the urban economy. Policymakers have to face important non-economic and equity considerations that must be balanced against economic growth.

The COVID-19 pandemic is exacerbating urban inequality: Lockdowns and other public health measures to control the spread of COVID-19 have exposed and worsened inequalities in cities. Informal workers dependent on day wages were shut out of their basic livelihoods. Children without internet access could not receive an education. Isolated older persons were confined to their homes with no opportunities for social interaction. Migrants returned home on gruelling journeys. Women were forced to juggle childcare, education and work without access to schools and day care services. Extreme poverty is expected to increase globally for the first time in over two decades due to the deleterious effects of COVID-19.

Effective institutions are the bedrock of sustainable urbanization: Effective institutions are indispensable to the management and governance of any city. These intangible components have tangible impacts on inhabitants' everyday lives, like whether the garbage is picked up, the bus runs on time or a pothole is filled. Sound institutions and mechanisms that empower and include urban stakeholders are crucial

for generating value through urbanization, as they provide the supportive framework responsible for steering urban development and enabling it to operate and deliver maximum benefits to a majority of the population.

Cultural and ethnic diversity is an urban asset: The cultural diversity of cities contributes to their vibrancy, prosperity, inclusiveness, competitiveness, attractiveness, positive perception and overall development. Culturally diverse cities feature more innovative workforces given that they benefit from a wider range of international knowledge links, idea generation, problem-solving and diverse decision-making. It is no coincidence that economically successful global cities are dotted with vibrant international cultural neighbourhoods, ethnic retail stores, diverse religious landscapes and regular multicultural events such as Drongo Festival in Amsterdam, Caribana in Toronto, Notting Hill Carnival in London, Chinese New Year Festival and Parade in San Francisco and Living in Harmony in Sydney.

Cities can build economies around culture and creative industries: Creative industries are emerging as one of the most important dimensions of new economies in regions around the world. Cities as diverse as Austin (music and technology), Berlin (visual arts), Mexico City (contemporary art and television), Mumbai (film) and Seoul (gaming and digital media) have thriving creative industries that have contributed remarkably to their respective urban economies. The world's top tourism destinations are all known for their cultural landmarks. Small cities like Ségou, Mali have built entire local economies around cultural festivals.

Key Messages

Governments should move from "equality" to "equity" and remove systemic barriers: Whether in housing, education, transport or other municipal services, the concept of equity recognizes that redistributive mechanisms are put in place for a fair and more efficient use of resources, skills and opportunities to target the most vulnerable with the highest levels of support. For the social value of sustainable urbanization to be fully realized, identifying and addressing the root causes of exclusion and inequity are critical. For instance, an equitable policy approach to affordable housing would not simply build more affordable housing equally throughout the city,

but target that affordable housing in the neighbourhoods that have been historically gentrified or seen displacement due to real estate investment.

Gender "mainstreaming" can address systemic discrimination against women: Feminist approaches to urban planning include the notion of "gender mainstreaming," which applies a gender-based lens on all public decisions. Vienna has pursued this practice for 20 years, including in budgeting, policy and resource allocation, while Rwanda has the world's highest rate of female elected legislators. On a larger scale, various governments are partnering with the United Nations Women Friendly Cities programme to develop urban areas where everybody, especially women, can equally enjoy the economic, social and political opportunities offered by the city.

Youth rights and urban planning principles can lead the way to child-friendly cities: Creating vibrant play spaces and providing quality education are among the youth-specific outcomes that local authorities can pursue in line with UNICEF's Child Friendly Cities Initiative. Many urban policy objectives that benefit children and youth also benefit all urban residents, such as ensuring healthy food, safe and reliable public transport, affordable housing and decent work opportunities.

Local governments can foster active ageing in cities: In line with the WHO Age-friendly City initiative, there are eight entry points for cities to better adapt their structures and services to the needs of older people: outdoor spaces and buildings; transportation; housing; social participation; respect and social inclusion; civic participation and employment; communication and information; and community support and health services. Some cities might only be able to implement a few elements at a time and gradually add on the rest. Like the Child Friendly Cities Initiative, these principles are not exclusive to the needs of older persons. A city that works for children and older persons alike works for urban residents of all ages.

