WORLD CITIES REPORT 2016

URBANIZATION AND DEVELOPMENT

Emerging Futures

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URBANIZATION AND DEVELOPMENT: EMERGING FUTURES

WORLD CITIES REPORT 2016

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Foreword

Ban Ki-moon
Secretary-General
United Nations

Since the 1996 Habitat II Conference in Istanbul, the world has faced many serious challenges, including rising inequality, increasing insecurity in many places and the widening impacts of climate change everywhere. But we have also made major advances in medicine, life expectancy, information and communications technology, governance and human knowledge. On both the positive and negative sides of this ledger, cities have been a primary arena where change takes place.

As the world has transformed, so have urban areas. Today, cities are home to 54 per cent of the world's population, and by the middle of this century that figure will rise to 66 per cent. While cities face major problems, from poverty to pollution, they are also powerhouses of economic growth and catalysts for inclusion and innovation. With vision, planning and financing, cities can help provide solutions for the world.

This year's United Nations Conference on Housing and Sustainable Urban Development — known as Habitat III — in Quito, Ecuador, is a timely and important

opportunity. It takes place as the world embarks on efforts to implement the 2030 Agenda for Sustainable Development, which gives a prominent role to cities. Habitat III is expected to discuss and agree on a New Urban Agenda aimed at enhancing the contribution of cities to sustainable development, and at ensuring that cities are inclusive, safe, resilient and sustainable.

This new World Cities Report presents a number of issues that this New Urban Agenda should address. I commend its analysis and documentation to a wide global audience, and encourage all stakeholders to make Habitat III a success in pointing the way forward in designing and managing cities so that all their inhabitants can enjoy lives of dignity.

Introduction

Joan Clos
Under-Secretary-General,
United Nations Executive Director, UN-Habitat

The world has changed remarkably since the Habitat II Conference took place in Istanbul in 1996. Twenty years appears to be a short span of time, but our ideas, practices, modes of production and consumption, demographic structures, as well as education and health conditions have drastically changed. The way cities are shaped, their form and functionality have also been transformed over these years. Many of these changes have been for the better, but others for the worst.

The growth of the world's cities, from the north to the south, and from the east to the west, is ingrained in a culture of short-term economic benefit and often unbridled consumption and production practices that compromise the sustainability of the environment. The causes may vary according to different contexts, but uncontrolled growth, privatization of public goods, lack of regulations and institutions as well as forms of collective indolence are often the key factors behind a model of urbanization that is becoming highly unsustainable. Urbanization is at the same time a positive force underpinning profound social, political and economic transformation.

Urbanization and growth go hand in hand, and no one can deny that urbanization is essential for socio-economic transformation, wealth generation, prosperity and development. As this Report asserts, the emerging future of cities largely depends on the way we plan and manage urbanization, and the way we leverage this transformative process to 'provide the setting, the underlying base and also the momentum for global change'[1].

The analysis of urban development of the past twenty years presented in this first edition of the *World Cities Report* shows, with compelling evidence, that there are new forms of collaboration and cooperation, planning, governance, finance and learning that can sustain positive change. The Report unequivocally demonstrates that the current urbanization model is unsustainable in many respects, puts many people at risk, creates unnecessary costs, negatively affects the environment, and is intrinsically unfair. It conveys a clear message that the pattern of urbanization needs to change in order to better respond to the challenges of our time, to address issues such as inequality, climate change, informality, insecurity, and the unsustainable forms of urban expansion.

The Habitat Agenda adopted at the United Nations Conference on Human Settlements (Habitat II) in 1996 was influential in the recognition of the right to adequate housing, sustainable human settlements development in an urbanizing world, and the increased participation of the private sector and non-governmental organizations in the urbanization process. It reinforced the role of local authorities and stirred progress in strengthening fiscal and financial management capacities. However, in general terms, implementation, financing and monitoring have remained major challenges.

The New Urban Agenda that is expected to be adopted at the Habitat III Conference cannot afford to ignore these shortcomings. It should convey a sense of urgency in the implementation of policies and actions that can no longer depend on political schedules or opportunistic moments, but should, instead, be set in clear, well-defined agendas. The New Urban Agenda should adopt a city-wide approach to development with concrete actions, setting out clear funding mechanisms and effective means of implementation and monitoring.

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1. United Nations (2013) Sustainable Urbanization, thematic think piece prepared for the 2030 development agenda, New York.

Habitat III and the New Urban Agenda should establish critical connections to the 2030 Agenda for Sustainable Development and other international agreements. The Report is very explicit on the need to ensure a strong convergence among these agendas as a way of complementing and improving the implementation of the Sustainable Development Goals (SDGs), particularly those with an urban component.

The research, data, knowledge, practice and experience of UN-Habitat has facilitated the production of this highly informative Report. Its different chapters collectively present a path to sustainable urban development that the New Urban Agenda must consider.

A set of principles that guide major shifts in strategic and policy thinking are presented to ensure that human rights, the rule of law, equitable development and democratic participation are the bastions of this Agenda. The Report also elaborates on the strategic components that work as a framework for action based on UN-Habitat's three-pronged approach to planned urbanization – an effective and enabling legal and institutional environment, improved urban planning and design and vibrant local economic development.

Finally, the Report expounds the most important levers for the transformative change of cities. These include planned city extensions, planned city infills, land readjustment programmes, basic services and housing plans and public space planning and regulations. The need to put in place a new global monitoring framework to assess how countries and cities implement this Agenda and the urban components of the SDGs is also highlighted in this Report.

The success of the New Urban Agenda is about values, commitments and collective efforts. It is for the Habitat III Conference to steer the 'emerging futures' of our cities on to a sustainable and prosperous path.

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Acronyms and Abbreviations

3G	Third generation of mobile telecommunications technology
ADB	Asian Development Bank
BRICS	Brazil, Russia, India, China and South Africa
CAF	Corporacion Andina de Fomento- Development Bank of Latin America
CBO	Community Based Organization
CCTV	Closed-Circuit Television
CDS	City Development Strategy
CO_2	Carbon dioxide
EU	European Union
FDI	Foreign Direct Investment
GDP	Gross Domestic Product
GMS	Greater Mekong Subregion
HIV/AIDS	Human Immunodeficiency Virus infection/Acquired Immunodeficiency Syndrome
ICLEI	Local Government for Sustainability
ICT	Information and Communications Technology
IPCC	Inter-Governmental Panel on Climate Change
ISO	International Organization for Standardization
ITU	International Telecommunication Union
LA21	Local Agenda 21
LAC	Latin America and the Caribbean
MDG	Millennium Development Goal
NGO	Non-Governmental Organization
OECD	Organisation for Economic Co-operation and Development
$PM_{2.5}$	Particulate Matter 2.5 micrometers or less in diameter
PPP	Purchasing Power Parity
PSUP	Participatory Slum Upgrading Programme
Rio+20	United Nations Conference on Sustainable Development
SAR	Special Administrative Region (of China; used about Hong Kong and Macao)
SARS	Severe Acute Respiratory Syndrome
SDG	Sustainable Development Goal
SEZ	Special Economic Zone
UAE	United Arab Emirates
UCLG	United Cities and Local Governments
UK	United Kingdom of Great Britain and Northern Ireland
UMP	Urban Management Programme
UNDESA	United Nations Department of Economic and Social Affairs
UNICEF	United Nations Children's Fund
UNISDR	United Nations Office for Disaster Risk Reduction
US	United States of America
US$	US dollar
WCCD	World Council on City Data
WHO	World Health Organization/

01

From Habitat II to Habitat III: Twenty Years of Urban Development

QUICK FACTS

1 Urban areas around the world are facing enormous challenges and changes than they did 20 years ago.

2 Cities are operating in economic, social, and cultural ecologies that are radically different from the outmoded urban model of the 20th century.

3 Persistent urban issues over the last 20 years include urban growth, changes in family patterns, growing number of urban residents living in slums and informal settlements, and the challenge of providing urban services.

4 Connected to these persistent urban issues are newer trends in the urban governance and finance: emerging urban issues include climate change, exclusion and rising inequality, rising insecurity and upsurge in international migration.

POLICY POINTS

1 When well-managed, urbanization fosters social and economic advancement and improved quality of life for all.

2 The current model of urbanization is unsustainable in many respects.

3 Many cities all over the world are grossly unprepared for the challenges associated with urbanization.

4 A new agenda is required to effectively address these challenges and take advantage of the opportunities offered by urbanization.

5 The new urban agenda should promote cities and human settlements that are environmentally sustainable, resilient, socially inclusive, safe and violence-free and economically productive.
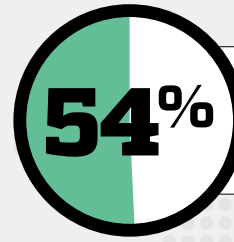
54% HALF THE WORLD'S POPULATION RESIDES IN URBAN AREAS.

Cities create **wealth, generate employment** and **drive human progress** by harnessing the forces of agglomeration and industrialization.

The decline in infant mortality and high fertility has resulted in a relatively young population. Children and youth **aged below 24** account for **40%** of global population. This represents a great opportunity in terms of labor force.

The world population is aging. Globally, the population **aged 60 or over** is the fastest growing at the rate of **3.26%** per year.

In 2015, there were **901 million** people aged 60 or over, comprising **12%** of the world's population. This represents a tremendous challenge.

Cities are responsible for more than **70%** of global carbon dioxide emissions.

In 2014, the Global Protocol for Community-Scale Greenhouse Gas Emission Inventories (GPC) was jointly established by the World Resources Institute (WRI), C40 Cities Climate Leadership Group (C40), and ICLEI-Local Governments for Sustainability (ICLEI), with the support of World Bank, UNEP, and UN-Habitat. Incorporating experiences from the Harmonized Emissions Analysis Tool plus (HEAT+) the GPC provides guidelines for reporting and auditing principles; quantifying city emissions in different sectors; and long term monitoring of local specific objectives.

PERSISTENT ISSUES AND EMERGING URBAN CHALLENGES DUE TO INCREASED URBAN POPULATION.

URBAN GROWTH

CHANGE IN FAMILY PATTERNS

INCREASED RESIDENCY IN SLUMS AND INFORMAL SETTLEMENTS

CHALLENGES IN PROVIDING URBAN SERVICES

CLIMATE CHANGE

EXCLUSION AND RISING INEQUALITY

INSECURITY

UPSURGE IN INTERNATIONAL MIGRATION

The new urban agenda should promote sustainable cities and human settlements that are environmentally sustainable and resilient, socially inclusive, safe and violence-free, economically productive; and better connected to and contributing towards sustained rural transformation. **This is in line with the 2030 Agenda for Sustainable Development, especially Goal 11: to make cities and human settlements inclusive, safe, resilient and sustainable.**

Cities that are sustainable, resilient and inclusive are dependent upon good governance that encompasses:

Strong effective leadership, which helps overcome fragmentation across departments, multilevel governance and investment sectors when building consensus and eliciting action on specific agendas

Land-use planning, particularly territorial and spatial strategies, have been used across different policy sectors to address climate change risks, and build effective mitigation and adaptation strategies

Jurisdictional coordination, in sectoral areas such as land, transport, energy, emergency preparedness, and related fiscal and funding solutions. This also includes addressing issues of poverty and social through inter-territorial solidarity.

Inclusive citizen participation in the design of infrastructure, urban space and services legitimizes the urban planning process and allows cities to leverage their stakeholders' expertise.

Efficient financing helps foster urban responses to climate change, through the ability to establish innovative ways to finance sustainable projects. Public private partnerships (P3s) are one strategy in which governments leverage private sector capital for projects.

1.1
The Beginnings

The United Nations Human Settlements Programme (UN-Habitat) started in 1976 with the UN Conference on Human Settlements in Vancouver, Canada, at a time when the governments began seriously to perceive the cities under their jurisdictions as "emerging futures" in their own right. Opening the event, Canadian Prime Minister Pierre Elliott Trudeau aptly summarized the worldwide (and ongoing) challenge as follows: "Human settlements are linked so closely to existence itself, represent such a concrete and widespread reality, are so complex and demanding, so laden with questions of rights and desires, with needs and aspirations, so racked with injustices and deficiencies, that the subject cannot be approached with the leisurely detachment of the solitary theoretician."[1]

There were two major outcomes of this path-breaking event. The first was the Vancouver Declaration, which urged both countries and the international community to commit to human settlements policies which would combine spatial planning with elements of economic, social and scientific thinking in order to alleviate the worst conditions of "uncontrolled urbanization" within a framework of social justice. The second outcome, announced in a UN General Assembly document of December 1977, was the establishment of the United Nations Centre for Human Settlements.

Two decades later, in June 1996, in Istanbul, the Second UN Conference on Human Settlements (Habitat II), further contributed to raising global awareness about urban and human settlements issues. Habitat II was the last in the series of UN global conferences that took place in the 1990s, and marked for the first time in a UN conference the invitation of NGOs and civil society organizations to speak and participate in drafting the recommendations.[2] Behind all the organization and planning that went into Habitat II were trends and changes that were demanding the world's attention. Many of these themes were summarized in *An Urbanizing World: The Global Report on Human Settlements 1996*.[3] Among the myriad issues raised in this landmark document, the most important were:

◗ Cities had come to the forefront in strategies for development, but
◗ Poverty and poor housing conditions were increasing in incidence
◗ Cities desperately needed competent and accountable governance
◗ Citizen groups, community organizations and NGOs were more important and needed more attention, since
◗ Governments would in the future be enablers much more than providers.

In their historical context, these issues fit quite comfortably within the overall paradigm of what were then called megatrends, or patterns of restructuring that popularly summarized some of the major changes that were taking place in the world at large. In his bestselling book, John Naisbitt in 1982 highlighted 10 important changes, the most notable being: from industrial to information society; from national economies to a world economy; from centralization to decentralization; from institutional help to self-help; from hierarchies to networking; and

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1976
Vancouver, Canada
Inception of UN-Habitat at the First United Nations Conference on Human Settlements

WE CAN
END POVERTY
2015 MILLENNIUM DEVELOPMENT GOALS

2000
Millennium Development Goals (MDGs)
Eight Millennium Development Goals (MDGs) agreed to by all the world's countries and all the world's leading development institutions, including a Target on Slums

2002
World Urban Forum
The First Session of the World Urban Forum (WUF). WUF was formed to galvanized interest in urban issues through sharing of new ideas, lessons learned; exchange of best practices and good policies

1996
Istanbul, Turkey
The Second United Nations Conference on Human Settlements (Habitat II)

+5

2001
Habitat + 5 Review
Reviewing and Appraising Progress Five Years After Habitat II in June 2001

from North to South.[4] In 1996, Naisbitt further noted that after the year 2000, Asia would become the dominant region of the world.[5] While Naisbitt's themes may have appeared evident to many, they did capture the spirit of the 1990s in two important respects: the world was changing toward a more global model, and this new model was being driven, to a significant degree by its cities.

As adopted at Istanbul, the *Habitat Agenda* (241 paragraphs with over 600 recommendations) served as the basis for the UN policy on cities for the next two decades. The main elements of the document were five central objectives:

◗ Ensure adequate shelter for all;
◗ Promotion of security of tenure throughout the developing world;
◗ Support for vulnerable groups, especially women and the poor;
◗ Provision of adequate and equitable access to basic urban services; and
◗ Promotion of decentralization and good urban governance.

All of these goals were to be pursued within a framework of sustainable human settlements. Although laudable for bringing urban issues to the global policy arena, the Habitat Agenda has been criticized on several grounds. A main criticism is that it contains so many recommendations with no prioritization, and has a level of generality that makes it difficult for policymakers at any level of government.[6] Another criticism is the Habitat Agenda lacked an effective monitoring mechanism, and as such, there was no systematic way of monitoring the implementation of the agenda. This made it difficult if not impossible to hold governments accountable for failing to implement the recommendations they endorsed.[7]

This chapter will trace and examine some of the most important urban issues that played out, or emerged, during the last twenty years since the Habitat II Conference, and make a case for revisiting the urban agenda. These urban issues can be divided into two major groups: persistent and emerging urban issues. The persistent urban issues, expressed through statistics of urban growth and changes in family structure. The persistent issues also include the growing number of urban residents living in informal and largely unserviced settlements, and increasing concentration of poverty in certain parts of the world. Connected to these persistent urban issues are newer trends in the governance and finance of cities. Since the late 1980s, but accelerating during the 1990s and beyond, countries have been devolving more power to local governments (and their cities), and grappling with the means of financing these new functions. Following this discussion, and in the second group of themes, the narrative turns to emerging urban issues, which include climate change and cities; then to the currently important and related questions of exclusion and rising inequality in cities; to issues of urban insecurity; and finally, the upsurge in international migration.

Cities create wealth, generate employment and drive human progress by harnessing the forces of agglomeration and industrialization

A number of basic themes are articulated through the issue narrative that follows. One theme is that urbanization fosters growth, and is generally associated with greater productivity, opportunities and quality of life for all. Cities create wealth, generate employment and drive human progress by harnessing the forces of agglomeration and industrialization.[8] Cites also offer greater societal freedoms. In the process of urbanization, however, there have been some bumps along the road, many of which are discussed in Chapters 3 to 8. Many rapidly growing cities keep sprawling, slums are expanding or consolidating, there is increasing poverty and sometimes inequality, cities can be very expensive for new migrants,

2012
Rio+20: UN Conference on Sustainable Development recognizes that the battle for sustainable development will be won or lost in cities

2016
Quito, Ecuador
The Third United Nations Conference on Human Settlements (Habitat III)

2002
World Summit on Sustainable Development (WSSD) World Summit on Sustainable Development, Agenda 21 and integration of sanitation as a key priority for development

2015
Sustainable Development Goals (SDGs)
The international community adopted the Sustainable Development Goals, with a stand-alone Goal (11) on cities

Inequality, exclusion and deprivation creates spatial inequalities and divided cities. Ho Chi Minh City slums by river, Saigon, Vietnam.

Source: kagemusha / Shutterstock.com

crime can be rife in large cities, on top of which comes the contribution that cities make to climate change. While it is easy to ascribe all these changes to urbanization, such a causal connection would be superficial.

What is at the root of these dysfunctions and discontinuities is the current model of development? The model is a result of relentless globalization, the unfettered transformation of cities into sources of private gain, a declining attention to public space and community benefit, and rapid technological change which in the end increases connectivity while it diminishes accountability.

Although urbanization has the potential to make cities more prosperous and countries more developed, many cities all over the world are grossly unprepared for the multidimensional challenges associated with urbanization. Generally, urbanization has relied on a model that is unsustainable in many respects. *Environmentally,* the current model of urbanization engenders low-density suburbanization— largely steered by private, rather than public interest, and partly facilitated by dependence on car ownership; it is energy-intensive and contributes dangerously to climate change.[9] *Socially,* the model of urbanization generates multiple forms of inequality, exclusion and deprivation, which creates spatial inequalities and divided cities, often characterized by gated communities and slum areas. Cities face growing difficulties in integrating migrants and refuges so that they equitably share in the human, social, cultural and intellectual assets of the city, and thus have a sense of belonging. From an *economic* perspective, the model of urbanization is unsustainable due to widespread unemployment especially among the youth and the existence of unstable and low-paying jobs and informal income-generating activities, which create economic hardship, unequal access to urban services and amenities and poor quality of life for many.

Although urbanization has the potential to make cities more prosperous and countries more developed, many cities all over the world are grossly unprepared for the multidimensional challenges associated with urbanization

All these urban challenges are further exacerbated by the failure to create appropriate institutional and legal structures to promote sustainable urbanization. Indeed, poorly planned and managed urbanization – which translates into low densities, separation of land uses, mismatch between infrastructure provision and residential concentration, and inadequate public space and street networks, among others – diminishes the potential of leveraging economies of scale and agglomeration.