Cities should develop frameworks to properly integrate migrants: Even amidst political disagreements over immigration, local authorities are on the frontlines of migrations and can prepare for the arrival of refugees and migrants by establishing "welcome departments." If cities and local governments

look beyond the humanitarian emergency lens, they can see migrants as integral to the socioeconomic development of their cities. This perspective requires effective integration programmes in the form of housing, employment, education and health, safety and security, social protection and according migrants a sense of belonging.

Invest in cultural infrastructure for long-term dividends: Historic buildings in need of renovations, arts and crafts traditions that could prove nascent economic drivers and cultural institutions like museums and performing arts venues are all the building blocks of a creative economy. Cities with a vibrant cultural scene and assets are more likely to attract skilled talent who will boost the city's long-term prospects.

Chapter 6 Innovation, Technology and the Value of Sustainable Urbanization

The world is firmly entrenched in the Information Age. Technology continues to reshape economies and societies amidst the fourth industrial revolution, or the exponentially paced disruption caused by the possibilities of billions of people connected by mobile devices, with unprecedented processing power, storage capacity and access to knowledge. These possibilities will be multiplied by emerging technological breakthroughs in fields such as artificial intelligence, robotics, the Internet of Things, autonomous vehicles, 3-D printing, nanotechnology, biotechnology, materials science, energy storage and quantum computing.

Cities are at the centre of these changes as the concentration of people and human activities encourage technology and innovation talent to co-locate. Even amidst the COVID-19 pandemic, cities are where the main health facilities are located and the home of the research institutions that are working assiduously to develop a vaccine. They are the home base for the technology companies that have produced the tools for millions to work from home. The interplay of technology and innovation has already influenced urbanization patterns and is poised to further shape the future of cities.

Key Findings

Cities are rapidly deploying technology to address a wide range of urban challenges: Rapid urbanization, technological change and the climate crisis are all happening at the same time, creating new challenges for cities. In response, cities are also innovating, leveraging new technologies, ideas and approaches to help achieve the New Urban Agenda and meet the Sustainable Development Goals and other international development frameworks relevant to sustainable urbanization. New technologies and innovations provide opportunities for cities to generate immense value from urban life. Cities that encourage creative activities, communities and people are best able to innovate.

Innovation is not the exclusive purview of the private sector—the public sector innovates as well: Innovation is most commonly associated with start-up businesses and technology entrepreneurs, but a growing recognition exists that while cities can serve as platforms of innovation, creativity and knowledge generation, city governments can also be innovators drawing on, and in some cases creating, new technologies and developing legal and institutional

innovations to improve and transform government processes and service delivery.

New technology is facilitating better urban monitoring: Cities are increasingly using patented technologies like cheaper and more effective sensors to monitor and share information on water, air, solid waste, infrastructure, energy, traffic and public transport, among other areas. Such monitoring can also contribute to reducing the adverse environmental impact of cities, including by paying special attention to air quality and waste management.

Cities have troves of big data at their disposal: In addition to monitors and sensors, cities collect data from smartphone apps, city data dashboards, information screens in public spaces, intelligent operations centres and public-facing websites with critical information and feedback mechanisms. Combined, these sources generate "big data" so massive that traditional techniques and software cannot analyse them. Big data analysis, real-time monitoring and automation of various municipal services from streetlights to complaint systems are extremely useful for city planning and service delivery.



Pollution detector station of the Chief Inspector of Environmental Protection, Warsaw, Poland. © HAL-9000/Shutterstock

When cities make their data open and transparent, innovations emerge: Cities are making once proprietary data sources available to the public. As cities open their data portals to the public, private industry, civil society groups and individual citizens through activities like civic "hackathons" can create useful tools. For example, public transport data, once hidden, is now standardized and has enabled transit systems around the world to integrate their routes and schedules into mapping apps.