Looking at our world through a primarily urban lens, we must constantly be concerned about these larger issues. As this chapter traces through the changes that have pulsed through cities over the last two decades, it will become obvious that urban areas around the world are facing enormous challenges. For a framework to respond to these challenges, UN-Habitat has developed, since its first conference in Vancouver in 1976, policies and programmes meant to improve urban conditions for all. But given the changes and transformations that have occurred over the past two decades since Habitat II, there is now a need to revisit this urban agenda, and to reposition our approach to urban policy. This is important, given that cities are now operating on a radically different economic, social, and cultural ecology than the outdated model of the city of the 20th century.[10]

The repositioned or *new* urban agenda should seek to realize Goal 11 of the 2030 Agenda for Sustain-

the urban agenda should propose strategies and actions to make slums history, ensure the universal provision and safe and sufficient water and good quality sanitation, eradicate poverty and address persistent inequalities that are still prevalent in many cities across the world

able Development, which is to: make cities and human settlements inclusive, safe, resilient and sustainable.[11] The urban agenda should respond to the challenges and opportunities of urbanization, and address the unfinished business of the Millennium Development Goals. For instance, the urban agenda should propose strategies and actions to make slums history, ensure the universal provision and safe and sufficient water and good quality sanitation, eradicate poverty and address persistent inequalities that are still prevalent in many cities across the world and land management in the public interest. Indeed, many of these are referred to as the "old" urban agenda, which urgently require attention.[12] Above all, the urban agenda should prescribe conditions that would facilitate a shift towards more sustainable patterns of urbanization, seeking to achieve inclusive, people-centred, and sustainable global development. Therefore, the policies that emerge must be implementable, universal, sensitive and relevant to the local context. They must be participatory and collaborative. They must be inclusive and recognize the rights of minorities and vulnerable groups. Above all, the policies must be sustainable.

1.2
Cities: A Gathering Force

Since 1990, the world has seen an increased gathering of its population in urban areas. This trend is not new, but relentless and has been marked by a remarkable increase in the absolute numbers of urban dwellers—from a yearly average of 57 million between 1990-2000 to 77million between 2010-2015. In 1990, 43 per cent (2.3 billion) of the world's population lived in urban areas; by 2015, this had grown to 54 per cent (4 billion). The increase in urban population has not been evenly spread throughout the world. Different regions have seen their urban populations grow more quickly, or less quickly, although virtually no region of the world can report a decrease in urbanization.

Asia has by far the highest number of people living in urban areas, followed by Europe, Africa and Latin America (Figure 1.1). The fact that 2.11 billion people in Asia live in urban areas is no longer a development scourge as once feared. Being 48 per cent urbanized and home to 53 per cent of the world's urban population,[13] Asia has become a global powerhouse, generating close to 33 per cent of world output in 2010.[14] China's remarkable economic transformation is driven by urbanization

The urban growth rate of Africa is almost 11 times more rapid than the growth rate in Europe

Figure 1.1: Urban population at mid-year (1995-2015)

Source: Based on United Nations, 2014b.
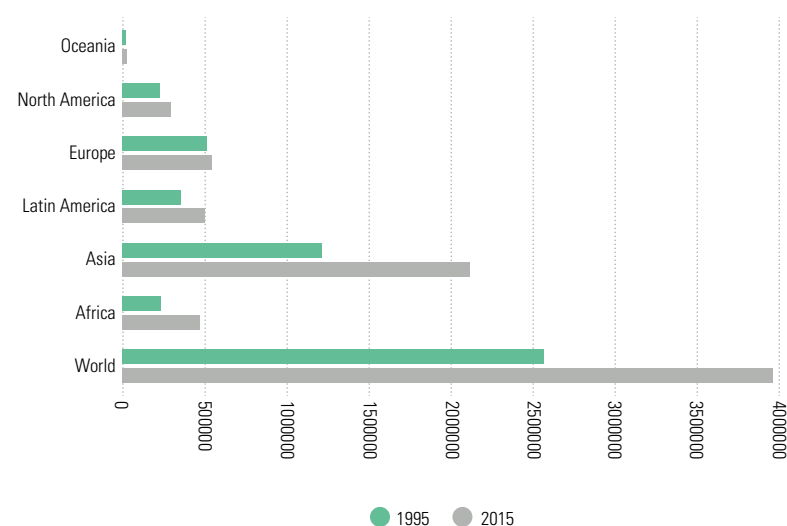
● 1995   ● 2015

and industrialization; the top ten cities in China account for 20 per cent of the country's GDP.[15] The economic hub of the region is almost entirely urban-based, with its cities thriving with investments, infrastructure, innovation and competitive impetus. Asian cities have become critical nodes in the system of global accumulation and regional development.

Urban growth rates have been much faster in some regions than others (Table 1.1). The highest growth rate between 1995 and 2015 was clearly in the least developed parts of the world with Africa being the most rapidly urbanizing. At the other extreme, the most developed regions in the world, led by Europe saw their cities growing the least. The urban growth rate of Africa is almost 11 times more rapid than the growth rate in Europe. Africa's rapid urbanization is driven mainly by natural increase, rural–urban migration, spatial expansion of urban settlements through the annexation, the reclassification of rural areas, and, in some countries, negative events such as conflicts and disasters.[16] Given that African cities are among the poorest in the world, their growth rates signal a major challenge to their resource base, to build and to sustain adequate infrastructure and public services for their growing populations.

Nearly 20 years ago, many developing countries with support from development agencies actively implemented policies to reduce migration to large cities; today multilateral and bilateral organizations recommend policies to encourage migration to enable the poor to move from lagging to leading areas, in such a way that governments can help reduce rural poverty by making migration more efficient.[17]

As the urban population increases, the land area occupied by cities has increased at an even higher rate. A global sample of 120 cities observed between 1990 and the year 2000, shows that while the population grew at a rate of 17 per cent on average, the built-up area grew by 28 per cent.[18] It has been projected that by 2030, the urban population of developing countries will double, while the area covered by cites would triple.[19] Such urban expansion is not only wasteful in terms of land and energy consumption, but increases greenhouse gas emissions. It has also led to the alteration of ecological systems in many cities over the past two decades.[20]

A second major theme of the demographic story must be the emergence of many large and megacities, particularly in the low- and middle-income regions of the world (Figure 1.2 and Figure 1.3). Large cities are defined as having between 5 and 10 million inhabitants and megacities as having 10 million or more inhabitants. In both cases, there were remarkable increases over the last two decades. In 1995, there were 22 large cities, and 14 megacities; by 2015, both categories of cities had doubled (Figure 1.3), as there were 44 large cities, and 29 megacities. Most megacities are located in developing countries and this trend will continue as several large cities in Asia, Latin America and Africa are projected to become megacities by 2030.

Large cities and megacities are influential in the global economy. Currently, the top 600 cities with a fifth of the world's population that generate 60 per cent of global GDP consist mainly of cities in developed countries.[21] By 2025, the contribution of the top 600 cities is expected to remain the same, but the composition will

> As the urban population increases, the land area occupied by cities has increased at an even higher rate

Table 1.1: **Urban rate of change 1995-2015**

Source: Based on United Nations, 2014b.

Region/Area	Average annual rate of change of the urban population				Entire Period
	1995-2000	2000-2005	2005-2010	2010-2015	1995-2015
World	2.13%	2.27%	2.20%	2.05%	2.16%
High-income countries	0.78%	1.00%	1.00%	0.76%	0.88%
Middle-income countries	2.74%	2.77%	2.61%	2.42%	2.63%
Low-income countries	3.54%	3.70%	3.70%	3.77%	3.68%
Africa	3.25%	3.42%	3.55%	3.55%	3.44%
Asia	2.79%	3.05%	2.79%	2.50%	2.78%
Latin America	2.19%	1.76%	1.55%	1.45%	1.74%
Europe	0.10%	0.34%	0.34%	0.33%	0.31%
North America	1.63%	1.15%	1.15%	1.04%	1.24%
Oceania	1.43%	1.49%	1.78%	1.44%	1.53%

Figure 1.2: **Global patterns of urbanization, 1995**

Source: Based on United Nations, 2014b.
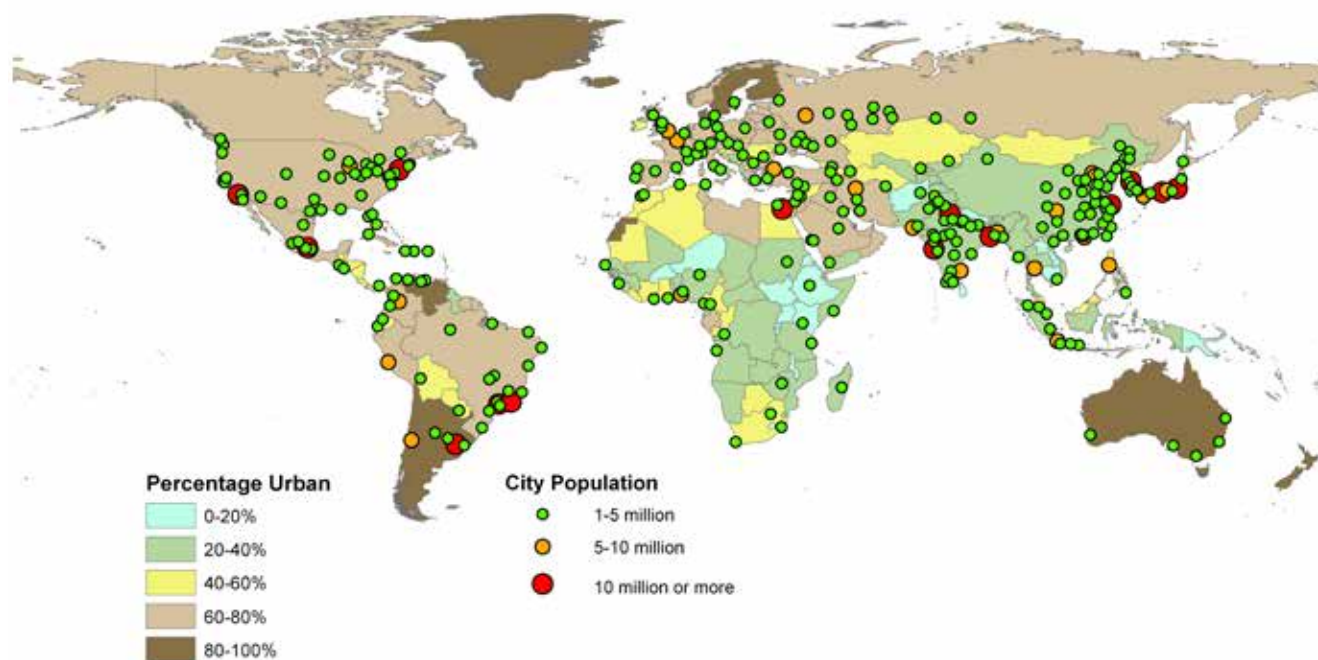
Figure 1.3: **Global patterns of urbanization, 2015**

Source: Based on United Nations, 2014b.
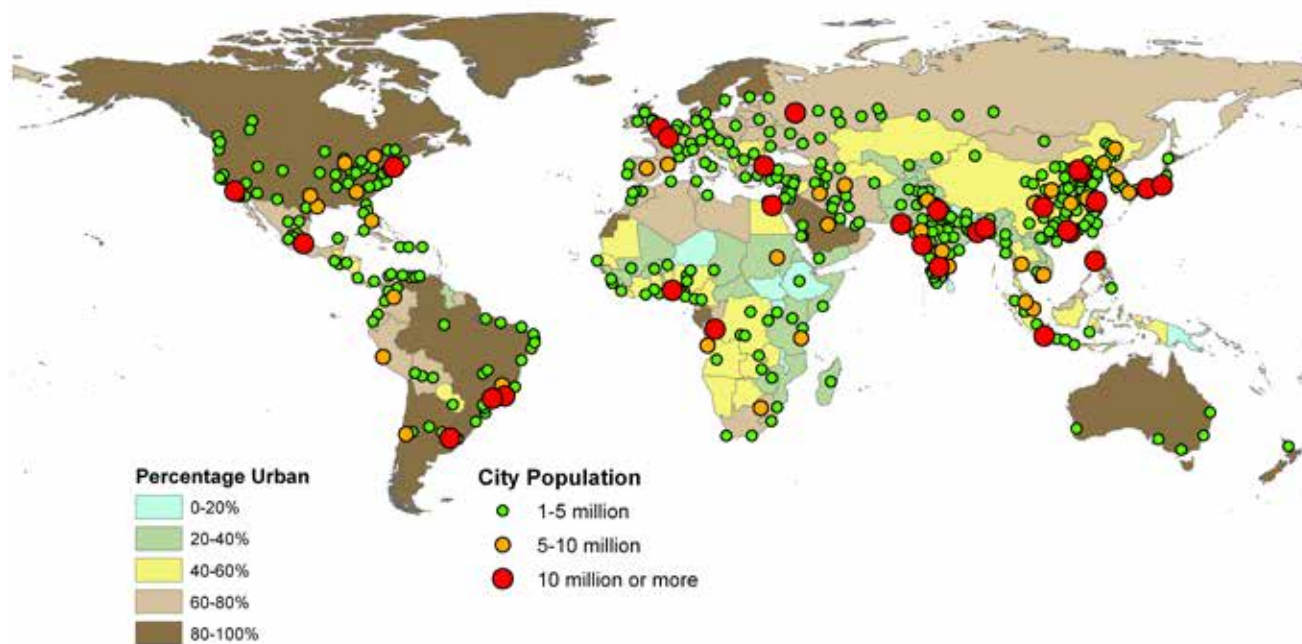
change; as there will be many more cities from China, India and Latin America— an indication that the centre of gravity of the urban world is moving to developing countries, particularly towards Southeast Asia.

Although large and very large cities are in some ways the leading edge of urbanization, because of their influence and economic importance, they are not the fastest growing, nor do they represent the majority of the urban population. The fastest growing urban centres are the small and medium cities with less than one million inhabitants, which account for 59 per cent of the world's urban population and 62 per cent of the urban population in Africa.[22] Despite the demographic importance and potential role of such cities, urban planning efforts in developing countries have focused disproportionately on the problems of large metropolitan areas, thereby contributing to urban primacy. If small and medium cities are to fulfil their potential, then they should form part of the new urban agenda for developing countries.

Although large and very large cities are in some ways the leading edge of urbanization, because of their influence and economic importance, they are not the fastest growing, nor do they represent the majority of the urban population

A final demographic dimension of urbanization involves reproduction and age cohorts. Three important trends stand out. The first is that as more people live in cities, the total fertility rate or average number of children per adult woman decreases. The relationship between urbanization and fertility shows that the relatively poor and less urbanized countries have high levels of fertility; African countries with the lowest levels of urbanization have high fertility rates, while Western Europe, Japan and North America are highly urbanized with low fertility rates. In China, urbanization was responsible for 22 per cent of the decline in total fertility rates between 1982 and 2008; leading to calls for China to relax its one-child policy without having adverse effects of its population growth.[23]

The developmental dynamics behind this picture are important to understand. The highest fertility rates in the world are for poor, rural countries. As countries urbanize, they gain in wealth; and as such, work and educational opportunities for women tend to increase, leading to later marriages, and fewer children. The positive urban dynamics behind the demographic transition to smaller families is complex, and have been studied intensively,[24] but as a general rule, higher rates of urbanization along with growth in GDP lead to lower fertility rates around the world. Over time, it is expected that the poorest African countries, which are currently urbanizing at very high rates, will show much lower fertility rates.

Over the past few decades, many countries in the developing regions have witnessed decline in infant mortality whilst fertility remains high. This has created a demographic momentum characterized by a relatively young population with children under age 15 accounting for 28 per cent of the population, and youth aged 15 to 24 accounting for a further 17 per cent.[25] The significant increase in proportion of persons aged 15 to 24 is referred to as the youth bulge. There are 1.19 billion people within this age bracket worldwide with 88 per cent in developing countries in 2015.[26] Many developing countries with a high youth bulge face the challenge of youth unemployment, which is two to three times higher that adult unemployment. This is particularly the case in Africa, the Middle East, South America, Central Asia and the Pacific Islands, where the youth account for a sizeable proportion of the population. Youth bulge may portend a blessing or a curse. It can represent a potential opportunity to spur social and economic development if countries harness the power of age-structure transformation. The youth bulge can also increase the risk of domestic conflict[27]— in a context of poor governance, poor economic performance and high levels of inequalities. All these imply that urban job creation and engaging the youth must feature prominently in the new urban agenda.

Globally, the population aged 60 or over is the fastest growing at 3.26 per cent per year.[28] This age group rose from eight per cent in 1950, to 10 per cent in 2000; by 2015, there were 901 million people aged 60 or over, comprising 12 per cent of the world's population. Currently, Europe has the greatest percentage of its population (24 per cent) aged 60 or over. Rapid ageing or greying of the population is occurring all over the world, and as such, all regions, save for Africa would have almost 25 per cent of their population aged 60 or over by 2050.[29]

Both trends have a critical influence on social, economic and environmental development. A youthful population requires investment in education, training, recreational and community facilities, as well as innova-

The world population is **AGEING RAPIDLY.**

25%

of the population in all regions except Africa will be aged 60 or over by 2050

tive ways of keeping the youth fully occupied. A rapidly ageing population places increased demand on health-care, recreation, transportation and other facilities for the elderly. It also has implications for old-aged social protection and pension schemes in many countries.

1.3

Urban Governance and Finance

From the late 1990s, governance became the mantra for development in developing countries.[30] Driven largely by multilateral institutions, the concept of governance has been promoted along with decentralization and democratization. In developed countries governance was in response to the growing complexity of governing in a globalizing and multilevel context. There have been two board approaches to governance: the World Bank has adopted a mainly administrative and managerialist interpretation of good governance; while United Nations agencies have emphasized democratic practice and human and civil rights[31]. UN-Habitat's Global Campaign on Urban Governance,[32] launched in the year 2000, sought to advocate good urban governance worldwide is characterized by: decentralizing responsibilities and resources to local authorities; encouraging the participation of civil society; and using partnerships to achieve common objectives.

Governance: Decentralization and local democracy

The persistent growth in population and size of cities has had many consequences. One of the most important is in their powers and functions. As cities grow, and spread out over the land, they have been the recipients of a worldwide trend to devolve power from the national to the local level. A World Bank publication claimed that "decentralization has quietly become a fashion of our time…It is being attempted where civil society is strong, and where it is weak. It appeals to people of the left, the centre and the right, and to groups which disagree with each other on a number of other issues."[33] The issues relating to governance, decentralization and a system of laws and regulations are addressed in Chapter 6.

The worldwide agency United Cities and Local

Governments (UCLG) notes that: "in the last 20 years decentralization has established itself as a political and institutional phenomenon in most countries around the world." As a result, in more than 130 countries, "the notions of autonomia local, 'local self-government,' 'Selbsverwaltung' and 'libre administration' have gradually become the norm in territorial administration in every region."[34]

An important facilitating factor which supported the implementation of decentralization initiatives and legislation was the increasing attention given, in many countries, to what UN-Habitat called "governance and democracy at the local level." In country after country, local governments began to assert more autonomy, their councillors and mayors came to be elected rather than appointed or nominated by higher level officials, and their role of providing basic services was emphasized. In two important guiding documents, approved by UN-Habitat's Governing Council in 2007 and 2009, countries were encouraged to operate in adherence with the principle of subsidiarity, according to which "public responsibilities should be exercised by those elected authorities, which are closest to the citizens."[35]

Among the implications of this principle, which the guidelines further spelled out, were that elected local authorities should be given adequate legal and financial resources to provide services to their constituents; and that these local authorities should operate transparently in consultation with civil society organizations and local communities. While the experience of many nations has been extremely varied, the fact that so many states have chosen to move along the path of decentralization constitutes a remarkable phenomenon."[36] So far, most decentralization initiatives — as far as cities are concerned — have had a relatively positive outcome. But the story is not fully written.

Decentralization without adequate finance

Decentralization is a process, not a final condition. But to the extent that decentralization has not been fully realized in practice, many discrepancies and inadequacies have been attributed to questions of finance. Chapter 8 notes that city financing particularly in rapidly urbanizing developing countries is not keeping pace with the demand for infrastructure and services.

From the late 1990s, governance became the mantra for development in developing countries

In country after country, local governments began to assert more autonomy, their councillors and mayors came to be elected rather than appointed or nominated by higher level officials, and their role of providing basic services was emphasized

Decentralization — sometimes called devolution when real political and financial power is transferred from higher to lower levels of government — has been an issue in many European countries since the latter half of the 20th century. New regional elected governments with executive and sometimes legislative powers have emerged in Spain, Italy, Belgium, and Portugal. France, traditionally a very centralized country, passed a major decentralization law in 1981. In the UK, the devolution of power to Scotland, Wales and Northern Ireland and the creation of the Mayor of London and the Greater London Assembly have changed the political and constitutional landscape. The most recent UK election in 2015 showed the strength of Scottish nationalism; while political agitation for more local power continues in some regions and major cities of Spain. But just as new initiatives for decentralization were developing in Europe, very significant decentralization reforms began to take place in many countries of Asia, Africa and Latin America.

> **Decentralization is a process, not a final condition**

Following important decentralization reforms in the late 1980s and early 1990s, most countries in Asia, Africa and Latin America made major efforts to put them into practice. These efforts involved building more capacity at the local level for powers and functions now operating locally; establishing revenue generating procedures to fund local authorities; and organizing agencies and accountable bodies — both administrative and legislative — to promote local development and design improved systems of local finance. Important examples of

these changes can be seen in the cases of India, Colombia, Brazil, and in a number of countries of Sub-Saharan Africa.

India is a good example of the recent wave of decentralization reforms. The Constitution (72nd Amendment) Act, 1992, prescribes two new institutions to regulate the flow of funding to municipalities. One new institution is the Central Finance Commission, which both suggests new taxation and financial policies that the states can apply to the municipalities under their sway; but under the new arrangements since 1992, the Governor of a state is required set up a finance commission to review the local system, to propose new taxes, and to govern grants in aid to municipalities from the consolidated funds of the state.[37] In spite of these constitutional requirements, results have been limited.

The low level of aggregate municipal expenditures in India, relative to GDP can be seen in Figure 1.4. With only 1.1 per cent of GDP, municipal expenditures in India compare very unfavourably with OECD countries, but even with other BRICS countries such as Brazil, Russia and South Africa. In Latin America, several countries have significantly changed their municipal financial systems. Perhaps the leading example is Colombia, previously a highly centralized country, which went through different phases of decentralization, beginning in the late 1970s. With a new constitution in 1991, more responsibility was delegated to the municipalities, accompanied by a dramatic increase in transfers from the central to the local level, so that by 1997, municipalities' expenditures were almost seven per cent of national GDP.[38] Under the new constitution, mayors (previously appointed) were elected–and cannot stand for immediate re-election. At first, their terms were limited to two years; but this was later increased to four years.[39] Once mayors were elected, and since they now had substantial funds to work with, many innovations and improvements in infrastructure emerged in major Colombian cities. Another good example of decentralization with improved financing in Latin America is Brazil as discussed in Box 1.1.

Many African countries undertook decentralization reforms in the 1980s and 1990s. This was the third "moment" of decentralization across the continent — a pattern that was consistent with reforms in other parts of the developing world.[40] This period is referred to as one of "democratic decentralization"[41] because this was when many African countries genuinely attempted to both devolve powers to local governments, and to democratize the process of local governance. Some important exam-

Figure 1.4: Municipal expenditure per country

Source: AFD, 2014. Indian Urban Panorama, p. 27; Federal Reserve Bank of St. Louis, 2015, Economic Research; Manoel, Garson and Mora, 2013, p. 63.

Country	Value
Australia	2.3
Austria	7.4
Belgium	6.9
Brazil	8.0
Canada	7.2
Germany	7.2
India	1.1
Russia *	6.5
South Africa **	6.9
Spain	6.4
Switzerland	9.7
USA ***	6.5
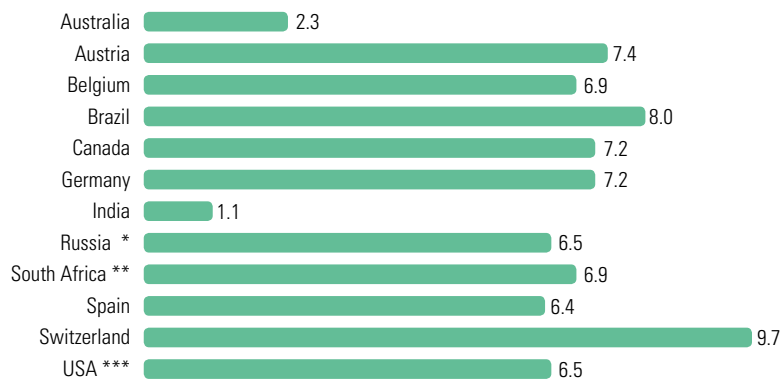
*Figure for 2001
** Data for 2003/4; 2007/8
*** Data for 2013

ples of this phase of decentralization in African countries are: the new constitution in South Africa and its famous "Chapter 7" dealing with local government, which came into operation in 1996;[42] a number of new laws in Senegal, passed in 1996, which changed the Local Government Code, and transferred powers to localities;[43] adoption by referendum in June 1991 of the new Burkina Faso constitution, setting out the main principles of decentralization, followed in 1998 by four major laws which organized the decentralization process and set the guidelines for its implementation; and a new constitution put in place in Kenya in 2010, which did away with provinces and districts, creating 47 counties with elected governors.

Robust decentralization is particularly challenging in Africa, given its history of highly centralized but weak states and extremely limited local revenue.[44] While all the legal and institutional initiatives, cited above, shifted some administrative and political power to the local level, how much financial support was made available to the new mayors and governors? Although there are variations across the continent, the short answer is: not very much. At best, says UCLG, "…the share of public expenditure managed by local government remains low and the implementation of decentralization policies is half-hearted. In some countries, the share of the revenues of local government coming from national resources has decreased in recent years."[45]

One of the best measures of financial capacity— local government expenditure as a percentage of GDP— is very low in most African countries. Information for 18 African countries shows that nine countries are at one per cent or less, with Mauritania being the lowest with 0.2 per cent, followed by Togo at 0.4 per cent. Five countries range from over one per cent to 4.9 per cent, and only three countries (Uganda at 5.6 per cent, South Africa at 5.8 per cent and Rwanda at 6.1 per cent) exceed five per cent.[46] Most European and North American local government systems occupy a much higher range as can be seen in Figure 1.4. In Brazil, often considered a "developing" country, local government expenditure as a percentage of GDP is eight per cent.

A comparison of municipal finance in four African countries (Senegal, Burkina Faso, Ghana and Kenya) found that there is a persistence of strong central government supervision over "decentralized" local authorities,[47] there is relatively weak local tax collection, and "central ministries … are not, on the whole, convinced of the effectiveness of decentralization. As a result,

Robust decentralization is particularly challenging in Africa, given its history of highly centralized but weak states and extremely limited local revenue

Box 1.1: Decentralization with improved financing in Brazil

With a new federal constitution in 1988, Brazil began to devolve considerable functional and fiscal powers to its municipalities. Having added some 1,500 municipalities to its states after 1988, by 2013 Brazil had some 5,570 in its statistical records although 75 per cent of these municipalities had populations under 20,000.

While the states have some implied power over the municipalities, the latter were given control of intra-city transport, pre-school and elementary education, land use, preventive health care, and historical and cultural preservation. On the participatory side, municipalities were given the right to establish councils of stakeholders or municipal boards. These bodies, established in most of the largest cities include elected councillors as well as non-elected representatives of community groups, who deal with such matters as urban

development, education, the environment, health and sanitation. Municipalities can also establish other institutional means of participation through the passing of local constitutions or "organic laws."

The right of cities to have their own constitutions means that they can develop their own institutions of popular participation. One of the most widely reported local approaches to this challenge in Brazil is the participatory budget. The essential element of this institution is the democratic discussion and allocation of the investment budget of the city. While versions of this system have been operating throughout Brazil, the most well-known example of participatory budget in the city of Porto Alegre where the practice started in the late 1980s. The practice has since been attempted in other parts of the world.

States and municipalities account for almost half of public sector revenues and expenditures in Brazil. Municipal revenues come from two main sources: own revenue and transfers from the states and federal government. Own revenue comes mainly from property tax and professional tax. On the average, municipalities raise about 35 per cent of their total revenues internally, and receive 65 per cent from transfers. In larger and wealthier municipalities, the internally generated revenue is higher; and in smaller and poorer municipalities, the proportion of revenue dependent on transfers is higher. By 2007, UCLG reported that local expenditures in Brazil were equal to 8.3 per cent of its GDP – the highest level in Latin America.

Sources: Abers, 2000; UCLG, 2010a.

unwieldy legal and financial mechanisms are kept in place to control the activities of local governments, even when legislation has theoretically granted them considerable leeway for action."[48] In light of their very rapid growth, African cities in the second decade of the millennium are truly "faced with serious funding problems that hamper the implementation of their responsibilities."[49]

Overall, decentralization has been an important policy issue over the past two decades. While it has waxed and waned in many countries as central governments have failed to fully relinquish financial control over municipalities even when directed to do so by legislation, cities have emerged with generally stronger financial tools than they had going into the period. But as their growth has continued to outpace their ability to provide services for their citizens, they have had to deal frontally with one of the central issues of the Habitat Agenda: the need to provide adequate housing, particularly for the poor. It is at this point that we need to discuss the whole question of slums or informal settlements, particularly in the developing world.

Overall, decentralization has been an important policy issue over the past two decades

1.4
The Continous Growth of Slums

The widespread growth of slums or informal urban settlements— particularly in the developing world— became a central policy issue during the last two decades. Images of slums were ubiquitous, as the *favelas* of Brazil and the huge, unserviced settlements of Nairobi caught the world's imagination. But as an issue, and a challenge to urban managers, the problem was not by any means new, so we can consider it a *persistent issue* in the classification of this chapter. Slums represent part of the unfinished business of the MDGs or part of the "old" urban agenda that must be addressed by the new urban agenda. This is why Target 11.1 of Goal 11 of the sustainable development agenda seeks to ensure by 2030, access for all to adequate, safe and affordable housing and basic services and upgrade slums.[50]

During the1960s and 1970s, international agencies like the World Bank, and later, UN-Habitat, began to focus their urban development efforts on improving housing and basic services. The enormous growth of cities largely through rural-urban migration, and the challenge of organizing adequate housing placed the emphasis on large-scale public schemes to build low-cost, affordable housing. As it became obvious that these schemes could not possibly keep up with demand, nor could they be managed in such a manner that the most needy would be the primary beneficiaries, and in the context of a retreat of the state as a housing provider as shown in Chapter 3, public housing declined as a policy option.

As public housing declined, informal settlements burgeoned. Locally, those living in these settlements were known by a variety of terms: slum-dwellers, informal settlers, squatters*, maskwota* (in East Africa) *paracaidistas* or *colonos* (in Mexico), *okupas* (Spain, Chile and Argentina) and *favelados* (in Brazil). Most of these terms connote stigma in the local culture. Over the years, a staggering number and variety of these settlements have emerged largely in Latin America, Africa, and Asia. The defining characteristics of these areas— now often called slums in the international literature — are their precarious legality and almost non-existent level of services such as community facilities, potable water, and waste removal.

In a major study of this phenomenon, *The Challenge of Slums*,[51] UN-Habitat estimated that in 2001, 924 million people, or 31.6 per cent of the total urban population in the world, lived in slums. The report noted that"… the immensity of the challenge posed by slums is clear and daunting. Without serious and concerted action on the part of municipal authorities, national governments, civil society actors and the international community, the numbers of slum dwellers are likely to increase in most developing countries."[52]

Following UN-Habitat's ground-breaking report, the issue of slums was taken up by both researchers and journalists. A number of accounts of the appalling living conditions in slums and informal settlements were published during this period.[53] A recent analysis examines the history and planning architecture behind various stalled attempts to redevelop the Dharavi district in Mumbai – a vast area with nearly 750,000 people.

The enormous growth of cities largely through rural-urban migration, and the challenge of organizing adequate housing placed the emphasis on large-scale public schemes to build low-cost, affordable housing

Redevelopment plans such as the Dharavi Redevelopment Project routinely fail:

"…*and it is often a good thing that they do. If the grand visions of master planners –referred to by many in Mumbai as hallucinations – were realized, then the social dislocations they would bring about would be unimaginable. Holding aside the critical question of where they would all go, if the hundreds of thousands of "unauthorized," "unregularized," or "ineligible" Dharavi residents were evicted, the city would simply stop working. If the megaslum were to disappear, then Mumbai would lose so many of its drivers, domestic workers, garment manufacturers, garbage collectors, and office workers that India's commercial capital would simply cease to function.*"[54]

But are people consigned forever to live in slums, or do they move out of slums and into other parts of the city? Longitudinal studies in the *favelas* of Rio,[55] and in a squatter settlement in Guayaquil, Ecuador,[56] show that there has been considerable movement both physically out of these settlements, and into better serviced neighbourhoods, as well as upwards socially and economically as families improve their positions in the workforce through education and economic initiatives. These studies reinforce the general argument that migrations around the world from rural areas to the big cities are part of a two-stage process.

In the first stage, poor migrants move to low-income neighbourhoods often of big cities; and in the second stage, they and their families spread outward and find opportunities in the more established parts of the city. The neighbourhood to which they first migrate, called an *arrival city* by one author, "is linked in a lasting and intensive way to its *originating villages* …And it is linked in important and deeply engaged ways to the established city. Its political institutions, business relationships, social networks and transactions are all footholds intended to give new village arrivals a purchase, however fragile, on the edge of the large society, and to give them a place to push themselves, and their children, further into the centre, into acceptability, into connectedness."[57] While conditions may be harsh within some of these arrival cities, says the author, without them the established cities might stagnate and die.

The statistics on the incidence of slums over time reflect some notable improvement. While many still live in slums, they have clearly been receding as a proportion of the urban population over the last two decades.

Chapter 3 discusses slums in greater detail and shows changes that have occurred across various developing regions. Recent estimates provided by UN-Habitat show that the proportion of the urban population living in slums in the developing world decreased from 46.2 per cent in 1990, 39.4 per cent in 2000, to 32.6 per cent in 2010 and to 29.7 per cent in 2014. However, estimates also show that the number of slum dwellers in the developing world is on the increase given that over 880 million residents lived in slums in 2014, compared to 791 million in 2000, and 689 million in 1990.[58] This implies that there is still a long way to go in many countries, in order to reduce the large gap between slum dwellers and the rest of the urban population living in adequate shelter with access to basic services. Promoting universal access to basic services should clearly be one of the cornerstones of the new urban agenda.

1.5
The Challenge of Providing Urban Services

Closely linked to the issue of slums particularly in the fast growing cities of Asia and Africa is the challenge of providing adequate basic services and infrastructure. This challenge is central to the economic performance of cities, and their ability to provide a minimum quality of life to their citizens. The major services which cities provide include transport networks, water and sanitation connections, electricity, health, education, and a whole host of other ancillary services such as street cleaning, the maintenance of public spaces and parks, public lighting, archives, and cemeteries. When urban services are lacking or are severely strained – as in large areas in many poor cities with large informal settlements – the basic productivity of all citizens will be compromised.

The MDGs and the recently adopted SGDs place considerable emphasis on the improvement of basic services – in both urban and rural areas. But with continuing population growth, how have urban services and related infrastructure kept up over the last two decades? The story varies from country to country, and even between cities

Public management remains the dominant approach to basic service delivery in most countries; and the role of local governments has been reinforced since the 1990s by decentralization initiatives

within the same country. But an overall *tour d'horizon* of some major basic urban services was recently carried out by UCLG. In this document, the basic services surveyed included potable water supply, sanitation, solid waste management, urban transportation and energy.[59]

Among the results reviewed, three trends emerge. First, as countries have improved their economic levels, they have tended to improve the proportion of their urban population able to access basic services. However, this trend has been uneven regionally, with Sub-Saharan Africa, Oceania and South Asia falling behind in urban water provision, while Asia, North and South Africa, and Latin America have improved considerably. Important considerations here are the rapid increase in population and where the country is poor; consequently, cities have not been able to keep up with the demand for services.

The second trend is the increasing number of attempts to find innovative ways of dealing with the infrastructure challenge. Public management remains the dominant approach to basic service delivery in most countries; and the role of local governments has been reinforced since the 1990s by decentralization initiatives. But even though cities may have the legal authority to undertake, and to manage large water schemes and large sewerage or electricity supply schemes, they do not have the human

resources, let alone the large-scale capital and technical capabilities to keep up with rapid demand (Chapter 6). During the 1990s, there were high hopes in some quarters that private sector participation— particularly in the area of drinking water provision would be able to fill the supply gap. However, experience has shown mixed results and pure private concessions have become very unusual.

As an alternative to privatization, a modified approach known as Public Private Partnership (PPP) emerged in many countries. Typically, this model involves a contractual relationship between a public oversight agency and a private company— either local or foreign, or a combination of the two. If the PPP model is defined broadly, one study estimates that between 1991 and 2000, the population served by private water operators in low and medium-income countries around the world grew from 6 million to 94 million; and to over 160 million by the end of 2007. Another study shows that "water and sanitation privatization in developing countries" had taken place in 90 countries, in 87 state or provincial jurisdictions, and in 504 local governments during the period 1990-2011.[60] But experience with the hybrid model of privatization among low-income countries has been disappointing. Consequently, PPIAF-World Bank now argues that this option is more appropriate for relatively upper-middle-income countries, where borrowing is possible in the local currency.[61]

Many homes in the southern Philippine island of Mindanao do not have potable water.

Source: Asian Development Bank, CC BY 2.0, https://creativecommons.org/licenses/by/2.0/legalcode

The third general trend in the supply of basic urban services is that common public services are still very poor. Slums may be housing a gradually reduced portion of the urban population as local policies take effect and as incomes increase. However, for the hundreds of millions at the bottom of the urban system, garbage pickup and removal is almost non-existent; toilets, let alone public toilets, are rare; running water to one's premises is an impossibility; well-funded public education is unavailable; and the quality of health services, transport facilities, leisure and open spaces, and even good local food markets is low. Investing in infrastructure is therefore an absolute necessity for the new urban agenda.

1.6
Cities and Climate Change

One of the key emerging issues that cities have to contend with is climate change, which has been described as one of the greatest challenges of our time, with adverse impacts capable of undermining the ability of all countries to achieve sustainable development.[62] As shown in Chapter 5, it is no coincidence that climate change has become a pressing international development agenda simultaneously with urbanization, offering many opportunities for climate change adaptation, mitigation and disaster risk reduction. Between 1950 and 2005, the level of urbanization increased from 29 per cent to 49 per cent, while global carbon emissions from fossil-fuel burning increased by almost 500 per cent.[63] Indeed, scientists have reported that 2015 was the hottest year in history by wide margin, as average temperature for the year was 0.75°C warmer than the global average.[64] This has been attributed to increase in greenhouse emissions caused mainly by the burning of fossil fuels, together with the El Niño weather event which releases immense heat from the Pacific Ocean into the atmosphere. In this regard, Goal 13 of the Sustainable Development Agenda, which urges countries to take urgent action to combat climate change and its impacts, could not have come at more auspicious time.

Chapter 5 notes that while climate change is a profound global issue, it is also a local issue, as urban areas have a crucial role in the climate change arena. Urban areas concentrate economic activities, households, industries and infrastructures which are hotspots for energy consumption as well as key sources of greenhouse gases. It is now widely accepted that urbanization brings about fundamental changes in production and consumption patterns, which when associated with dysfunctional urban forms and structure of cities, contribute to higher levels of energy consumption and greenhouse gas emissions. With more than 50 per cent of the world's population, cities account for between 60 and 80 per cent of energy consumption, and generate as much as 70 per cent of the human-induced greenhouse gas emissions primarily through the consumption of fossil fuels for energy supply and transportation.[65]

Heavy precipitation and extreme weather events can disrupt the basic fabric and functioning of cities with widespread implications for the economy, infrastructure and inhabitants. In 2014, 87 per cent of disasters were climate-related— thus, continuing the 20-year long trend of climate-related disasters outnumbering geophysical disasters in the 10 most disaster-prone countries in the world.[66] Often, cities in developing countries are particularly vulnerable, both from new extreme weather events and the exacerbation of existing poverty and environmental stresses.

Especially vulnerable to climate events are low-lying coastal areas where many of the world's largest cities are located (Figure 1.2 and Figure 1.3). Although low-elevation coastal zones account for just two per cent of the world's total land area, they host approximately 13 per cent of the world's urban population.[67] A one-metre rise in sea levels would pose a great threat to many coastal megacities such as Rio de Janeiro, New York, Mumbai, Dhaka, Tokyo, Lagos and Cairo. These risks are amplified in cities that lack the necessary infrastructure and institutions to respond to the climate change. Research suggests that cities that are deeply connected to regional or global financial systems (e.g. Mexico City, Rio de Janeiro, Johannesburg, Bangkok, Manila, Seoul and Singapore) can potentially spread the negative consequences of any one disaster across the global economy with huge systemic loss effects.[68]

The vulnerability of cities to climate change is dependent on factors such as patterns of urbanization, economic development, physical exposure, urban planning and disaster preparedness. Within cities, gender, age, race, income and location also have implications for

Between 1950 and 2005, the level of urbanization increased from 29% to 49%, while **global carbon emissions** from fossil-fuel burning increased by almost

500%

the vulnerability of individuals and groups. Low-income groups are being pushed into locations that are prone to natural hazards and four out of every ten non-permanent houses in the developing world are now located in areas threatened by floods, landslides and other natural disasters, especially in slums and informal settlements.[69]

It is crucial to recognize that cities must also be part of the solution to climate change. Urbanization offers many opportunities to develop mitigation and adaptation strategies to deal with climate change especially through urban planning and design. The economies of scale, concentration of enterprises and innovation in cities, make it cheaper and easier to take actions to minimize both emissions and climate hazards. There are also significant opportunities for disaster risk reduction, response and reconstruction in cities including through land use planning, building codes and regulations, risk assessments, monitoring and early warning, and building-back-better response and reconstruction approaches.