The COVID-19 pandemic is accelerating the deployment of innovation and technology in urban areas: Innovations designed to curb the spread of the virus and keep people safe, productive and connected when they are physically apart have profound implications for urban built environments, social relations, labour markets and education, among other areas. These evolving technologies have enabled remote work, online or distance learning, digital and contactless payments, telehealth, online shopping and drone or robot delivery. While these technological trends can make cities more resilient in the face of current and future pandemics, there is a real possibility that they could deepen the existing digital divide and social inequalities, particularly when millions of people cannot work or go to school remotely or access technology and its benefits.

Smart city rhetoric does not always match reality: "Smart city" is among the most common buzzwords at the intersection of technology and urbanization. However, top-down private-sector-led approaches driven mainly by technology firms frequently do not promote socially inclusive urbanization as envisioned in the New Urban Agenda. Technology firms are increasingly focusing on cities as markets for smart city technologies. Results of smart city initiatives are mixed and particularly poor when these efforts are driven by technology rather than by people. Cities should focus on applying their own civic and urban technology and encouraging public sector innovation to address existing problems within their jurisdiction.

Cities do not have adequate regulatory and policy capacity to address technological challenges: Many governments are trying to leverage new technologies to improve service delivery, citizen engagement and governance as well as reduce carbon footprints in cities. Few have adequate capacity to maximally use, manage and regulate these

technologies while addressing concerns such as digital exclusion, privacy, surveillance and political misuse of social media platforms as well as the impacts on labour markets, poverty and inequality. To address these problems, more capacity support must be given to cities.

Investment in technology is unevenly spread across the world: The global distribution of the top 100 digital companies and the venture capital that backs new start-up enterprises is uneven, favouring specific metropolitan areas like Silicon Valley, the US Northeast Corridor, London, Paris, Toronto, Beijing, Tel Aviv, Shanghai, Mumbai and Bangalore. Large technology innovation networks and the companies within them are almost always located in global cities that can also attract young well-educated workers, many of whom are immigrants, while less globally connected cities are left behind.

Key Messages

Innovation and technology play a multidimensional role in urban areas: Disruptive technologies and new ways of managing cities are now fundamental to the urban experience. They are reshaping social relations, labour markets and governance. At the same time, technology cannot displace citizen engagement in neighbourhood and city affairs. Technology is most effective when coupled with institutional innovation and is not a substitute for improving governance, planning, operations and management.

True smart cities are people-oriented: Citizens are a city's greatest resource as they provide new ideas for innovation, act as the eyes or ears of the city, help monitor conditions on the ground and engage the city more actively in setting priorities. Smart city technologically-based initiatives need to be people-centred and people-driven.

Fostering collaborative network to drive research and development: Cities should foster strong research and development institutions and collaborative networks between levels of government to build the research, data and regulatory capacities to ensure that new technologies address urban problems rather than exacerbate them or create new challenges. Finding pathways towards global cooperation to confront these challenges and opportunities is critical, including through city networks that share innovative ideas.

Government should build its capacity to effectively manage, deploy and regulate the use of technology: Cities should be proactive in the technology they procure for public use. They should also be willing to take a regulatory approach toward disruptive technologies like transportation start-ups, which if left unchecked can create negative externalities like traffic congestion. Cities require access to and capacity to manage data, as well as benefit from building open data and open source ecosystems in line with the principles for digital development. To enhance the potential benefits, cities should develop open data portals, urban innovation labs, hackathons, innovation challenges, town-gown programs and support for research and local data science.

Governments should address digital divides and exclusion:

Cities should develop and implement strategies to address ongoing problems of digital exclusion with a special focus on vulnerable populations to avoid exacerbating inequalities and instead tap into a wide, diverse pool of talent. In an era of remote learning, ensuring access to technology is now an essential responsibility of public education. At the same time, more traditional forms of public outreach remain necessary to reach segments of the population, like older persons or the homeless, who do not have easy access to smartphones or internet connections to answer surveys or sign up for municipal services.