To date, the measures envisaged at the global and national levels have yet to be accompanied by concerted measures at the city and local levels. The response of cities to the challenges of climate change has been fragmented, and significant gaps exist between the rhetoric of addressing climate change and the realities of action on the ground. The critical factor shaping urban responses to climate change is government capacity, which is hindered by factors that are institutional, technical, economic, or political in character. In developing countries, where resources are particularly limited, municipal authorities might be hesitant to invest in climate change adaptation given the many competing issues on their urban agendas. Often, municipal authorities have to contend with other "higher priority" issues such as unemployment, backlogs in housing, inadequate infrastructure and high levels of poverty among others. Indeed, the way climate change is prioritized in relation to other development objectives such as economic growth, poverty reduction, political stability, and other social issues plays a crucial role in climate change responses.

The design and use of the built environment is a critical area for climate change mitigation; the built environment consumes about one-third of the final energy used in most countries, and absorbs an even more significant share of electricity.[70] In 2005, the City of Chicago's Department of Buildings launched a "Green Permit Program" to promote green roofs which resulted in: reduced heat island effect; lower urban air temperatures;

The design and use of the built environment is a critical area for climate change mitigation; the built environment consumes about one-third of the final energy used in most countries, and absorbs an even more significant share of electricity

reduced stormwater runoff; and stimulated green business development.[71] Arguably, urban emission reductions have a global impact that will benefit future generations, thus mitigation policies provide important co-benefits for the current generation, at the local and regional levels.[72]

Municipal governments are best positioned to make meaningful contributions to greenhouse gas reductions. The Compact of Mayors initiative builds on cities existing climate commitments, to undertake a transparent measurement and reporting on emissions reductions.[73] It also aims to reduce vulnerability and enhance resilience to climate change, in a consistent and complementary manner to national level climate protection efforts. While cities are well positioned to adapt to climate change through appropriate urban planning and design, this often requires new and improved infrastructure and basic services. Consequently, cities worldwide must take advantage of the need to redress existing deficiencies in housing, urban infrastructure and services, whilst simultaneously creating jobs and stimulating the urban economy.

1.7
Inequality and Exclusion

Inequality has become a major emerging urban issue, as the gap between the rich and the poor in most countries is at its highest levels since 30 years.[74] This policy issue is important to the extent that— in different countries and cities— the urban divide both stigmatizes and excludes. It stigmatizes and even removes large groups of the urban population from a socially and economically productive life (Box 1.2); and it excludes, by preventing them and their children from benefitting from opportunities to advance in the society at large. While inequality and exclusion are closely related as shown in Chapter 4, inequality has been at the centre of policy discussion. It is therefore gratifying that Goal 10 of the Sustainable Development Agenda seeks to reduce inequality within and among countries.

In the 1950s, the economist Simon Kuznets discovered an inverted U-shaped relation between income inequality and economic growth. In poor countries, he argued that there was a substantial income disparity

between the rich and the poor, but as countries grew wealthier, economic growth narrowed the difference. In this process, as countries experienced growth, mass education would provide greater opportunities which, in turn, would decrease inequality and shift political power to lower income groups in order to change government policies.[75] The increase, then decrease in inequality over time became known as the Kuznets curve. While this early thesis has since been criticized and modified, the relationship among income inequality, growth and economic policies remains important in economic thinking.

In his book *The Price of Inequality*, Nobel laureate Joseph Stiglitz highlights increasing inequality in the US "For thirty years after World War II, America grew together— with growth in income in every segment, but with those at the bottom growing faster than those at the top…But for the past thirty years, we've become increasingly a nation divided; not only has the top been growing the fastest, but the bottom has actually been declining."[76]

Since the US is largely an urban society, these national patterns are a reflection of urban inequality. Large metropolitan areas such as Atlanta, New Orleans, Washington, DC, Miami and New York experience the highest levels of inequality, similar to those of developing country cities such as Abidjan, Nairobi, Buenos Aires and Santiago— with Gini coefficients of around 0.50.[77] Box 1.2 provides a narrative of the nature of inequality in the city of New York.

The reduction, then growth of inequality in the US, with a close comparison to Europe over time, has been traced by Thomas Piketty in his ground-breaking book, *Capital in the Twenty-First Century.* His calculations show that the level of inequality in the US—especially since the 1970s— has been considerably higher than that of Europe. Among other findings are that income inequality in "emerging" countries (India, Indonesia, China, South Africa, Argentina, and Colombia) has been rising since the 1980s, but still ranks below the level of the US in the period 2000-2010.[78] While the levels of inequality across Western Europe have been widening since the 1980s, as reflected by the Gini coefficient which increased to 0.315 in 2013[79] compared to 0.291 in the late 1980s, the region remains the most egalitarian in the world.

UN-Habitat's analysis of 48 selected cities shows that urban income inequality in developed countries is not high by international standards.[80] Of the three main clusters of developing countries, Africa shows the highest levels of persisting urban inequality; Latin America shows a mixed pattern with high incomes but relatively high levels of inequality; while Asia shows the lowest levels of urban inequality. The balance of change seemed to be positive in terms of decreasing inequality over time. Still, the story is an open-ended one, not least because "inequality is multidimensional and cannot be viewed solely through the prism of income."[81] Households may have unmeasured social capital, opportunities for education or health that enhances their potential capability to earn income in the future; or assistance in income or kind from friends and relatives. Besides, how communities organize and how their communities are planned and located may overcome basic disabilities caused by income scarcity.

China, which has one of the largest urban populations in the world, has a very complex picture of inequality. Rapid urbanization has been associated

Rising inequality is one of the challenges of urbanization that has confined many people to poor living conditions. Kibera slum, Nairobi, Kenya.
Source: Julius Mwelu / UN-Habitat

Box 1.2: "Tale of two Cities:" New York has become the capital of inequality

New York City is a microcosm of America's rising economic inequality — and of the lopsided nature of the "recovery" that officially began in 2009, the one most working people have yet to experience. Manhattan is becoming an island of extremes. The mean income of the top five per cent of households in Manhattan soared nine per cent in 2013 over 2012, giving Manhattan the biggest dollar income gap of any county in the country, according to data from the Census Bureau. The top five per cent of households earned US$864,394, or 88 times as much as the poorest 20 per cent, according to the Census Bureau's American Community Survey. The recovery seems to be going to those at the top, much more than those in the middle, while those at the bottom may even be losing ground.

The citywide poverty rate remained stalled at about 21 per cent. Its poverty rate is 6.5 points higher than the national average and 1.8 million people— around one in five — require food assistance to get by. Almost one in three of the city's children live in poverty. In March 2014, the *New York Daily News* reported that the city's 1,000 food pantries— which help feed 1.4 million New Yorkers — are straining to keep up with steadily increasing demand.

At the same time, those at the top of the ladder have seen their incomes spike, and are driving up prices throughout the city. Sports car sellers and Hamptons beach house realtors rejoice: Wall Street bonuses hit their highest level since 2007. The tech industry also is booming; tech employment grew by 33 per cent between 2009 and 2013, and in 2012, those jobs paid an average of US$118,000 per year. Tourism and entertainment are also booming.

The question is who will be around to serve the city's economic elites that US$14 glass of cabernet or show them to those great seats at Yankee Stadium? Where will that person live? How will he or she raise kids in the city that never sleeps? Median rental costs in Manhattan have increased for six consecutive years, and now stand at just under US$4,000 per month. And you won't find that much relief heading to the boroughs; the median rent in Brooklyn is now US$3,172, and in Queens it is US$2,934. Owning a home is just a fantasy for working New Yorkers. The average cost in the five boroughs rose six per cent between the second quarters of 2013 and 2014, and now stands at US$826,000.

Source: Holland, 2014.

UN-Habitat's analysis of 48 selected cities shows that urban income inequality in developed countries is not high by international standards.[80] Of the three main clusters of developing countries, Africa shows the highest levels of persisting urban inequality

with growing income and wealth inequality.[82] The Gini coefficient for China stood at 0.47 in 2012,[83] up from 0.42 in 2010.[84] With the exception of Shenzhen and Zhuhai— with Gini coefficients of 0.49 and 0.45 respectively[85]— inequality in Chinese cities is much lower compared to other cities in the developing world; although this has been increasing in recent decades.

Inequality in Chinese cities has been exacerbated by the hukou system (legal household registration in the city). According to one count, 205.6 million rural migrants (without hukou) representing about 31 per cent of the urban population were living in Chinese cities in 2010; this increased to 230 million in 2011.[86] While there have been many changes in the situation of migrants, most operate at least in the semi-informal sector, and do not have the right to state-supported health, education or housing facilities.

Increasingly, the migration decision is been viewed as a survival strategy to diversify the range of family incomes. Seen in this light, migration to Chinese coastal cities interior has the indirect result of fun-

neling remittances back to the regions of origin and thus reducing regional disparities. Furthermore, migrants work in export-oriented enterprises, thus valorizing the productive investments already made in urban areas of Guangdong and Fujian Provinces.[87] While the newer generation of migrants tends to be much better educated and attain higher positions in the urban occupational hierarchy, they are still at a distinct disadvantage vis-à-vis local residents with hukou status when it comes to access to public facilities and social services. Given the importance of the household registration system to the welfare of so many urban migrants, the Chinese government's decision in 2014 to reform the system, in order to give cities more flexibility in dealing with welfare entitlement, is a significant and positive step.[88]

One of the physical manifestations of increasing levels of inequality in urban areas is that the phenomenon of gated communities has become more evident in the last two decades. These communities share similar characteristics such as separation from neighbouring land by fences, walls, or by other constructed or natural obstructions, including symbolic barriers; and filtered or selective entry using mechanical, electronic or human guardianship as access-control elements.[89]

One of the physical manifestations of increasing levels of inequality in urban areas is that the phenomenon of gated communities has become more evident in the last two decades

Gated communities have been increasing rapidly in the US. In the late 1990s, a major study of US housing showed that 40 per cent of new homes in planned developments are gated in the West, the South, and south-eastern parts of the country.[90] It has been estimated that seven million households in the US lived in 20,000 gated communities in 2007, with such communities emerging as the fastest growing housing type.[91] Although not as widespread as in the US, a 2004 survey found more than 1,000 gated neighbourhoods in England, with most of these in the London Metropolitan area and the southeast.[92]

In Latin America, the fear of crime has led to the emergence of gated communities in almost all major cities to the extent that some of these have now become "gated cities," providing full urban services for their residents with private highways linking them together.[93] In Santiago, Chile, private highways have been built, connecting exclusive quarters of the city, accessible only to those living in these neighbourhoods.[94] In 2012, Buenos Aires had more than 400 gated developments containing 90,000 homes, thereby further widening the gap between the rich and the poor (Box 1.3). Rising levels of crime and growing inequality have in part played a key role in rise of gated communities in major African cities such as Johannesburg, Lagos and Nairobi. In 2004, Johannesburg had 300 enclosed neighbourhoods and 20 security estates.[95]

While the rise of gated communities have in part, been in response to growing crime and security concerns, they have far greater ramifications, leading to disproportionate and more intense consumption of public space, increasing polarization, privatization and segmentation of urban space, and segregation between income and social groups. In an attempt to curb the growth of gated commu-

While the rise of gated communities have in part, been in response to growing crime and security concerns, they have far greater ramifications, leading to disproportionate and more intense consumption of public space, increasing polarization, privatization and segmentation of urban space

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Box 1.3: Barbarians at the gate: Buenos Aires' exclusive neighbourhoods face a heavy new tax

Residents of the Mayling Country Club, a gated community on the outskirts of Buenos Aires that boasts tennis courts, a polo field and a private restaurant, often carp about the Pinazo River, which runs through four holes of their verdant 18-hole golf course. If one doesn't aim carefully, the river, which is flanked by weeping willows and navigated by ducks, swallows all the balls launched its way.

A few miles downstream, residents of Pinazo, an informal settlement that has sprung up along the riverbank, have very different complaints. During heavy rains the river overflows, inundating their makeshift aluminium and brick homes with sewage. Its gangs are so tough that even police fear to go in.

Such inequality is the norm in the suburbs of Buenos Aires, where a quarter of Argentina's 40 million citizens live. For the majority, life is hard. Less than half of homes have sewerage and a quarter lack access to piped water. A third have no gas; almost as many stand on unpaved streets. But amid this poverty, islands of luxury are popping up. A report by the provincial tax office in 2012 suggested that there were more than 400 gated developments around the capital, containing 90,000 homes. Most manage their own utilities and security, with CCTV and guards patrolling at all hours. Some are small towns in their own right: Nordelta, a secure mega-complex on the capital's northern edge, is home to more than 17,000 people and has its own schools, hospitals and hotels.

A new law proposes to prize open the gates. The Law of Just Access to Habitat, promulgated in October 2013, allows the provincial government to tax new gated communities a tenth of their land, or the equivalent in cash, to pay for social housing. It also raises by 50 per cent the tax levied on vacant lots in gated neighbourhoods, and allows the government to expropriate lots that have lain undeveloped for five years after a three-year grace period.

The idea is to give the government more power to intervene in the regulation of land, and therefore decrease the unbelievable inequality. An opposition congressman from Buenos Aires, has lodged a complaint that the law is unconstitutional in that it violates the right to private property and opens a dangerous door. Whatever the impact of the new law, the rich and poor of Buenos Aires will continue to live jammed close together, but worlds apart.

Source: The Economist, 2013.

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nities, the provincial government in Buenos Aires enacted the *Law of Just Access to Habitat* in October 2013, which allows the provincial government to tax new gated communities 10 per cent of their land or the equivalent in cash to be used for social housing (Box 1.3). The law also increases by 50 per cent the tax on vacant lots in gated communities, and allows the government to expropriate lots that have remained undeveloped for five years. How effective this law becomes will be seen in the years to come.

1.8
Upsurge in Involuntary Migration

The upsurge in forced migration across international borders is an emerging issue which has implications for cities. While involuntary migration is a global issue, Europe has been at the forefront of large scale involuntary migration in recent years steaming from the conflict in the Middle East. However, the bulk of this humanitarian crisis is largely affecting neighbouring countries, particularly Syria.[96] Syrian refugees now comprise the biggest refugee population from a single conflict.[97] As the end of 2015, it estimated that 2.5 million Syrian refugees were in Turkey, 1.11 million in Lebanon, 0.63 million in Jordan, 0.25 million in Iraq and 0.12 million in Egypt.[98] In Lebanon, for instance, Syrian refugees account for over a quarter of the country's resident population. This makes Lebanon the country with the highest per capita concentration of refugees worldwide along with Jordan, which has refugees from several countries fleeing different crisis.

In 2015, more than one million forced migrants and refugees arrived in Europe compared to 280,000 in 2014[99]— a figure that the European Union's external border force, Frontex, puts at more than 1.8 million.[100] The vast majority (over one million) arrived by sea and the rest over land. In Europe, Germany is the preferred destination of migrants, as it received close to 1.1 million migrants and refugees in 2015, more than one per cent of its population.[101] This in part can be attributed to Germany's initial welcoming approach and more favourable economic situation. Besides, Germany has an established quota system for the distribution of asylum seekers among its federal states, based on their tax income and population density. Few countries such as Sweden and Austria have taken a large number of refugees relative to their population.

Not all migrants are fleeing conflicts, wars or oppressive regimes; it has been a mixed-migration flow of refugees, asylum-seekers and economic migrants among others. There are a variety of reasons, complex and often overlapping, as to why migrants pay thousands of dollars to smuggling rings to undertake dangerous journeys on sea to cross from parts of Sub-Saharan Africa to the Spanish Canary Islands, from Morocco to southern Spain, from Libya to Malta and the Italian islands of Lampedusa and Sicily, and from Turkey to Greek Islands.

A large number of migrants recorded to have entered Europe illegally though the Mediterranean Sea are from some African countries. Although the African economy has witnessed relatively high levels of growth, and is the second fastest the world,[102] high unemployment especially among the youth, inequality, poverty, lack of opportunities and a sense of hopelessness are driving migrants to make this perilous journey in unworthy and overcrowded boats to Europe. The large black market's labour force serves as a major pull factor for illegal migration to Europe.[103] Globalization of information generally reinforces the idea of a better life in Europe and drives the quest for greater prosperity abroad. Refugee migration to Europe has been marred deaths, with the Mediterranean Sea being the deadliest route in the world; nearly three-quarters of reported migrants' deaths in the world occurred in this sea in 2015.[104] The first eight months of 2015, witnessed the loss of 2,373 lives on the Mediterranean.[105]

The influx of refugees to Europe is occurring against the backdrop of fight against terrorism, as well as a relatively weak labour market and economic conditions. Consequently, insularity, xenophobia and right-wing populism and anti-immigrant parties are gaining ground across Europe.[106] This has led to negative public perception of migrants and refugees. Hungary, for instance, has introduced restrictive measures that have ensured limited access for refugees at its borders. In Demark, the parliament backed what was considered by many— a controversial bill to confiscate the assets of asylum seekers worth more than US$1,420 to cover their housing and feeding costs.[107] Some of the countries that initially welcomed refugees into their cities are beginning to experience escalating far-right opposition and the spread of anti-immigrant sentiment manifested by a persistent pattern of protests and violence against migrants, including efforts to render shelter uninhabitable through arson and other forms of vandalism. At the same time, there has been a rise in expression of solidarity with immigrants. Some cities have been avenues for movements that embody empathy

The upsurge in forced migration across international borders is an emerging issue which has implications for cities

The influx of refugees to Europe is occurring against the backdrop of fight against terrorism, as well as a relatively weak labour market and economic conditions

with the plight of migrants; rallies have taken place across major cities in Europe in show of solidarity with migrants and to express disagreement with anti-refugee policies.

In Germany, the City of Dresden experienced rallies in support of refugees that countered the protests PEGIDA.[108] Also, a right-wing rally *Offensive for Germany* of about 400 marchers sparked a larger counter-protest that drew more than 1,000 activists in the City of Leipzig.[109] In London, tens of thousands joined the Solidarity with Refugees rally, urging the UK government to do more and to welcome more refugees. [110] In Copenhagen, over 30,000 people gathered outside the Parliament building chanting: "Say it loud, say it clear, refugees are welcome here!" Similar events have taken place in Glasgow and Dublin among other European cities to express similar sentiments. This has been a rallying force agitating for national governments to respect international obligations and commitments, ensure dignified reception conditions for all refugees and take concrete measures against intolerance and xenophobia.

Europe stands to gain from influx of migrants especially in the face of the threat posed by the demographic trajectory of an ageing population and low birth rates in some countries.[111] Local authorities are looking beyond the humanitarian emergency and seeing migrants as integral for the socioeconomic development of their cities; if migrants integrate well, they are likely to boost the economy of their host city by easing skill shortage. Previous experience of refuge crisis shows that migrants can, eventually become valuable contributors to the economic and social development of countries.[112]

Absence of integration policies can lead to the formation of ghettos and marginalized communities, which could serve as breeding grounds for frustration, disenchantment, vulnerability and even radicalization.[113] The City of Leipzig (Germany) which for decades was considered a 'shrinking city' can see the arrival of migrants as an opportunity for reviving the city. Other German cities like Munich, Düsseldorf, Stuttgart and Freiburg have established 'welcome departments' within their city halls to prepare for the arrival of refugees.[114] Additionally, German ministry responsible for housing has embarked on the construction of 350,000 public-housing units for refugees, which will likely create an estimated 25,000 jobs.[115]

> Europe stands to gain from influx of migrants especially in the face of the threat posed by the demographic trajectory of an ageing population and low birth rates in some countries

1.9
Rising Insecurity and Urban Risk

A major emerging urban issue concerns insecurity and increasing risk. Over the past two decades, urban population growth and the effects of globalization have enhanced the complexities and manifestation of crime and violence in cities.[116] The fear of crime and violence continues to be pervasive in cities and is one of the top concerns in citizens' everyday lives. One study showed that 60 to 70 per cent of urban residents have been victims of crime in those developing or transitional countries where rapid urban population growth is at its highest.[117] New and pervasive risks affecting cities include terrorism, urban warfare, heightened securitization, and disease and pandemics. Insecurity and risk undermine the long-term sustainability of cities worldwide.