Cities should put in place clear ethical frameworks and institutional arrangements for data collection and sharing: These governance frameworks need to set out ethical standards, including who has the right to data, access and ownership, and who should enjoy the benefits from the data. Here, it is important that the public sector, as the custodian of citizens' rights, assume its full governance responsibility. For many local governments, this is a completely new area, and as such, digital policy and governance capacity needs to be significantly strengthened or built from scratch. Cities should work with government to protect privacy and open, factual public discourse. They should prioritize innovative people-based policy over technological solutions. How technology is designed and used should reinforce democratic and humanistic values and ecological wellbeing as embodied in the Universal Declaration of Human Rights.

Chapter 7 Local Governments and The Value of Sustainable Urbanization

Local governments are the prime movers of sustainable urbanization. As the unit of government closest to everyday citizens, they are the most attuned to the needs and desires of urban residents. The successful implementation of the global development agendas and effectively unleashing the value of sustainable urbanization thus depends on the democratic, efficient and inclusive functioning of this level of urban governance.

Key Findings

Subnational governments are central to the global sustainable development agenda: There is a growing movement of local and regional governments advancing the localization of the global agendas to harness the value of sustainable urbanization. In all regions, local governments and their organizations are contributing to the advancement of sustainable urbanization by fostering climate change mitigation actions, urban resilience, alternative economic models and social inclusion policies. For instance, in 2019, more than 10,000 cities from 139 countries made commitments to take measurable climate action.

Overall, there is global progress on decentralization, despite setbacks: Local governments are playing an increasingly significant role in urban governance as decentralization processes get implemented across various regions. Globally, local governments account for 24.1 per cent of public spending, 25.7 per cent of public revenue and 36.6 per cent of public investments.

Weak institutional environments are hindering local action: In many countries, a weak "enabling institutional environment"—the powers, capacities and resources devolved to the local level—have a debilitating impact that hinders urban governance, and consequently, the realization of the value of urbanization. The extent of fiscal decentralization is uneven across regions, yet adequate financing flows are needed to support urban investments as acknowledged by the Addis Ababa Action Agenda.

Local governments can be transformative forces: In the implementation of the 2030 Agenda for Sustainable Development and the New Urban Agenda, many cities are playing the role of experimental hubs and their experiences can be used to inform policies that are scaled up at the national level. Many cities are revising their policies and strategic plans to include the SDGs, strengthening the value of urbanization. Participatory planning, for example, is being implemented in order to co-create fairer, more inclusive and environmentally sustainable cities. Notably, many cities are increasingly institutionalizing their engagement with local stakeholders as the basis for more inclusive decision-making that leaves no one behind.

Weak coordination, monitoring and reporting hampers localization efforts: Although various countries are taking advantage of SDG-driven national coordination initiatives to ensure greater collaboration between national and subnational governments, local governments in all regions are facing difficulties securing inclusion into the national coordination mechanisms and reporting processes. Many cities lack adequate statistical capacities. This dilemma

makes it difficult to monitor the implementation of the SDGs and the New Urban Agenda, as well as to ensure local and national planning processes are founded on realistic targets.

Key Messages

Galvanize the forces of localization of the 2030 Agenda and the New Urban Agenda in cities and territories: Localization strategies should be mainstreamed in all plans, programmes and budgets from national to local levels. Cities need to adopt the SDGs and the New Urban Agenda as reference frameworks to guide their policies and plans, as well as ensure coherent and integrated implementation. Countries need to integrate and strengthen robust localization approaches into their sustainable development strategies and actions.

Effectively involve local governments in national coordination mechanisms: National governments should strengthen local governments' involvement in the definition, implementation and monitoring of national urban policies



Community members design a public space at the Kalobeyei Integrated Settlement in Turkana, Kenya. © UN-Habitat

and the SDGs. Coordinated strategies to support these localization processes are also key.