Rapid urban growth and the globalized nature of cities have added new levels of urban health risks. The spread of disease in cities often occurs as a result of inadequate infrastructure and services. High incidence of traffic fatalities, air pollution related respiratory infections and premature deaths, and communicable, vector, and waterborne diseases can all be related to inadequate, poor, or inefficient urban infrastructure.[118] Movement between global cities has significantly impacted the spread of viruses such as SARS.[119] For instance in 2003, the SARS virus that originated in the Guangdong province in China, spread to 30 countries around the world over a 6-month period killing 916 people and infecting 8,422 people before it was contained.[120] The world learned from the SARS outbreak that maintaining a city's health security will depend on sound urban planning as advocated in Chapter 7, as well as a very robust and responsive infrastructure and health service network.[121]

The outbreak of Ebola fever in West Africa, and subsequent spread during the years 2013 to 2015, was particularly virulent in the underserviced slums of major coastal

> The fear of crime and violence continues to be pervasive in cities and is one of the top concerns in citizens' everyday lives

cities.[122] West Point, in Monrovia, Liberia, "is West Africa's largest and most notorious slum: more than 70,000 people crowded together on a peninsula, with no running water, sanitation or garbage collection. The number of Ebola deaths in that slum will likely never be known, as bodies have simply been thrown into the two nearby rivers."[123] While urban areas can be the vector for the spread of this epidemic, the concentration of population, services and effective treatment in a city can also result in its local eradication. This was the case in Lagos in late 2014, where a rapid, coordinated public health response was able to limit the spread of the virus to only 19 persons (8 of whom died), once an infected passenger from Liberia brought the virus to the city. The passenger arrived on July 20, and by October 20, WHO declared the country Ebola-free.[124]

Cities are increasingly becoming targets of terrorism as they provide high levels of visibility and impact as a result of their social, political, and economic centrality.[125] High concentrations of people and complex infrastructure leave cities vulnerable to potentially devastating attacks and disruptions to vital services.[126] The intensification of terrorism and its impacts on civilian lives in cities is clearly demonstrated by the over five-fold increase of terrorism related deaths in the past decade and a half. Since 2000, the number of deaths from terrorism has increased over nine-fold from 3,329 to 32,658 in 2014.[127] In spite of the public's fear of terrorist activities, it is important to note that the incidence of terrorist attacks is far surpassed by that of common crimes and other types of violence.[128] For example, 437,000 people are killed by homicides in each year, which is over 13 times greater than deaths from terrorism.[129] However, the number of casualties from terrorism is on the increase with many victims being private citizens. In 2014, the total number of deaths from terrorism increased by 80 per cent when compared to 2013— thus making this the largest annual increase in the last 15 years.[130]

The impact of terrorism on cities is enormous and extends beyond civilian causalities to the destruction of infrastructure and buildings. The attack on New York in 2001 left 3,500 people dead but also damaged about 2.8 million square metres of office space and the Port Authority Trans-Hudson train station at the World Trade Center.[131] Large public facilities such as malls, hotels, transit systems and schools are targets of terrorism because securitization of large numbers of the public is extremely costly and difficult. In the Westgate Shopping

Mall attack in Kenya in 2013, unidentified terrorists associated with Al-Shabaab in Somalia killed 67 in the capital city.[132] In April of 2015, an Al-Shabaab siege of a Kenyan university campus in Garissa town left 147 dead.[133] According to a Kenyan parliamentary report, Kenya has experienced 35 terrorist attacks since 1975, of which 26 took place in urban areas.[134] The terrorist attacks in Paris in November 2015, which simultaneously targeted a concert hall, a major stadium, restaurants and bars, left 130 people dead and hundreds wounded.[135]

Terrorism could have adverse implications for state-initiated urban development programmes in aid-dependent countries. This because the fight against terrorism might adversely affect the disbursement of development assistance from donor countries that are affected, or feel threatened by terrorism could spend more of their resources in fighting terror and less on development assistance. Less funding could therefore be available for state-initiated urban and infrastructural projects.

War itself is now being urbanized, with cities being targeted as sites for the confrontation of opposing powers, regimes, and ideologies.[136] Warfare in cities has meant greater civilian death. For instance, in 2001, the first 20 weeks of US bombings of cities in Afghanistan resulted in approximately 3,500 civilian deaths. An additional 19,000 to 43,000 refugees later died of hunger, disease and cold as result of the destruction of important infrastructure including hospitals, power plants, water supply utilities, communication systems, and transport networks.[137]

States are now responding to these security breaches by urban militarization which entails the militarization of civil society— the extension of military ideas of tracking, identification and targeting into city space and everyday life.[138] Some states or cities are investing in military facilities and technologies specifically designed for combat in cities.[139] Militarization is seen as necessary to thwart civil disobedience and terrorism and consequently greater limits have been placed on protests and violent measures are more often used to sanction demonstrators.[140] Militarization of cities is evident in the security measures adopted for sporting events, the fortification of border security networks, and the deployment of security details during large international summits and anti-globalization protests.[141]

In the past 20 years, a parallel trend has been the intensification and privatization of security and the unprecedented growth of mass urban surveillance to

tackle emerging threats.[142] At the turn of the current century, annual growth rate of private security was estimated at 30 per cent in developing countries and eight per cent in developed countries.[143] A study conducted in South Africa showed the number of private security guards increased by 150 per cent between 1997 and 2006.[144] In Latin America, the private security industry with nearly 4 million security agents is growing at nine per cent a year, and is projected to reach about $30 billion by 2016, which is more than the economies of Peru or El Salvador.[145]

With the advancement in digital technology there has also been a rise in the use of digital camera surveillance systems, license plate recognition, and face and crowd detection software.[146] For instance, London has a camera for every six citizens and in May 2014, the city began the UK's largest trial of body-worn cameras for police officers.[147] At the same time, there has been an increased diversification of agents, targets, and forms of urban surveillance.[148]

Over the past few decades, the advancement of digital technologies and the development of the internet have paved a way for a new kind of risk. Cyber insecurity, which goes beyond physical boundaries, has become extremely prevalent in today's digital world. Digital technology is being deployed in many aspects of a city's infrastructure and service delivery systems.[149] Over reliance on technologies and electronic service delivery has made cities more vulnerable to hacking and cyberattacks, which are reported to occur as frequently as every thirty seconds.[150] Lloyd's of London estimates that cyberattacks cost businesses as much as US$400 billion a year.[151] This in part explains why global spending on cyber security is projected to increase by 8.2 per cent from US$77 billion in 2015 to US$101 billion in 2018 and reaching US$170 billion in 2020.[152]

Urban crime and violence can also be extremely detrimental to economic development by impeding foreign investment and the provision of infrastructure and public services, contributing to capital flight and brain drain, and negatively impacting international tourism.[153] For instance, the Mexican government esti-

mated that crime and violence cost the country US$9.6 billion from lost sales, jobs, and investment in 2007.[154]

Safety, security and justice are frequently outside local authorities control and are highly centralized. As crime, violence, and terrorism can cut across local boundaries, there is a need for central governments to cooperate with, support, and include cities in strategies for protection and prevention. Urban safety policies need to include both gender and poverty dimensions with a particular focus on citizens at risk including urban poor, youth, women and single female-headed households, and the elderly.[155]

There is also a need for community based approaches and strategies to help reduce risk factors.[156] Transferring certain powers of enforcement to the community level can help ensure that local culture and reconciliation justice is taken into account.[157] Today, efforts to take back the city's spaces are gaining in momentum in many cities worldwide. Overall, it is clear that cities need to involve local communities in designing appropriate solutions in order to better tackle evolving urban safety and security concerns.

1.10
The Need for a New Urban Agenda

As this chapter has shown, cities are growing everywhere, but as they grow and their problems become more complex, they learn from each other, and from their local communities. In so many areas—urban services, urban housing, growing inequality and exclusion, and safety and security— new challenges are emerging, even when old patterns persist. These challenges will in part frame the attempt to find a new, and more current urban agenda in order to better structure and regulate the forces of social, economic, technological and political change that are pulsing through our cities. Cities will always be "rife with problems," even when they are "filled with promise."[158]

To effectively address these challenges and take advantage of the opportunities of urbanization requires a coherent approach. This approach in the form of a new urban agenda offers a unique opportunity to achieve global strategic goals by harnessing the transformative forces of

Cyberattacks cost businesses an estimated **US$400 billion** a year

urbanization. The new urban agenda should recognize that urbanization as a force on its own, which, alongside other drivers of sustainable development can be harnessed and steered through policy, planning and design, regulatory instruments as well as other interventions to contribute towards national sustainable development. Moreover, the challenges posed by urbanization have global ramifications that, if not addressed adequately, could jeopardize chances of achieving sustainable development. It is therefore necessary to shift cities and towns onto a sustainable development path.

It is clear that continuing along the current model of urbanization is no longer an option. Cities and towns can play a greater role in the sustainable development agenda, and for that they need to be better understood and integrated into the changing global discourse on sustainable development. Urbanization affects all human settlements: rural villages and service centres, small and medium-sized towns, cities and megacities. All these settlements contribute in different ways to national growth and sustainable development

Urbanization is vital for delivering sustainable development, not only because the urban areas of the world are expected to absorb almost all future population growth, but because they concentrate economic activities and influence social change. Urban areas also have the potential to reduce ecological footprints, connect rural and natural environments and create system-based solutions.[159] The new urban agenda responds to the differentiated needs, challenges and opportunities of cities in developed and developing countries.

The new urban agenda should promote sustainable cities and other human settlements that are environmentally sustainable and resilient; socially inclusive, safe and violence-free; economically productive; and better connected to and contributing towards sustained rural transformation. Such a vision should be fully in line with the 2030 Agenda for Sustainable Development, especially Goal 11: to make cities and human settlements inclusive, safe, resilient and sustainable

The new urban agenda represents a paradigm shift towards a new model of urbanization that can better respond to the challenges of our age by optimizing resources to harness future potentials. This new urban

Cities that are environmentally sustainable, socially inclusive and violence-free, economically productive and resilient can genuinely contribute to national development

a new urban agenda offers a unique opportunity to achieve global strategic goals by harnessing the transformative forces of urbanization

The new urban agenda should promote sustainable cities and other human settlements that are environmentally sustainable and resilient; socially inclusive, safe and violence-free; economically productive; and better connected to and contributing towards sustained rural transformation

agenda should be implementable, universal, rights-based, sectorally and spatially integrative, inclusive, equitable, people-centred, green and measurable. Elsewhere, we are reminded that "… the effectiveness of any New Urban Agenda is whether it is relevant to urban governments and urban dwellers, especially those whose needs are currently not met."[160] Besides, the new agenda must take cognizance of the delivery failures of the recent decades.[161] The new urban agenda should have the possibility of articulating different scales, from the neighbourhood to the global level, and diverse scales of human settlements— from the village through the small and medium-sized town, to the city and megacity.

For the new urban agenda to induce transformative change in cities and countries both developed and developing, it needs to give explicit attention to both the pillars that can guide this change and the levers to support the development of a new model of urbanization. These pillars and levers of the new urban agenda are elaborated upon in Chapters 9 and 10 respectively.

The new urban agenda can shape our emerging futures, bringing about the sustainable type of development that is essential for national sustainable development, as its expected outcomes extend well beyond urban areas through a range of ripple effects across socioeconomic and environmental spaces. From an economic perspective, the new urban agenda will support more efficient economic growth through better allocation of land, labour, capital and other resources, as well as through greater connectivity, economic diversification and strategies for creating employment and improving working conditions. From a social perspective, the new agenda will promote shared prosperity with equitable access to the benefits of urbanization, underpinned by a rights-based approach to

urbanization, with concomitant protective laws and institutions. This also includes socioeconomic safety nets that guarantee access to basic urban services, as well as practical actions designed to add value: e.g. employment-generation through public services, combating child labour and support to youth in risky situations. From an envi-

ronmental perspective, the agenda will protect natural resources, ecosystems and biodiversity at local and global levels, and promote climate change mitigation and adaptation as well as building of resilience, allowing present and future generations to live in sustainable cities. Cities that

are environmentally sustainable, socially inclusive and violence-free, economically productive and resilient can genuinely contribute to national development, prosperity and sustainability— in this sense, cities indeed are our emerging futures.

Notes

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5. Naisbitt. 1996.
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   ii. to ensure the provision of services to

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   iii. to promote social and economic development;
   iv. to promote a safe and healthy environment; and
   v. to encourage the involvement of communities and community organizations in the matters of local government."
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02

Urbanization as a Transformative Force

QUICK FACTS

1 Over the last two decades, cities have emerged as the world's economic platforms for production, innovation and trade.

2 Urban areas offer significant opportunities for both formal and informal employment, generating a sizeable share of new private sector jobs.

3 Urbanization has helped millions escape poverty through increased productivity, employment opportunities, improved quality of life and large-scale investment in infrastructure and services.

4 The transformative power of urbanization has in part, been facilitated by the rapid deployment of Information and Communications Technology.

POLICY POINTS

1 Cities have become a positive and potent force for addressing sustainable economic growth, development and prosperity and for driving innovation.

2 Realizing the gains of urbanization will depend on how urban growth is planned and managed, and the extent to which the benefits accruing from urbanization are equitably distributed.

3 The need to move from sectoral interventions to strategic urban planning and more comprehensive urban policy platforms is crucial in transforming city form.

4 When ICT is deployed unevenly, it can create a digital divide, which can exacerbate inequality, characterized by well-connected affluent neighbourhoods coexisting with under-serviced residents in low-income neighbourhoods.

80%

of global GDP is accounted by cities

Contribution of cities to national income is greater than their share of national income

Paris: is 16% of the population of France, but accounts for 27% of GDP

Kinshasa: is 13% of the population of DRC but accounts for 85% of GDP

Metro Manila: is 12% of the population of Philippines but contributes 47% of the GDP

WELL PLANNED AND MANAGED URBANIZATION BENEFITS

Economic prospects and quality of life for the majority
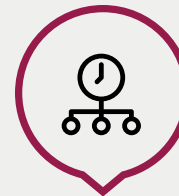
Drives innovation and productivity

Contribute to national and regional development

Alleviation of poverty

Work towards social inclusion

Transformative Power of Connected Cities:

The deployment of **information and communications technologies in cities supports innovation and promotes efficiencies in urban infrastructure leading to lower cost city services.**

In some cases, urban economies are able to leapfrog stages of development by deploying new technologies in the initial construction of infrastructure.

Key issues that position cities at the fore towards enabling transformative and sustainable development

01 — The dynamic economic transition of cities in national and global contexts

02 — The evolving spatial form of cities

03 — Capacity of cities to address environmental risks;

04 — The emergence of smart and connected cities, driven by information and communication technologies (ICT), city data movements and the field of big data
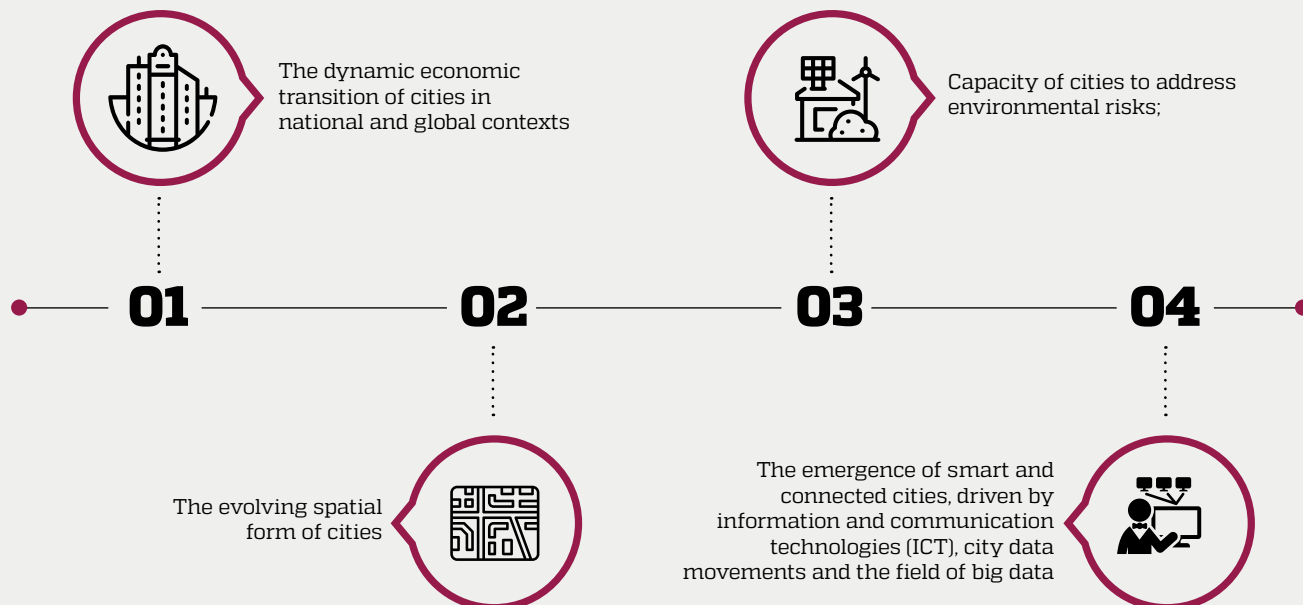
ROLE OF CITIES IN SUSTAINABLE DEVELOPMENT

Cities

play a central role in moving the sustainable energy agenda forward.

Current global share of renewable energy supply is **11%**
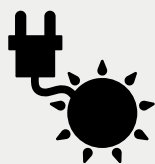
The diversity of renewable energy resources is vast and research indicates a potential contribution of renewable energy reaching **60%** of total world energy supply.

Sustainable urban mobility

provides efficient access to goods, services, job markets, social connections and activities while limiting both short- and long-term adverse consequences on social, economic, and environmental services and systems. An evolving transformative trend is the shift away from auto-dependency.

Good governance

is crucial for developing, maintaining, and restoring sustainable and resilient services and social, institutional, and economic activity in cities. Many city governments are weakened due to limited power and responsibility over key public services, including planning, housing, roads and transit, water, land-use, drainage, waste management and building standards.

Tracking the last twenty years of development reveals a global transformation that positions cities at the core of the development agenda. Urbanization is indeed one of the most significant trends of the past and present century, providing the foundation and momentum for global change. The shift towards an increasingly urbanized world constitutes a transformative force which can be harnessed for a more sustainable development trajectory, with cities taking the lead to address many of the global challenges of the 21st century, including poverty, inequality, unemployment, environmental degradation, and climate change. Cities have become a positive and potent force for addressing sustainable economic growth, development and prosperity, and for driving innovation, consumption and investment in both developed and developing countries. This dramatic shift towards urban life has profound implications for energy consumption, politics, food security and human progress.[1] Although some of this change is posi-

Urbanization is indeed one of the most significant trends of the past and present century, providing the foundation and momentum for global change

Cities have become a positive and potent force for addressing sustainable economic growth, development and prosperity, and for driving innovation, consumption and investment in both developed and developing countries

tive, poorly planned urbanization can potentially generate economic disorder, congestion, pollution and civil unrest.[2]

As the mindsets resisting urbanization have changed, so have city dwellers' living and working environments. Globally, urban centres are expanding due to their capacity to generate income, contribute to national wealth, attract investments and create jobs.[3] Cities are places of mass production, consumption and service provision, with their scale, density and diversity of social, cultural and ethnic groups, setting them apart from rural contexts.[4] This draws sharp focus to the galvanizing power of proximity for innovation, including the economies of urbanization and agglomeration—which together establish the foundation of the transformative power of urbanization.

From New York to São Paulo, the upside potential of globalization has facilitated the re-emergence of cities as strategic global centres for specialized functions.[5] Cities have become the locus for change and the venue where policies and actions are mobilized. Yet, as shown in Chapters 1 and 4, cities have turned into nodal points of mounting human, socioeconomic

Workers take a break at a construction site. Rapid urbanization in Vietnam has brought both opportunities and challenges to the country. Ho Chi Minh City, Vietnam.

Source: Tran Viet Duc/World Bank, CC BY 2.0, https://creativecommons.org/licenses/by/2.0/legalcode

and environmental vulnerabilities, of which inequality, sprawl and air pollution have become the most visible manifestations. It therefore follows that a business-as-usual approach will not be enough to keep up with the pace of urban growth in the next coming decades.

This chapter presents key issues that position cities in a transformative role towards sustainable development. These transformative issues relate to the dynamic economic transition of cities in national and global contexts; the evolving spatial form of cities; capacity of cities to address environmental risks; and the emergence of smart and connected cities, driven by ICTs, city data movements and big data.
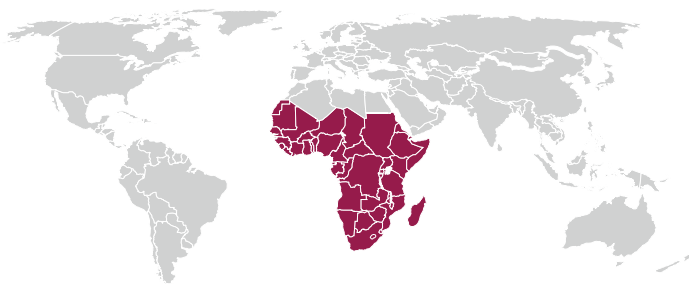
Increase in people living in extreme poverty in Sub-saharan Africa

| 1981 | 205 million |
| 2010 | 414 million |

Cities have become the locus for change and the venue where policies and actions are mobilized

In virtually all cases, the contribution of urban areas to national income is greater than their share of national population

2.1
The Dynamic Economic Transition of Cities

No country has achieved its level of development without urbanizing

In virtually all cases, the contribution of urban areas to national income is greater than their share of national population

As shown in Chapter 8, cities have emerged as economic powerhouses driving the global economy. Cities are engines of economic growth and development. No country has achieved its level of development without urbanizing. Increased productivity due to urbanization has strengthened the weight of urban areas and reduced poverty, thus making cities more important to national and global economies. Indeed, the prosperity of nations and regions is increasingly dependent on the economic performance of cities.

Large cities are associated with higher levels of productivity and income, given their central role in innovation and job creation, amidst rapidly increasing economic and technological complexity (Chapter 8). Sustainable economic growth is virtually impossible without the growth of cities. As cities become more concentrated, the economic potential of urban growth is driven by higher levels of productivity.

As the world recovers from the global recession, cities in emerging economies such as China, India and Brazil have become major sites for business investment, presenting global companies with unprecedented opportunities for research and development. By 2030, the middle class in China – the majority of which will be concentrated in urban areas could reach one billion, corresponding to 70 per cent of China's projected population.[6] Undoubtedly, urbanization will be one of the biggest drivers of global economic growth in this era, but countries and cities may not equally seize the advantages and opportunities.

Productivity in cities

The evidence of the positive link between urban areas and economic development is overwhelming. With just 54 per cent of the world's population, cities account for more than 80 per cent of global GDP.[7] Figure 2.1 and Figure 2.2 respectively show the contribution of cities in developed and developing countries to national income. In virtually all cases, the contribution of urban areas to national income is greater than their share of national population. For instance, Paris accounts for 16 per cent of the population of France, but generates 27 per cent of GDP. Similarly, Kinshasa and Metro Manila account for 13 per cent and 12 per cent of the population of their respective countries, but generate 85 per cent and 47 per cent of the income of the Democratic Republic of Congo and Philippines respectively. The ratio of the share of urban areas' income to share of population is greater for cities in developing countries vis-à-vis those of developed countries. This is an indication that the transformative force of urbanization is likely to be greater in developing countries, with possible implications for harnessing the positive nature of urbanization.

The higher productivity of urban areas stems from agglomeration economies, which are the benefits firms and businesses derive from locating near to their customers and suppliers in order to reduce transport and communication costs.[8] They also include proximity to a large labour pool, competitors within the same industry and firms in other industries.

These economic gains from agglomeration can be summarized as three essential functions: matching, sharing, and learning[9]. First, cities enable businesses to *match* their distinctive requirements for labour, premises and suppliers better than smaller towns because a wider choice is available. Better matching means greater flex-

Figure 2.1: Share of GDP and national population in selected cities (developed countries)

Source: UN-Habitat, 2011f.

Figure 2.2: **Share of national population and GDP in selected cities (developing countries)**

Source: UN-Habitat, 2011f.

● Share of national GDP (%)　　● Share of national population (%)
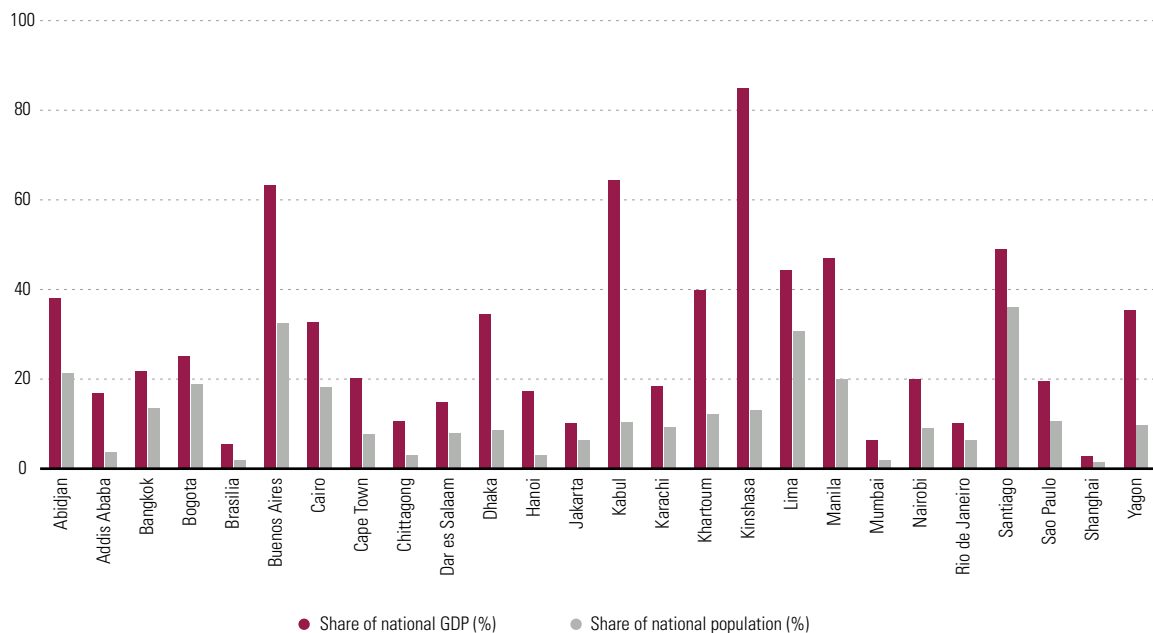
ibility, higher productivity and stronger growth. Second, cities give firms access to a bigger and improved range of *shared services*, infrastructure and external connectivity to national and global customers because of the scale economies for providers. Third, firms benefit from the superior flows of information and ideas in cities, promoting more *learning* and innovation.[10] Proximity facilitates the communication of complex ideas between firms, research centres and investors.[11] Close proximity also enables formal and informal networks of experts to emerge, which promotes comparison, competition and collaboration.[12] It is not surprising therefore that large cities are the most likely places to spur the creation of young high growth firms, sometimes described as "gazelles."[13] It is cheaper and easier to provide infrastructure and public services in cities. The cost of delivering services such as water, housing and education is 30-50 per cent cheaper in concentrated population centres than in sparsely populated areas.[14]

The benefits of agglomeration can be offset by rising congestion, pollution, pressure on natural resources, higher labour and property costs, greater policing costs occasioned higher levels of crime and insecurity often in the form of negative externalities or *agglomeration diseconomies*.[15] These inefficiencies grow with city size, especially if urbanization is not properly managed, and if

cities are deprived of essential public infrastructure. The immediate effect of dysfunctional systems, gridlock and physical deterioration may be to deter private investment, reduce urban productivity and hold back growth. Cities can become victims of their own success and the transformative force of urbanization can attenuated.

Cities in the global economy

Over the last two decades, cities and metropolitan areas have emerged as the world's economic platforms for production, innovation and trade. However, this global connectivity also carries with it concurrent risks, since the wellbeing of cities is greatly influenced by regional and global dynamics. Urbanization is currently taking place within the context of a relatively weakened global economy. During the 2008 global financial crisis, the world suffered the most significant economic downturn since the Great Depression. By October 2008, the crisis had erased around US$25 trillion from the value of stock markets globally.[16] The pace of world economic growth slowed down to 3.1 per cent in 2015, as against 3.4 per cent in 2014,[17] which was significantly less than before the economic crisis.

The economic crisis may well have resulted in a reduction of the contribution that urban areas make to the national GDP.[18] A 2009 UCLG study of the impact

Urbanization is currently taking place within the context of a relatively weakened global economy

of the crisis considered the deterioration of the fiscal position of local governments as its most important consequence.[19] Several other factors combined exacerbated this crisis and its impact on cities: collapsed tax revenues, unemployment, higher operational costs for addressing social needs, difficulty gaining access to borrowing, disinvestment and collapsed public-private partnership activity.

Employment is the gateway out of poverty for many and an important cornerstone of economic and social development

While the effects from the financial crisis varied across the world, one universal impact was the decrease in foreign direct investment (FDI), which is an important contributor to economic growth. During the recession, the world experienced a decline in FDI inflows by more than 20 per cent, with developed countries being the most affected. Developing countries, on the other hand, have been experiencing steady growth in FDI inflows since early 2000s, thereby exhibiting resilience in the face of the economic downturn as shown in Figure 2.3. This is in line with a World Bank study,[20] which shows that between 2003 and 2012, two-thirds of the top FDI destination cities were in Sub-Saharan Africa, South Asia, and East Asia and Pacific (excluding China). The study also notes that FDI remains highly concentrated in a small number of elite cities.

unemployment can be particularly challenging in urban areas, as cities are often associated with a high concentration of unemployed people

The rapid-pace urbanization is regarded as a bright spot in the midst of the multiple global crises confronting countries.[21] As engines of growth, cities have a key role to play in the economic recovery of countries. In coordination with—or financed by—their national governments, many cities worldwide have adopted new policies and stimulus programmes to recover from the global financial crisis. In the UK, cities have been instruments to revive the economy by driving growth, providing jobs, supporting investment in critical infrastructure, and granting greater financial autonomy.[22]

Cities and employment creation

A further indication of the transformative nature of urban areas relates to the significant opportunities they offer for both formal and informal employment. Cities generate a sizeable share of new private sector jobs. Between the year 2006 and 2012, the 750 largest cities in the world created 87.7 million private sector jobs, or 58 per cent of all new private sector jobs in their respect 129 countries.[23] In the UK, cities account for 78 per cent of all jobs.[24] In the US, metropolitan areas account for 84 per cent of total employment and 88 per cent of labour income.[25] Among African countries, urban employment grew by an average of 6.8 per cent over the last decade— twice more than the national rate of 3.3 per cent.[26] In India, between 2000 and 2005, urban employment grew at a rate of 3.22 per cent compared to rural employment, which grew by 1.97 per cent.[27]

Employment is the gateway out of poverty for many and an important cornerstone of economic and social development.[28] Employment is also a key determinant of peoples' satisfaction. The integration of rapidly urbanizing countries endowed with an abundance of unskilled labour into the world economy can generate extensive employment opportunities especially in light manufacturing. This has been the case of East Asia over the last five decades, and mirrors the recent situation in Bangladesh with respect to the garment industry in large cities such as Chittagong and Dhaka.[29] In Bangladesh, the industrial sector currently accounts for 30 per cent of value-added as against 20 per cent in 1990, with the level of urbanization at about 35 per cent.

Notwithstanding the foregoing, unemployment can be particularly challenging in urban areas, as cities are often associated with a high concentration of unemployed people— a phenomenon often referred to as the *urban paradox*.[30] About 60 per cent of unemployment in UK, Japan, Korea, Netherlands and US is concentrated in urban areas.[31] This is likely to be the

Figure 2.3: FDI inflows, 1995-2014 (billions of US$)

Source: Based on UNCTAD, FDI/TNC database (www.unctad.org/fdistatistics), last accessed 17 March 2016.
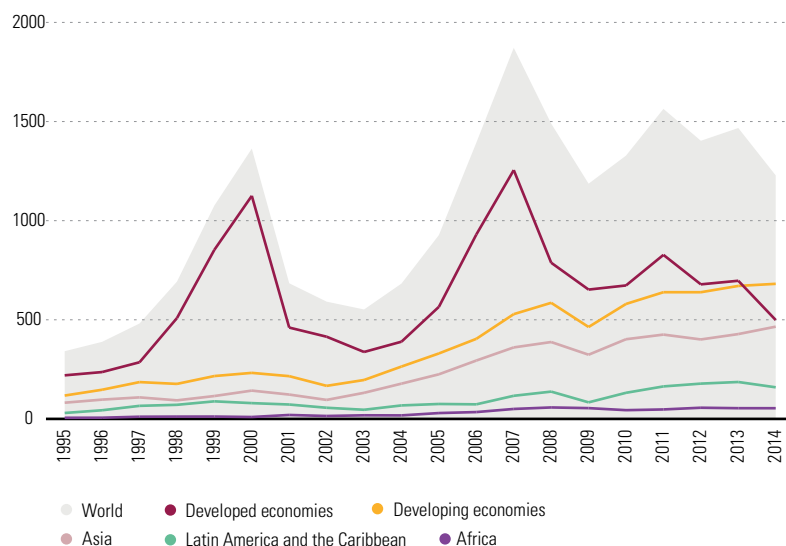
case in developing countries. The global unemployment rate for 2015 was 5.8 per cent— 197.1 million people, which is one million more than in 2014 and over 27 million higher than the pre-crisis period.[32] Particularly problematic is youth unemployment, which is two-three times higher than adult unemployment. In South Africa and Spain, youth unemployment currently stands at 51 per cent and 42 per cent respectively.[33] Global unemployment cuts across various sectors, but is particularly severe in finance, construction, automotive, manufacturing, tourism, services and real estate— all of which are strongly associated with urban areas. A key issue confronting cities, especially those in developing countries, is to ensure that urbanization generates sufficient economic growth to provide decent, productive and remunerative jobs for the rapidly growing labour force.

Cities and inclusive prosperity

A prosperous city supports productivity, infrastructure development, quality of life, equity and social inclusion, and environmental sustainability.[34] The foundations for competitiveness translate to cities that retain and grow their skilled labour, enhance their business attractiveness, and expand their economic base. As cities become more dominant and interconnected in the global economy, competitiveness at the local level becomes imperative for economic growth. In order to sustain inclusive economic growth, local governments are considering their capacity to foster important determinants of productivity, such as higher education, innovation, quality of life, and infrastructure for all.

In light of the current dispensation, cities and city regions compete intensely for investment, for the location of headquarters of transnational corporations, for hosting international agencies, for tourist streams, for large conventions, for major events such as the Olympics or the World Cup, or for major political meetings. A study of the competitiveness of 48 Latin American cities in terms of their attractiveness for external investment identifies five leading cities— São Paulo, Mexico City, Santiago, Rio de Janeiro, and Buenos Aires.[35] The key elements determining the attractiveness to investment of these cities include: the size and wealth of the city; the number of global firms with offices in the city; the depth and specialization of the financial market; and quality of life and security. It is worth noting that the most desirable cities are among the very largest in the region.

While economic growth and prosperity bring

Figure 2.4: Urbanization and poverty

Source: Based on United Nations, 2014b; data.worldbank.org, last accessed 20 January 2016.
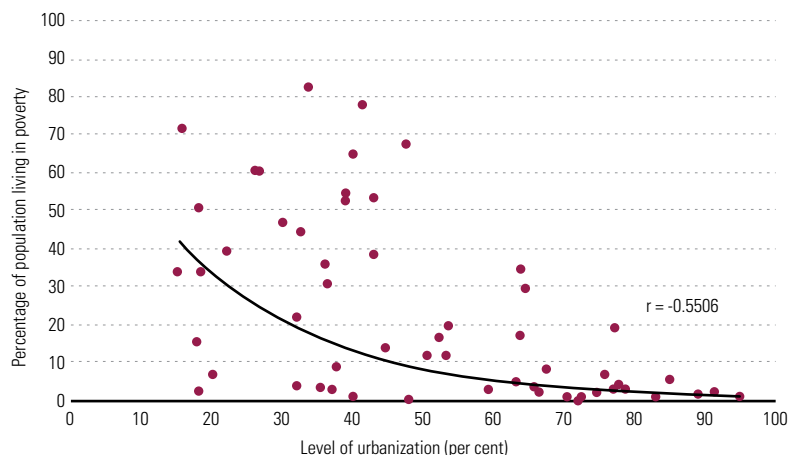
many benefits to local economies, inequality and social exclusion may actually be on the rise,[36] especially if the benefits of growth are not equitably distributed. The World Bank promotes shared prosperity or inclusive economic growth, which is at the core of sustainable development. Similarly, UN-Habitat has initiated a global city prosperity initiative in which equity and social inclusion are key dimensions of urban prosperity. The other dimensions are productivity, infrastructure, quality of life, environmental sustainability and governance.

Poverty and urban-rural linkages

When properly planned and managed, urbanization can play a key role in eradicating poverty. This is how and why cities have been described as *real poverty fighters*.[37] As illustrated in Figure 2.4, highly urbanized countries are associated with low levels of poverty. Urbanization has helped millions escape poverty through higher levels of productivity, employment opportunities, improved quality of life via better education and health, large-scale public investment, and access to improved infrastructure and services. Nowhere is this more evident than in East Asia, where increase in urbanization over the last three and half decades has been accompanied by a remarkable decrease in poverty. In the early 1980s, East Asia was the region with the highest incidence of poverty in the world, with 77 per cent of its

As cities become more dominant and interconnected in the global economy, competitiveness at the local level becomes imperative for economic growth

When properly planned and managed, urbanization can play a key role in eradicating poverty

Urbanization has helped millions escape poverty through higher levels of productivity, employment opportunities; improved quality of life via better education and health; large-scale public investment and access to improved infrastructure and services

population living below the poverty line; by 2008, this has fallen to 14 per cent.[38] In China, urbanization occasioned by massive economic growth helped pull 680 million people out of extreme poverty between 1981 and 2010, and reduce the rate of extreme poverty from 84 per cent in 1980 to 10 per cent in 2013.[39] China alone accounts for three-quarters of the global reduction in poverty.

However, the reduction in poverty associated with urbanization is not automatic.[40] Realizing the potential gains of urbanization will however depend on how well urban growth and its evolving challenges are planned and managed, and the extent to which the benefits accruing from urbanization are equitably distributed. Formulating the necessary policies including effective governance, urban planning and finance is a vital precondition for enhancing the transformative potentials of urbanization. As developing countries rapidly urbanize, it is crucial that the necessary institutions are established. Managing urbanization should therefore be an essential component of nurturing growth. If poorly planned and inadequately managed, urbanization will result in the proliferation of slums, poverty, more unequal, less productive and less habitable cities. Neglecting cities even in countries with low levels of urbanization can impose significant costs.[41]

Globally, the conventional distinction between urban and rural is changing, with cities emerging as drivers of change in rural areas. Rural areas benefit from urbanization through increased demand for rural goods, which can have a significant impact on rural poverty.[42] Other benefits from the urban-rural linkages include increased urban-rural remittances, increased rural land/labour ratio, and increased rural nonfarm employment.[43] Achieving sustainable development is more likely if there is a shift from the political, social and geographical dichotomy between urban and rural areas; and recognition and understanding of the continuum of urban and rural development.

The transformative power of urbanization has important implications for rural areas. Cities act as magnets for rural migration; in developed countries, migration is driven by better opportunities in urban areas. However, in developing countries, rural-urban migration is more complex, in some cases driven by rural migrants seeking refuge from disasters such as famine or war.[44] Cambodia experienced massive rural to urban migration during the 1975-1979 conflict, which contributed 14 per cent of total migrants in urban areas, leading to pressure on land, infrastructures and services in Phnom Penh. This is when the Urban–Rural Partnership Project was launched with the double function of improved livelihoods for the poor and stronger urban-rural linkages. The overarching, objective was to improve conditions in smaller towns to retain potential migrants.

Another facet of the growing interconnection between urban and rural areas is the physical expansion of metropolitan regions, which has seen cities extend to peri-urban and rural areas. These transitional zones enhance linkages between urban and rural areas. Special mechanisms are needed to strengthen land administration, including planning systems to respond to rapid urban expansion. Management of land use in peri-urban areas is critical to balance city expansion so that it does not compromise food production. In developing countries, rural hinterlands can reduce vital vulnerabilities through City

In China, urbanization occasioned by massive economic growth helped pull

680 million

people out of extreme poverty between 1981 and 2010, and reduce the rate of extreme poverty from 84 per cent in 1980 to 10 per cent in 2013

The transformative power of urbanization has important implications for rural areas

Region Food Systems.[45] Such systems should encourage domestic capital to expand the processing of local agricultural commodities, both for national consumption and for export.