Countries should create enabling institutional environments to effectively unleash the value of sustainable urbanization: Effective decentralization policies strengthen local authorities' capacities to pursue sustainable urban development. In order to address the critical mismatch between the increase of transferred responsibilities and the revenues allocated to local governments, special attention should be given to fiscal decentralization and adequate financing flows to support urban investments.

Create strong multilevel governance frameworks to foster vertical and horizontal cooperation between different levels of government and between local governments: Effective multilevel governance requires clear legal and institutional structures based on the principles of subsidiarity and decentralization, as well as adequate intergovernmental allocation of financial resources.

Make strong metropolitan governance a key component of new urban governance: National governments should enable metropolitan governance that responds to the realities of economic and social geographies, not just arbitrary jurisdictional boundaries, ensuring the involvement of both local and regional governments in the reform process.

Support sustainable urban transformation via participatory planning: An integrated planning approach is crucial to create inclusive cities and strengthen linkages between urban and rural areas. Inclusive and participatory planning is a key lever to involve local actors in the definition, implementation and evaluation of a shared vision and support the coalescence of transformative local forces. Participatory processes promoted by local government should be transparent and implemented with regularity and continuity, as well as endow citizens with real decision-making power.

The production and dissemination of disaggregated data for monitoring and impact evaluation is key: Cities must track the localization of the global agendas to ensure that planning processes at all levels are founded on realistic targets and effective implementation can be monitored, as well as to ensure accountability and citizen follow-up.

Chapter 8 Investing in the Value of Sustainable Urbanization

Significant investments are required to enhance the economic, environmental, social value of urbanization, including the intangible conditions of cities, all of which are critical for to realizing sustainable urbanization. Just like all aspects of development, sustainable urbanization requires adequate financing. The extent to which cities and countries attract and leverage the public and private investments required to achieve SDG 11 and the New Urban Agenda is key to enhancing the value of sustainable urbanization. Closing the investment gap requires coordination and co-operation among diverse stakeholders, including all levels of government, the private sector, and bilateral and multilateral development institutions.

Key Findings

Adequate investments in urban infrastructure are central to enhancing the value of sustainable urbanization: Urban infrastructure in all its dimensions—including physical assets, human capital, institutions, effective governance structures and innovative technology—is crucial to the delivery of essential services in urban areas to enhance the value of sustainable urbanization.

Delivering on the urban dimension of the SDGs will cost US\$38 trillion: UN-Habitat estimates the total investment need for infrastructure and the SDGs at US\$38 trillion for the years 2020–2030. Further, estimates based on the investment trends from the pre-COVID-19 period indicated that there would still be an investment gap of US\$5.6 trillion following the trend at the time. With the COVID-19 pandemic triggering a global recession, the investment trajectory of developing countries might enter a downturn for some years, leaving the investment gap even wider.

Adequate global financial resources exist to meet current investment needs, but they are not channelled in areas where they matter most: While there is a considerable amount of investible funds available at the global level and increasing investment in global cities, adequate financing is not directed to sustainable urbanization in the cities

and territories where resources are needed most. Yet, as UN-Habitat estimates show, the total public and private investment capacity of US\$98 trillion far surpasses total investment needs. Simply put, while financing capacity indeed does exist, it is currently not flowing into the right areas to meet this need. Redirecting even a part of these assets would make a significant difference, but it is imperative that these assets are matched to infrastructure and SDG projects to meet current investment needs.

The COVID-19 pandemic has created an uncertain investment climate: While the full impact of the COVID-19 pandemic will not be known for some time, the global economic consequences of the pandemic have shaken confidence in infrastructure investment. For example, only five per cent of public and private sector leaders believe that investments will "increase significantly" following the pandemic, a sharp decline from 34 per cent before the crisis.

Investment needs diverge widely: The investment needs of cities and countries required to achieve sustainable urbanization vary depending on city size, demographic trends, urban configurations, geographic location, the country's level of economic development and the quality of existing urban assets. For example, while investment needs of cities in most advanced economies are the necessary upgrades to replace ageing infrastructure, cities in emerging economies require adequate new investments in economic, environmental and social infrastructure to meet the demands of rapidly growing urban populations. Notably, a study by UN-Habitat shows that the average annual cost of achieving SDG 11 varies depending on context, ranging from the tens of millions to billions of dollars.