Urbanization can play a key role in eradicating rural poverty. Research in India found that an increase of 200,000 in the urban population resulted in a decrease of 1.3 to 2.6 per cent in rural poverty.[46] Overall, these urban-rural linkages were behind a reduction of 13 to 25 per cent in rural poverty in India between 1983 and 1999.[47] In Vietnam, a more recent study (2006-2008) found that rural households in highly urbanized provinces featured higher income and income growth than rural households.[48] These urban-rural linkages have transformative implications for global poverty reduction.

The benefits of urbanization should not be limited to large cities, but made available to small and medium towns. The adequate provision of adequate infrastructure and opportunities in small and medium cities can promote rural urbanization and contribute to achieving balanced population distribution.[49] In Korea, migration to small and intermediate towns in mid-1970s contributed to diverse and dynamic redistribution of population, induced by specialized local industrial structures, proximity to metropolitan cities and the appropriate educational standards.[50] This is why urban policies must not overlook small and medium-size towns, which rural migrants increasingly favour over larger cities.[51]

2.2
Evolving Spatial Form of Cities

The dramatic changes in the spatial form of cities brought about by rapid urbanization over the last two decades, present significant challenges and opportunities. Whereas new spatial configurations play key role in creating prosperity, there is an urgent demand for more integrated planning, robust financial planning, service delivery and strategic policy decisions. These interventions are necessary if cities are to be sustainable, inclusive and ensure a high quality of life for all. Urban areas worldwide continue to expand giving rise to an increase in both vertical and horizontal dimensions.

With cities growing beyond their administrative and physical boundaries, conventional governing structures and institutions become outdated. This trend has led to expansion not just in terms of population settlement and spatial sprawl, but has altered the social and economic spheres of influence of urban residents.[52] In other words, the functional areas of cities and the people that live and work within them are transcending physical boundaries.

Cities have extensive labour, real estate, industrial, agricultural, financial and service markets that spread over the jurisdictional territories of several municipalities. In some cases, cities have spread across international boundaries.[53] Plagued with fragmentation, congestion, degradation of environmental resources, and weak regulatory frameworks, city leaders struggle to address demands from citizens who live, work, and move across urban regions irrespective of municipal jurisdictional boundaries. The development of complex interconnected urban areas introduces the possibility of reinventing new mechanisms of governance.

A city's physical form, its built environment characteristics, the extent and pattern of open spaces together with the relationship of its density to destinations and transportation corridors, all interact with natural and other urban characteristics to constrain transport options, energy use, drainage, and future patterns of growth. UN-Habitat's principles for sustainable neighbourhood planning favour high densities.[54] However, density is no blanket solution: it takes careful, proper coordination, location and design (including mixed uses) to reap the benefits more compact urban patterns can bring to the environment (such as reduced noxious emissions) and quality of life.

New urban configurations

Large and small cities are expanding and merging to create urban settlements in the form of city-regions, urban corridors and mega-regions. These urban configurations act as nodes where global and regional flows of people, capital goods, research and science, services and information combine and co-mingle, resulting in faster economic and demographic growth than that of the countries where they are located.[55] These new configurations are spatially connected, and are functionally bound by their economic, socio-political and environmental link-

In India, urban-rural economic linkages were responsible for

13-25%

of the overall reduction in rural poverty between 1983 and 1999

Source: Cali, 2013.

Urbanization can play a key role in eradicating rural poverty

The benefits of urbanization should not be limited to large cities, but made available to small and medium towns

With cities growing beyond their administrative and physical boundaries, conventional governing structures and institutions become outdated

Mega-regions are playing an increasing role in various dimensions of prosperity far beyond their own boundaries

ages. Examples include the Hong Kong-Shenzhen-Guangzhou (Pearl River delta) region in China and the Rio de Janeiro-São Paulo region in Brazil, including the linear systems of urban corridors like the industrial corridor connecting Mumbai and Delhi in India (Chapter 8), and the regional economic axis forming the greater Ibadan-Lagos-Accra urban corridor in West Africa.[56]

These configurations facilitate intense division of labour and knowledge, offering opportunities for economic development and prosperity (Chapter 8).[57] Mega-regions are playing an increasing role in various dimensions of prosperity far beyond their own boundaries. However, while these engines of growth are transforming the global economy, they can also lead to unbalanced growth in a country's development. Additionally, ineffective and fragmented urban governance across these vast urban regions poses major challenges for the post-2015 development era.

Urban sprawl, suburbanization and peri-urbanization

More dispersed patterns of urbanization in the form of suburbanization, peri-urbanization, or urban sprawl have constituted a significant trend over the last two decades

More dispersed patterns of urbanization in the form of suburbanization, peri-urbanization, or urban sprawl have constituted a significant trend over the last two decades. This trend is hotly-debated; opponents view it as poor land management or as automobile-driven, uncontrolled growth. Proponents on the other hand view it as a choice to move outside the congested urban core where land is less expensive to suburbs where land and housing are cheaper, with low-density living often resulting in better quality of life and improved access to amenities.[58] The reality of urban expansion and dispersal is evidenced in most cities, spurred not only by individual preferences for a suburban lifestyle, but also due to: poor land management and lack of sound regulatory control over peri-urban areas; new land subdivisions accommodating highway and automobile expansion; and enhanced ease of mobility due to improved commuting technologies.

The need to move from sectoral interventions to strategic urban planning and more comprehensive urban policy platforms is crucial in transforming city form

The role of the privately owned car in urban form cannot be underestimated. As important as prior transportation innovations have been, private car ownership has had a more dramatic effect on the city.[59] Chapters 5 highlights some of the impacts of the car-dominated urban landscape, which include: higher costs of public infrastructure, social isolation, higher energy consumption, fiscal problems associated with inner cities supporting services consumed by suburban residents, loss of farmland and reduced biodiversity.

The ensuing pattern of urban development due to formal or informal peri-urbanization processes is characterized by the displacement of population, industries and services from the city centre to the periphery, and the creation of new centres with their own economic and social dynamics. As opposed to the upscale suburbanization of developed countries, the peri-urban areas in developing countries have become divided cities, characterized by of spatial segregation along socioeconomic lines. These large peri-urban areas consist of informal land-use patterns, accompanied by lack of infrastructure, poor or non-existent public services, with inferior quality housing and families living in poverty.

The transformative potentials of urban space

Urban space can be a strategic entry point for driving sustainable development. However, this requires innovative and responsive urban planning (Chapter 7) and design that utilizes density, minimizes transport needs and service delivery costs, optimizes land-use, enhances mobility and space for civic and economic activities, and provides areas for recreation, cultural and social interaction to enhance quality of life. By adopting relevant laws and regulations, city planners are revisiting the compact and mixed land-use city, reasserting notions of urban planning that address the new challenges and realities of scale, with urban region-wide mobility and infrastructure demands.

The need to move from sectoral interventions to strategic urban planning and more comprehensive urban policy platforms is crucial in transforming city form. For example, transport planning was often isolated from land-use planning and this sectoral divide has caused wasteful investment with long-term negative consequences for a range of issues including residential development, commuting and energy consumption. Yet, transit and land-use integration is one of the most promising means of reversing the trend of automobile-dependent sprawl and placing cities on a sustainable pathway.

The more compact a city, the more productive and innovative it is and the lower its per capita resource use and emissions. City planners have recognized the need to advance higher density, mixed use, inclusive, walkable, bikeable and public transport-oriented cities. Accordingly, sustainable and energy-efficient cities, low carbon, with renewable energy at scale are re-informing decision making on the built environment.

Despite shifts in planning thought, whereby

compact cities and densification strategies have entered mainstream urban planning practice, the market has resisted such approaches and consumer tastes have persisted for low-density residential land. Developers of suburbia and exurbia continue to subdivide land and build housing, often creating single purpose communities. The new urbanists have criticized the physical patterns of suburban development and car-dependent subdivisions that separate malls, workspaces and residential uses by highways and arterial roads. City leaders and planning professionals have responded and greatly enhanced new community design standards. Smart growth is an approach to planning that focuses on rejuvenating inner city areas and older suburbs, remediating brown-fields and, where new suburbs are developed, designing them to be town centred, transit and pedestrian-oriented, less automobile dependent and with a mix of housing, commercial and retail uses drawing on cleaner energy and green technologies.[60]

The tension in planning practice needs to be better acknowledged and further discussed if sustainable cities are to be realized. The forces that continue to drive the physical form of many cities, despite the best intentions of planning, present challenges that need to be at the forefront of any discussion on the sustainable development goals of cities. Some pertinent issues, which suggest the need for rethinking past patterns of urbanization and addressing them urgently include:

i.   competing jurisdictions between cities, towns and surrounding peri-urban areas whereby authorities compete with each other to attract suburban development;

ii. the true costs to the economy and to society of fragmented land use and car-dependent spatial development; and

iii. how to come up with affordable alternatives to accommodate the additional 2.5 billion people that would reside in cities by 2050.[61]

In reality, it is especially these outer suburbs, edge cities and outer city nodes in larger city regions where new economic growth and jobs are being created and where much of this new population will be accommodated, if infill projects and planned extensions are not designed. While densification strategies and more robust compact city planning in existing city spaces will help absorb a portion of this growth, the key challenge facing planners is how to accommodate new growth beyond the

existing core and suburbs. This will largely depend on local governments' ability to overcome fragmentation in local political institutions, and a more coherent legislation and governance framework, which addresses urban complexities spread over different administrative boundaries.

2.3
The Essential Role of Cities in Sustainable Development

While there are numerous definitions of sustainable development, many start with the definition provided in the 1987 Brundtland Report: "Development that meets the needs of the present without compromising the ability of future generations to meet their own needs."[62] The goals for sustainable cities are grounded on a similar understanding— urban development which strives to meet the essential needs of all, without overstepping the limitations of the natural environment. A sustainable city has to achieve a dynamic balance among economic, environmental and socio-cultural development goals, framed within a local governance system characterized by deep citizen involvement and inclusiveness.[63]

The newly adopted 2030 Agenda for Sustainable Development presents 17 Sustainable Development Goals that replace the previous Millennium Development Goals (MDGs). While cities were not specifically represented in the MDGs, Goal 11 of the new Sustainable Development Agenda (Box 2.1) seeks to: "Make cities and human settlements inclusive, safe, resilient and sustainable."[64] This stands-alone goal on cities recognizes the transformative role of urban areas towards building sustainability in the post-2015 Development Agenda.

A core component of a sustainable cities agenda is sustainable infrastructure— the interconnected physical and organizational structure, set of services and system that supports the daily functioning of

Despite shifts in planning thought, whereby compact cities and densification strategies have entered mainstream urban planning practice, the market has resisted such approaches and consumer tastes have persisted for low-density residential land

Box 2.1: Goal 11— Make cities and human settlements inclusive, safe, resilient and sustainable

11.1 By 2030, ensure access for all to adequate, safe and affordable housing and basic services and upgrade slums

11.2 By 2030, provide access to safe, affordable, accessible and sustainable transport systems for all, improving road safety, notably by expanding public transport, with special attention to the needs of those in vulnerable situations, women, children, persons with disabilities and older persons

11.3 By 2030, enhance inclusive and sustainable urbanization and capacity for participatory, integrated and sustainable human settlement planning and management in all countries

11.4 Strengthen efforts to protect and safeguard the world's cultural and natural heritage

11.5 By 2030, significantly reduce the number of deaths and the number of people affected and substantially decrease the direct economic losses relative to global gross domestic product caused by disasters, including water-related disasters, with a focus on protecting the poor and people in vulnerable situations

11.6 By 2030, reduce the adverse per capita environmental impact of cities, including by paying special attention to air quality and municipal and other waste management

11.7 By 2030, provide universal access to safe, inclusive and accessible, green and public spaces, in particular for women and children, older persons and persons with disabilities

11.a Support positive economic, social and environmental links between urban, peri-urban and rural areas by strengthening national and

regional development planning

11.b By 2020, substantially increase the number of cities and human settlements adopting and implementing integrated policies and plans towards inclusion, resource efficiency, mitigation and adaptation to climate change, resilience to disasters, and develop and implement, in line with the Sendai Framework for Disaster Risk Reduction 2015-2030, holistic disaster risk management at all levels

11.c Support least developed countries, including through financial and technical assistance, in building sustainable and resilient buildings utilizing local materials

Source: United Nations, 2015a.

Investment in sustainable infrastructure is pivotal in planning for the sustainable development of cities

a society and its economy. Sustainable infrastructure is that which is designed, developed, maintained, reused, and operated in a way that ensures minimal strain on resources, the environment and the economy. It contributes to enhanced public health and welfare, social equity, and diversity.[65] Investment in sustainable infrastructure is pivotal in planning for the sustainable development of cities. Despite the importance of urban infrastructure, there is a clear under-investment as characterized by the backlog and state of deficient infrastructure. Globally, US$57 trillion is needed for infrastructure investment between 2013 and 2030 in order to support economic growth and urbanization.[66] This is of particular concern with regard to developed countries, where many large cities experience serious congestion, and to developing countries, where improved basic socioeconomic conditions have been long overdue.

Singapore, Hong Kong and Tokyo are examples of cities where the costs of car ownership and use have been set high and planning strategies have emphasized development patterns oriented to transit, walking and cycling

Urban mobility

As a factor of inclusion and integration,[67] urban mobility has a specific transformative role. Urban mobility is a multidimensional concept, encapsulating the multitude of physical components pertaining to urban transport (air, road, and rail systems, waterways, light and heavy rail, cable cars) including the economic, environmental and social dimensions of mobility. Sustainable urban mobility provides efficient access to goods, services, job markets, social connections and activities while limiting both short- and long-term adverse consequences on social, economic, and environmental services and systems. A sustainable mobility strategy serves to protect the health of users and the environment, while fostering and promoting the city's economic prosperity.[68]

City dwellers are negatively impacted by inadequate and inefficient public transit systems; low-density development; urban sprawl; and by the growing distance between residents and their place of employment, markets, education and health facilities. Although faced with enormous challenges, behavioral, technological and political shifts, cities remain at the forefront of transformative changes to improve quality of life through investing in connected, sustainable urban mobility.

An evolving trend is the cultural shift away from auto-dependency. Singapore, Hong Kong and Tokyo

Use of green energy in Dali, People's Republic of China.

Source: Asian Development Bank, CC BY 2.0, https://creativecommons.org/licenses/by/2.0/legalcode

Box 2.2: E-hailing: Technological advances in the transportation industry

Uber is an example of an e-hailing mobile app that connects passengers with drivers of vehicles for hire. However, unlike conventional taxis, Uber drivers use their personal vehicles. Currently, Uber operates in 401 cities worldwide.

Uber recently launched *UberMOTO*, a motorcycle ride-hailing service, in order to beat the infamous traffic in Bangkok. The service is aimed at providing short trip services for passengers around the city, where heavy traffic has become notoriously commonplace. *UberMOTO* is significantly cheaper than its automobile counterpart. Apart from its benefits in price, the service is also quite safe, as *UberMOTO* motorcyclists are instructed to always bring a helmet for their passengers.

In some cites, Uber is larger than the traditional taxi industry. In China alone, 170 million people use some forms of e-hailing app. Long waits for taxis, over-pricing, uncomfortable old vehicles, and safety concerns are the shortcomings of some traditional taxi services, and provide the reasons why Uber is prospering.

In Australia, diverse jurisdictions are undertaking regulatory changes to cope with the disruptive nature of Uber to the taxi and third party driver industry. This is occurring within an environment of hostility from the incumbent industry providers and citizens seeking more cost effective and better service delivery to meet their needs. The growth and development of e-hailing services continues to increase as regulatory hurdles are addressed.

Sources: Rempel, 2014; Wambugu, 2016; Cendrowski, 2015; Skyring, 2016; www.uber.com, last accessed 28 March 2016.

are examples of cities where the costs of car ownership and use have been set high and planning strategies have emphasized development patterns oriented to transit, walking and cycling. In Europe and the US, the popularity of the share economy has allowed people to move to more walkable, livable urban communities.[69] Consequently, urban space is being reimagined, leading to denser and greener cities, enhanced flow of traffic, improved walkability, and increased use of public transit.[70] This shift could catalyze reinvestment in public transport and a reduction in automobile subsidies,[71] while also allowing for equitable access. New mobility services and products such as e-hailing (Box 2.2), autonomous driving, in-vehicle connectivity and car sharing systems offer multimodal, on-demand transportation alternatives.

More compact, better-connected cities with low-carbon transport could save as much as US$3 trillion in urban infrastructure spending over the next 15 years.[72] This would simultaneously result in substantial annual returns due to energy savings, higher productivity and reduced healthcare costs. The private sector and civil society can also help city leaders advance sustainable mobility, with improvements in telecommunications technology. For instance, the Paris-based company *BlaBlaCar* has developed an online platform that connects passengers with private drivers and allows them to book seats for long-distance journeys. Increased passenger numbers per car reduce carbon emissions and improve quality of life.[73]

Energy in cities

If the world is to achieve its sustainable development goals, and reach targets that range from eradicating poverty and social inequity, to combating climate change and ensuring a healthy and livable environment, global efforts in the transition to sustainable energy are pivotal. As cities represent more than 70 per cent of global energy demand,[74] they have been playing a central role in moving the sustainable energy agenda forward. The current global share of renewable energy supply is 11 per cent.[75] The diversity of renewable energy resources is vast and research indicates a potential contribution of renewable energy reaching 60 per cent of total world energy supply.[76]

While many renewable energy technologies remain more costly than conventional sources and are often site-specific, it is important to note that investment in renewable cleaner energy can reduce health impacts from air pollutants, which can severely impact quality of life and place strains on health care systems.[77] Increasing renewable energy sources, maximizing conservation and lessening dependence on non-renewable

More compact, better-connected cities with low-carbon transport could save as much as **US$3 trillion** in urban infrastructure spending over the next 15 years

sources of energy, particularly those most damaging and contributing to global warming, are critical steps to sustainable cities.

Cities are harnessing local capabilities to develop green technologies and renewable energy sources that enhance their ability to withstand climate-related shocks as well as boosting local economies.[78] Governments are investing in green technologies, presenting an excellent opportunity for cities to channel their innovation capabilities into a new sector of the economy.[79] The economies of scale and concentration of enterprises and innovation in cities make it cheaper and easier to take actions to minimize both emissions and climate hazards.

Resilience of cities

The risks that cities are now facing as a result of climate change and natural disasters (Chapters 1 and 5), the pressing short-falls in urban water, sanitation and waste management services, and the deteriorating quality of air and water, are being experienced in the context of their rapid growth. A growing international focus on resilience is a core agenda item for cities today. The increase in severe weather events and natural disasters has highlighted the need for cities to augment their ability to withstand the disaster risks they may face, and to mitigate and respond to such risks in ways that minimize the impact of severe weather events and natural disasters on the social, environmental, and economic infrastructure of the city. Consequently, city leaders have been making significant transformative changes and investments in the resilience of their cities.

Any city's resilience to external shock relies primarily on effective institutions, governance, urban planning and infrastructure. In this respect, the UN Office for Disaster Reduction (UNISDR) has set out a number of general practical recommendations for urban authorities.[80] Since then, UN-Habitat, together with the Technical Centre for Disaster Risk Management and Urban Resilience (DiMSUR) has developed and successfully tested a participatory methodology, known as the City Resilience Action Plan (CityRAP).[81]

A critical aspect of the creation of resilient cities is the construction of physical infrastructure that has the capacity to absorb the shocks and stresses created by extreme weather events. Climate change is putting pressure on infra-

structure that is already overtaxed from deferred maintenance, population growth and development.[82] As municipalities plan, design, and implement sustainable infrastructure projects, they need to consider the impact of extreme weather and natural disasters on the city's physical infrastructure in order to build resilience.