Local governments face multiple constraints regarding urban finance: These hurdles include insufficient and unpredictable transfers from central government, weak fiscal management, poor revenue generation and legal constraints that affect their institutional capacities. The combination of these factors poses enormous barriers such as restricting cities' access to capital markets—only 4 per cent of the 500 largest cities in developing countries are deemed creditworthy by international financial markets, and only 20 per cent are creditworthy in local markets. Cities also face challenges in accessing resources for pre-investment activities such as financial structuring necessary

to bring forth bankable projects and pilot projects that demonstrate local government capabilities.

Government revenues are still the primary source of financing for urban development: The average revenues in low-income countries remain below the 15 per cent of GDP—a threshold considered essential for the effective functioning of the state. Besides, most cities in developing countries are dependent on transfers from the central government and often have limited financial instruments and mechanisms for revenue generation; for example, the subnational taxes in developing countries are approximately 2.3 per cent of GDP compared to 6.4 per cent in advanced countries. Central governments' stringent control over spending and conditionalities tied to intergovernmental fiscal transfers often carry the risk of forcing local governments to spend funds in ways that do not match local needs, undermining a key objective of decentralization in developing countries.

The cost of inadequate investments in sustainable urbanization is high: Underinvesting in sustainable urbanization increases inequality and often threatens the competitiveness and productivity of cities and national economies. Inadequate investments also impact health outcomes—public health guidelines regarding the COVID-19 pandemic were almost impossible to implement in informal settlements due to inadequate infrastructure.

Investment in various aspects of human and institutional capacity is vital for inclusive and sustainable urbanization: The lack of adequate capacity impedes urban service delivery, revenue generation, financial management and project implementation in most cities in developing countries.

Key Messages

Adequate funding during the Decade of Action is key to realizing SDG 11, the urban dimension of the SDGs and the New Urban Agenda: As the world enters the Decade of Action, it is imperative for policymakers to catalyse actions that support the adequate investments in urban infrastructure (physical assets, human capital, institutions, innovation and technology) that are required to make cities and human settlements safe, inclusive, resilient and sustainable. Accelerated action on investment is required for the value of sustainable urbanization to be realized.

Cities require stable, sustainable sources of financing: In order to realize the investments necessary for sustainable urbanization, sources of municipal financing need to be sustainable. This stability comes when cities have diverse sources of revenue and adequate institutional capacities that allows them to harness innovative financing mechanisms pooled financing, blended finance, green municipal bonds and land-based finance instruments, among others. Urban areas have tremendous assets that can be unlocked for investments and local economic development. Local authorities must develop ways to link revenue generation to urban growth to ensure that local finances are sustainable in the long term. Local governments must be empowered to tap their endogenous potential to innovatively increase and diversify own-source revenues, which in the long-run enhances local autonomy and long-term sustainability.

Realign financial frameworks for sustainable urbanization: Investing in sustainable urbanization calls for a policy framework that realigns local financial flows to public development goals. Urban governance should be underpinned by well-coordinated fiscal, political and administrative decentralization, where local expenditure responsibilities are backed by predictable intergovernmental transfers and fiscal empowerment.

Policy coherence between global, regional, national and local stakeholders is crucial for meeting investment needs: To leverage the full potential of sustainable urbanization, investments made in all forms of infrastructure must be compatible with the 2030 Agenda, New Urban Agenda and other development agendas. The goal should not merely be more spending, but rather more efficient spending while prioritizing sustainability to enhance the value of urbanization.

A multiplicity of actors and collaborative ventures is required to adequately fund urban infrastructure: Public sector entities, private sector corporations and financial institutions, multilateral development banks, international public finance and foreign direct investment all have significant roles to play in funding urban investments.

Sustainable cities stem not just from physical assets, but also from sound legal and institutional frameworks: Making cities inclusive, safe, resilient and sustainable not only requires physical assets in cities, it also calls for investing in

effective urban governance, sound legal and institutional frameworks and strengthened capacities to formulate, implement, enhance, manage, monitor and evaluate public policies for sustainable urban development. Strengthening the institutional capacities of local governments is also integral to facilitating local financial sustainability. A city's ability to maximize its leverage of endogenous resources is subject to appropriate institutional arrangements, as well as its technical capacity for planning, accessing and administering the full range of financing instruments.

Optimizing revenue mobilization matters, as does improving value for money from investment: Effective management is essential to safeguard public investment. Local governments should strengthen institutions for public investment management to achieve desired developmental outcomes while, at the same time, achieving quality and efficiency in spending on the city's physical assets.

An accurate investment needs assessment is the basis for sustainable urban investment: Urban policies and investments should be evidence-based and founded on realistic targets that can be monitored. Preparing precise estimates of urban investment should be the starting point for all levels of government in their pursuit of sustainable urbanization. These estimates should be considered alongside the shortand long-term benefits unlocked by urban investments. The needs and combination of potential financing sources are unique for each country. Some countries may require technical assistance to develop a national reform agenda that maps infrastructure needs and the SDGs to national circumstances. Others may need technical assistance to align the complementary roles that various development partners can play in financing infrastructure development and maintenance needs.

Chapter 9 The New Urban Agenda and the Value of Sustainable Urbanization

Sustainable urbanization generates economic, environmental, social and intangible value that can be harnessed for the wellbeing of all. This message can and should guide development efforts during the Decade of

Action to achieve the SDGs and as the world recovers from the COVID-19 pandemic. Fortunately, there is a road map to sustainable urbanization in the New Urban Agenda, which provides a comprehensive framework for unlocking the value inherent in well-planned, managed and financed cities.

Unlocking the value of sustainable urbanization is a multisectoral and multi-stakeholder endeavour. National governments must create an enabling environment for cities to thrive. Local authorities must seize the opportunities given to them and govern their territories effectively, as called for in the New Urban Agenda. The private sector must invest in sustainable urban development, from affordable housing to climate-friendly infrastructure. Civil society must strengthen institutions and create a welcoming environment for a diverse citizenry. Philanthropy must fill in the gaps to support the most vulnerable. Universities must educate the next generation and foster research and development opportunities for innovation and inclusive prosperity. When all the interlocking parts operate in harmony and are supported by appropriate institutions and policies, cities will thrive and their value will be enhanced and shared by all.

Key Messages

A call to action and commitment to implement the New Urban Agenda: There should be a sense of urgency and a long-term commitment to implement the New Urban Agenda as the basis for achieving sustainable urbanization. The costs of inaction and delay are too high. Profound rethinking to formulate appropriate action is necessary. The start-up phase of New Urban Agenda and SDG implementation has been quite slow. The pace needs to accelerate rapidly in the Decade of Action to achieve the SDGs.

The effective implementation of the New Urban Agenda will harness the value of sustainable urbanization: Effective frameworks of action can substantively enhance the value of sustainable urbanization, most notably through supportive urban governance structures, planning and management of spatial development, and effective means of implementation in the form of adequate financing, capacity development, information, technology and innovation. Regionally-specific action plans and local initiatives from city governments and civil society groups complement one

another. Together they can boost awareness, enthusiasm and uptake of these global sustainability agendas.

Assess progress in implementing and achieving the development agendas relevant to sustainable urbanization: Cities should undertake audits and map their efforts onto the transformative commitments of the New Urban Agenda, SDG 11 and the urban dimensions of the other SDGs. This assessment is an important step that will demonstrate what is already being done and thereby help to identify what needs to be done, as well as key weaknesses and gaps on which to focus new interventions and direct appropriate resources.

Development goals and targets can be addressed simultaneously: Being able to identify and take advantage of such synergies across the SDGs and New Urban Agenda reinforces the need for integrated policy coherence and cross-sectoral harmonization from the global to local scales. Demonstrating progress early on, even without dedicated new investments, has the added benefits of reducing the scale of new costs to be incurred relative to starting from scratch. These "easy wins" make it easier to gain support from elected subnational and national representatives and officials who must trade off diverse and competing resource demands.

Collaboration and cooperation across scales is central to enhancing sustainable urban development: Convening multistakeholder workshops like national and regional urban forums can act as strong catalysts for change, bringing public sector, private sector and civil society together to determine what changes are needed, gauge reactions and explore more transdisciplinary and collaborative ways forward. Deeper forms of multi-sectoral co-creation and co-production are demonstrating significant improvements in appropriate public service provision as well as in research and practice for improved sustainable urbanization.

Effective governance with cooperation between formal and informal actors is key to achieving the SDGs and advancing the New Urban Agenda: Informality is a fact of life, from housing to the economy, and should not be ignored. Urban development initiatives where state-citizen relationships have been reformed and strengthened can be built upon and shared more widely for supporting sustainable

urbanization. Co-production of housing and infrastructure in informal settlements and spaces where civil society and governments engage in joint action are effective models for bridging the gap between the formal and informal, as well as enhancing the value of urbanization.

Sustainable urbanization leads to economic development and employment opportunities: Cities by their nature offer significant work opportunities because urban areas create employment that builds on their comparative advantage and unique characteristics. Urbanization creates economic development through the provision of decent jobs, income and equal opportunities for all. Ensuring access to sustained productive employment, enhancing innovation and productivity, nurturing the talent and skills required to thrive in a modern urban economy, developing creative industries and utilizing viable forms of municipal finance all have a key role to play in enhancing and sustaining the economic value of urbanization.

Urban greening enhances the environmental value of cities: One central requirement for accelerating urban sustainability is for all stakeholders to take the green or circular economy seriously and proactively promote it. Evidence from around the world demonstrates that proactive urban greening leads to a net gain in employment across diverse skill categories, thus removing previous concerns about job losses from phasing out carbon-intensive economic activities.

Cross-cutting considerations underpin all efforts to enhance social justice, equity and the overall value of sustainable urbanization by leaving no one and no place behind: While strongly recognized in the New Urban Agenda and SDGs, issues of cultural diversity, gender, age and other dimensions of intersectionality, as well as groups marginalized on the basis of other characteristics, require greater inclusion in the design of national and local policies on urban sustainability and resilience. Leaving no one and no place behind are the mantras of the development agendas.

Innovation in technology and data are integral to enhancing the value of sustainable urbanization: Technological innovation is no longer a luxury, but rather an integral part of everyday life in urban development and governance. Mobilization of diverse sources of data and delivering effective strategic action within current data constraints is key, together

with capacity building for strengthening government's ability to effectively manage, deploy and regulate the use of technology.

Local governments are key agents of change for achieving the transformative commitments of the New Urban Agenda and enhancing the value of urbanization: However, the evidence base for city-level implementation and monitoring remains somewhat limited and uneven as relatively few municipal governments have explicitly embarked on a path to implementing the New Urban Agenda. The growth of national and international city networks, and their increasing membership, are potential catalysts to change this course. They play a leading role in sharing experience, knowledge and good practices in relation to climate change, urban sustainability and resilience.

Financing sustainable urbanization requires enabling environments: Local authorities must be empowered to raise the necessary revenue in order to plan and manage sustainable urban growth and development. There is a wealth of fiscal tools available to governments provided that they are given the necessary authority to deploy them effectively.

Cities can turn the COVID-19 crisis into an opportunity to "build back better": The current COVID-19 pandemic has brought to the fore existing problems and inequalities in how cities are planned and managed, from an overabundance of public space allocated to private automobiles to crowded housing conditions and inadequate sanitation in slums and informal settlements. The need for public health measures like physical distancing and appropriate hygiene practices underscore the urgency of eliminating urban poverty and improving housing and infrastructure, while the global sustainable development agenda, especially the SDGs and NUA, provide a unique framework and opportunity to implement the necessary measures.