Moving the cities agenda forward: The core challenge of governance

There is a growing consensus that good governance is crucial to developing, maintaining, and restoring sustainable and resilient services and social, institutional, and economic activity in cities.[83] Many city governments are weakened due to limited power and responsibility over key public services, including planning, housing, roads and transit, water, land-use, drainage, waste management and building standards. As shown in Chapters 1, 6 and 8, city governments also often lack the power to raise the revenues to finance infrastructure and build more sustainable and resilient cities. When governance capacity is weak and constrained, cities are limited in their abilities to take programmatic action on climate change mitigation and adaptation. The multiple forms of risk and vulnerability in cities call for more integrated approaches, combining established policies (urban governance, planning and management) with additional policy leverage, powers and responsibilities for local government.[84]

Sustainable, resilient and inclusive cities are often the outcome of good governance that encompasses effective leadership; land-use planning; jurisdictional coordination; inclusive citizen participation; and efficient financing. Strong effective leadership is critical for overcoming fragmentation across departments, multiple levels of government and investment sectors when building consensus and eliciting action on specific agendas. Land-use planning across these broad urban regions is another key criterion for effective governance. Territorial and spatial strategies are central in addressing climate change risks and building effective mitigation and adaptation strategies. Coordination across the metropolitan area is fundamental not only in areas such as land, transport, energy, emergency preparedness, and related fiscal and funding solutions, but in addressing issues of poverty and social exclusion through innovative mechanisms of inter-territorial solidarity.[85]

A critical aspect of the creation of resilient cities is the construction of physical infrastructure that has the capacity to absorb the shocks and stresses created by extreme weather events

Sustainable, resilient and inclusive cities are often the outcome of good governance that encompasses effective leadership; land-use planning; jurisdictional coordination; inclusive citizen participation; and efficient financing

Including stakeholders in the urban planning process is critical to creating liveable, sustainable cities, where citizens are active players in determining their quality of life. Including stakeholders in the design of infrastructure, urban space and services legitimizes the urban planning process and allows cities to leverage their stakeholders' expertise.[86] Finance, however, can be a major impediment to effective governance (Chapters 1, 6 and 8). Municipal governments around the world are increasingly looking for new and innovative ways to finance sustainable projects. Consequently, partnership with the private sector is increasing since the private sector has capital not available to the public sector.

2.4
The Transformative Power of Connected Cities

Over the last two decades, the transformative power of urbanization has, in part, been facilitated by the rapid deployment of Information and Communications Technology (ICT), and by a revolution in city data to inform decision-making and propel a global movement to smart cities. This has been accompanied by deeper connectivity and networking of cities and citizens at both the local and global levels.

Cities have to contend with a wide range of challenges— from crime prevention, to more efficient mobility, to creating healthier environments, to more energy efficient city systems, to emergency preparedness among others. To address these challenges, ICT, the Internet of Things— or networked connections in cities and data— are deployed to improve service delivery and quality of life. The use of data allows cities to measure their performance and to re-inform investments in city infrastructure. Cities are increasingly relying on metrics and globally comparable city data to guide more effective and smarter city decision-making that build efficiencies in city budgets.

ICT and sustainable urban development

Central to the communications revolution is the deployment of ICT in cities. High-quality infrastructure, innovation, investment, well-connected firms, efficiencies in energy and budgets, are often cited as ICT-driven benefits to cities. However, the potential consequences of this deployment are yet not well understood. When ICT is deployed unevenly in cities, it can create a *digital divide*— which can exacerbate inequality, characterized by well-connected affluent neighbourhoods and business districts coexisting with under-serviced and under-connected low-income neighbourhoods. The affluent tend to have greater access to these technologies, and ICT can often serve to extend their reach and control while curbing that of the more socioeconomically marginalized residents.

Over the past two decades, the growth and expansion of mobile networks has been extensive (Figure 2.5) and overtaken most predictions, changing the course of development for the post 2015 era. According to the Ericsson Mobility Report, the total number of mobile subscriptions in the third quarter of 2015 was 7.3 billion, with 87 million new subscriptions.[87] For the vast majority

Over the last two decades, the transformative power of urbanization has, in part, been facilitated by the rapid deployment of ICT

Figure 2.5: Global ICT developments (2005-2015)

Source: ITU World Telecommunication /ICT Indicators database, last accessed 16 March 2016.

Mobile-cellular subscription
Individuals using the internet
Active-mobile broadband subscription
Fixed telephone subscription
Fixed (wired)-broadband subscription
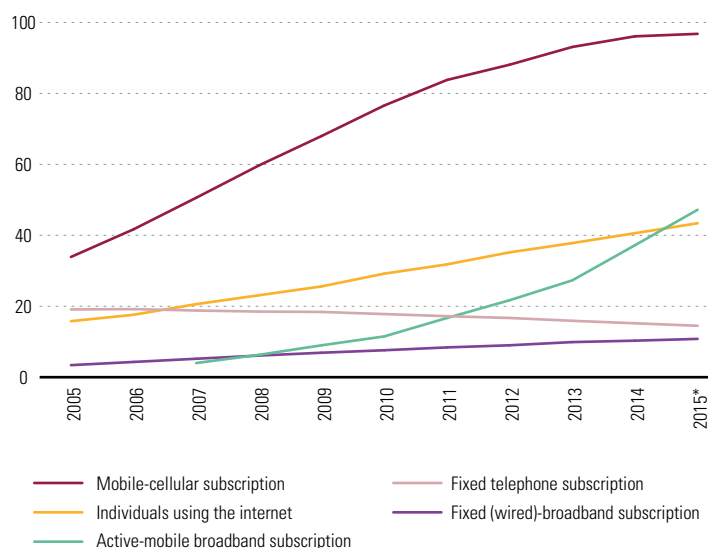
For the vast majority of low-income population in developing countries, mobile telephony is likely to be the sole connectivity channel

As a transformative force, the deployment of ICT in cities supports innovation and poverty eradication, by promoting efficiencies in urban infrastructure leading to lower cost city services

of low-income population in developing countries, mobile telephony is likely to be the sole connectivity channel.[88] Although an affordable and reliable Internet is not yet a reality for the majority of people in the world, the network, both in terms of infrastructure and content, has grown rapidly since inception, spurring enormous innovation, diverse network expansion, and increased user engagement in a virtuous circle of growth. The number of Internet users stood at one billion in 2005 and two billion in 2010, reaching over three billion by 2015.[89]

As a transformative force, the deployment of ICT in cities supports innovation and poverty eradication, by promoting efficiencies in urban infrastructure leading to lower cost city services. In some cases, urban economies are able to leapfrog stages of development by deploying new technologies in the initial construction of infrastructure. Cities like Hong Kong and Singapore are notable examples of economies that were able to make this leap by digitizing their infrastructure.[90] Box 2.3 shows how the city of Kigali in Rwanda is providing internet connectivity to its residents via the public bus system. In 2010, Curitiba, Brazil was the first city in the world to connect public buses to a 3G mobile-broadband network. Such innovation opened up new possibilities for traveler services that helped commuters plan their route and enabled them to purchase tickets wherever and whenever it is most convenient.[91] Cities worldwide, such

as Chicago, London, and Vancouver are implementing digital inclusion programs to ensure that all citizens have the tools to thrive in an increasingly digitalized world. As cities depend increasingly on electronic information and technology for their functioning and service delivery, city leaders are proceeding with caution to avoid an unequal distribution of ICT and to examine ways to bridge the digital divide.

The evolution of data in cities

Local governments have come under increased pressure to collect and monitor data in connection with governance, infrastructure, urban planning, services, the economy, health, education, safety and the environment. Performance measurement has become fundamental if policymakers and planners are to make evidence-based decisions. At the other end of the process, data collection enables cities to assess and benchmark performance.

Data-driven decision-making has evolved over time,[92] due to advancements such as performance indicators, big data, data analytics, machine learning, predictive metrics and geo-spatial measurement. Data is essential for evidenced-based policymaking and effective investment in and management of infrastructure in a city. Comparative analysis and knowledge sharing is crucial to respond to emerging global challenges the associated demand for sustainability planning, resilience and emergency preparedness.[93] The Internet has played a significant role in increasing the data availability for cities and the speed at which it is collected.

The rapid pace of city growth requires comparable high-quality city data and indicators, which are essential for effective leadership and decision-making. International standards bodies, such as the International Electrotechnical Commission, the International Organization for Standardization (ISO) and International Telecommunication Union have begun to address the pressing cities agenda with work ranging from smart grids and smart city infrastructure, to international telecommunications and management systems. Additionally, the ISO Technical Committee for the Sustainable Development of Communities is developing a new series of international standards designed for a more integrated approach to sustainable development and resilience. Among these standards is ISO 37120: *Sustainable Development of Communities— Indicators for City Services and Quality of Life,* which is the first international standard on city indicators.[94] Box 2.4 illustrates how cities under the World Council on City

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Box 2.3: Smart Kigali: Connecting 400 buses to 4G Internet

As part of the broader Smart Kigali initiative, 487 buses belonging to Kigali Bus Services were connected to 4G broadband network in February 2016. This has allowed passengers on board have full access to free super-fast internet. This makes Kigali the first city in Africa to provide citizens with the free wireless internet in public transport.

The initiative comes after the City of Kigali in partnership with the Ministry of Youth and ICT and other stakeholders launched the Internet Bus Project in 2015, which will see all buses not only within Kigali, but also across the country offer internet to passengers. Following the launch of the project, last year, five buses were connected as a pilot project before the general roll out.

The Smart Kigali initiative has seen the start of the implementation of the 4G solutions for the benefit of general population in Rwanda, and the aim is to scale up broadband adoption in the country.

Source: Bizimungu, 2016.

Data (WCCD) network are using standardized indicators from ISO 37120 to compare their performance, exchange knowledge and share solutions.

In response to decision-makers' demand for measurement tools, UN-Habitat developed the City Prosperity Index in 2012, which advocates for a broader understanding of prosperity in cities, taking in six criteria: productivity, quality of life, infrastructure, equity, environmental sustainability and governance. The broader City Prosperity Initiative provides cities with locally adapted monitoring capabilities and the possibility to devise indicators and baseline information.[95]

Open data

Open Data is significantly transforming the way local governments share information with citizens, deliver services and monitor performance. The system enables public access to information and more direct involvement in decision-making. The Urban Open Data movement aims to foster understanding of government information by the average citizen and is driven by commitments to transparency and accountability.[96]

In the US, New York, San Francisco, Chicago, and Washington, DC, have been at the forefront of the movement.[97] Other cities around the world are also now emerging as leaders. In Helsinki, data is released and managed through the city's Urban Facts agency, in collaboration with neighbouring municipalities, who in turn release regional data through Helsinki Region Infoshare.[98] In New York, businesses are leveraging open data to disseminate various types of information from public transport schedules and delays to crime statistics to healthcare services.[99] In the UK, the Greater London Authority has set up London DataStore, a free and open data-sharing portal where people can access over 500 datasets for a better understanding of local issues and possible solutions.[100] Opening up data enables local governments to support innovative business and services that deliver social and commercial value.

Big data

With Big Data and the Internet of Things, city leaders are gaining more detailed, real-time picture of what is happening within their city. The Internet of Things is reaching a tipping point. As more people and new types of information are connected, Internet of Things becomes an Internet of Everything— a network of networks where billions of connections can create unprecedented opportu-

nity for cities. Notably, the volume of digital data is almost doubling every two years.[101] Moreover, the increasing use of Geographical Information Systems allows spatially referenced data from diverse sources to be linked, thus providing a clear picture of what is going on within cities. In Santander (Spain), solid waste, parking spaces, air pollution and traffic conditions are monitored through 12,000 sensors installed around the city, providing city officials real-time information on service delivery.[102]

Today, smartphone tools and apps proactively provide citizens with useful contextualized information, while supercomputers are able to query vast quantities of unstructured data and suggest solutions to more complex

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Box 2.4: An open data portal for cities and globally standardized city data

The World Council on City Data (WCCD) is the worldwide leader in standardized city metrics and is implementing its dedicated standard in many regions. Formally known as *ISO 37120: Sustainable Development of Communitie— Indicators for City Services and Quality of Life*, the WCDD standard is a set of 100 worldwide comparative indicators that enable municipalities to track annual performance and benchmarking data across 17 different categories. Most importantly, ISO 37120 is a demand-led standard, driven and created by cities, for cities.

In 2014, the WCCD devised the first international certification system and Global Cities Registry™ for ISO 37120, which provides a consistent and comprehensive platform for standardized urban metrics. The WCCD hosts independently verified ISO 37120 data on its Open City Data Portal, which displays data using cutting-edge visualizations and customized trend analyses, and enables cross-city comparisons.

The first 20 cities to become ISO 37120-certified and added to the WCCD Global Cities Registry™ include: Amman, Amsterdam, Barcelona, Bogotá, Buenos Aires, Boston, Dubai, Guadalajara, Haiphong, Helsinki, Johannesburg, London, Los Angeles, Makati, Makkah, Melbourne, Minna, Rotterdam, Toronto, and Shanghai. The ISO 37120 Standard and the World Council on City Data can offer accurate independently certified data to support measurement of cities' progress against Sustainable Development Goal 11 ("Making cities and human settlements inclusive, safe, resilient and sustainable").

Source: www.dataforcities.org, last accessed 28 April 2016.

Open Data is significantly transforming the way local governments share information with citizens, deliver services and monitor performance

Today, smartphone tools and apps proactively provide citizens with useful contextualized information

problems. In Los Angeles, software developed by the city is processing big data to address traffic congestion. Using magnetic sensors, real-time updates on traffic flow are transmitted, with simultaneous data analysis making second-by-second adjustments possible to avoid bottle-necks.[103]

Smart cities

The ever-increasing application of data and the Internet of Things is supporting a much more collaborative relationship between city governments, citizens, and businesses. This trend is driving the smart cities phenomenon worldwide. The definition of a smart city continues to evolve, but a consistent component is the application of ICT and the Internet of Things to address urban challenges. Many conceptual frameworks of smart cities also consider sustainability, innovation, and governance as important components in addition to the application of ICT. The International Telecommunication Union defines a smart sustainable city as "an innovative city that uses information and communication technologies and other means to improve quality of life, efficiency of urban operation and services, and competitiveness, while ensuring that it meets the needs of present and future generations with respect to economic, social, environmental as well as cultural aspects."[104]

A smart city can guide better decision-making with respect to prosperity, sustainability, resilience, emergency management, or effective and equitable service delivery. The city of Rio de Janeiro collaborated with IBM, to create a municipal operations centre that combines data and information from city and state agencies, and private utility and transportation companies to collaborate on logistics and management challenges. The city, faced with growing concerns in flooding and traffic gridlock, can now monitor data and provide citizens with important information via mobile phones and other warning systems.[105] Barcelona is a leading smart city for its application of innovative solutions aimed at improving city services and the quality of life of its citizens. Barcelona's smart city model aims "to use ICT in order to transform the business pro-

cesses of public administration…to be more accessible, efficient, effective and transparent."[106] Singapore has also been at the forefront of the smart city movement; its Smart Nation Programme seeks to harness ICT, networks and data to support better living, create more opportunities, and to support stronger communities.[107] Singapore was the first city in the world to introduce congestion pricing and now by using more advanced systems, can analyse traffic data in real time to adjust prices.[108] Technology solutions and the effective use of data are providing city leadership with new tools and opportunities for effective change.

Estimates show that the global smart city market will grow by 14 per cent annually, from US$506.8 billion in 2012 to US$1.3 trillion in 2019.[109] Over the next two decades, city governments in the US will invest approximately US$41 trillion to upgrade their infrastructure and take advantage of the Internet of Things.[110] With China's cities projected to grow by 350 million people over the next 20 years, investment in smart cities is expected to exceed US$159 billion in 2015 and US$320 billion by 2024.[111] In 2014, India announced plans to build 100 smart cities in response to the country's growing population and pressure on urban infrastructure.[112] In order to realize the potential of ICT towards sustainable development, an enabling environment has to be created, with participatory governance models, the right infrastructure and technical platforms, including capacity building, ensuring inclusion and bridging the digital divide.[113]

Estimates show that the global smart city market will grow by

14% annually,

from US$506.8 billion in 2012 to US$1.3 trillion in 2019

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03

The Fate of Housing

QUICK FACTS

1 Over the last 20 years, housing has not been central to national and international development agendas.

2 The housing policies put in place through the enabling approach have failed to promote adequate and affordable housing.

3 Most involvement by governments has focused on helping the middle class to achieve home-ownership in a formal sector that only they can afford.

4 The slum challenge continues to be one of the faces of poverty in cities in developing countries. The proportion of slum dwellers in urban areas across all developing regions has reduced since 1990, but the numbers have increased gradually

POLICY POINTS

1 If the emerging future of cities is to be sustainable, a new approach that places housing at the centre of urban policies is required.

2 UN-Habitat proposes a strategy that places *housing at the centre of the new urban agenda* and seeks to reestablish the important role of housing in achieving sustainable urbanization.

3 At the national level, the goal is to integrate housing into national urban policies and into UN-Habitat's strategic thinking on planned urbanization.

4 At the local level, the importance of housing must be reinforced within appropriate regulatory frameworks, urban planning and finance, and as part of the development of cities and people.
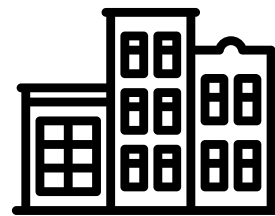
Housing accounts for more than **70%** of land use in most cities and determines urban form and densities, also providing employment and contributing to growth.

With the **"Housing at the Centre"** approach, UN-Habitat seeks to re-establish housing problems and opportunities in the international development agenda in an increasingly strategic manner and in relation to the future of urbanization.

Housing shortfalls represent a challenge

> In 2010, as many as **980 million** urban households lacked decent housing, as will another **600 million** between 2010 and 2030.

> **One billion** new homes are needed worldwide by **2025**, costing an estimated **$650 billion** per year, or **US$9-11 trillion** overall.

> In addition, shortages in qualitative deficiency are much larger than those in quantity.

Number of urban residents living in slums

Year		
1990		689 million
2014		881 million

This represents an increase of

28%

over the past 14 years.

- Still, in 2014, **30 %** of urban population of developing countries resided in slums compared to **39 %** in the year 2000.

KEY TRENDS WITH RESPECT TO THE PROVISION OF ADEQUATE HOUSING

The decline of housing as a political priority despite increasing demand

Inequality, focus on home-ownership, speculation and neglect of rental housing

Increasing reliance on the private sector

Affordability: an increasingly elusive concept

Land administration and management

Migration: positives and negatives for housing supply

Climate change and disasters

The "emerging futures" of cities will largely depend on whether urban housing is cast in decent buildings or in loads more unsustainable, ramshackle shelter. Housing determines the mutual relationship between every single human being and surrounding physical and social space. This involves degrees of exclusion or inclusion in terms of collective and civic life which, together with socioeconomic conditions, are the essence of urban dynamics. That is why the fate of housing will largely determine the fate of our cities. The sustainable future of cities and the benefits of urbanization strongly depend on future approaches to housing.

Housing accounts for more than 70 per cent of land use in most cities and determines urban form and densities, also providing employment and contributing to growth.[1] That it has not been central to government and international agendas over the last 20 years is evident in the chaotic and dysfunctional spread of many cities and towns. Since 1996, in Europe and the US, housing has become more of an asset for investment than a place to live, but when the property bubble burst in 2007-08, housing investment stalled in many countries, despite soaring demand, and trust in the market was severely dented. In the face of unprecedented urbanization and population growth many cities developing and emerging have accrued huge housing shortages. This chapter reviews the housing sector since Habitat II in 1996 and offers ways forward.

3.1
An Enabling Approach for Some, but Disabling for Many

The Global Strategy for Shelter to the Year 2000 (GSS)[2] and the enabling approach[3] have dominated housing policies since Habitat II and the 1996 Habitat Agenda, which rests on two pillars: housing for all, and sustainable human settlements in an urbanizing world.[4]

The enabling approach reflected the predominant market-led political and practical thinking of the late 1980s: governments must take care of the elements of housing supply they could control or handle best. They were to focus on the regulatory framework, and five housing-related markets: land, finance, infrastructure, the construction industry/labour, and building materials,[5] eradicating bottlenecks and optimizing housing sector performance (Table 3.1). The private sector, communities and households were to take over the supply side. Government was to remain active only in a different way— enabling instead of doing.[6]

The enabling approach was soon reinforced by Agenda 21, Chapter 7 of which promoted sustainable urban development. Further international policy on housing followed in the Millennium Goals included two housing-related targets: 7c and 7d, [7] and more recently, the 2030 Agenda for Sustainable Development with Target 11.1 (Table 3.2). In 2005, the need for urgent action against future formation of slums was recognized.

Masons work at a new condominium at Sao Bartolomeu, a low-income neighborhood in Salvador, Bahia. Hundreds of families who were constantly exposed to floodings and landslides will be relocated to the new buildings.

Source: Mariana Ceratti/ World Bank, CC BY 2.0, https:// creativecommons.org/licenses/ by/2.0/legalcode

Table 3.1: **The do's and don'ts of enabling housing markets to work**

Source: World Bank, 1993.

Instrument	Do	Don't
Developing property rights	Regularize land tenure Expand land registration Privatize public housing stock Establish property taxation	Engage in mass evictions Institute costly titling systems Nationalize land Discourage land transactions
Developing mortgage finance	Allow private sector to lend Lend at positive/market rates Enforce foreclosure laws Ensure prudential regulation Introduce better loan instruments	Allow interest-rate subsidies Discriminate against rental housing investment Neglect resource mobilization Allow high default rates
Rationalizing subsidies	Make subsidies transparent Target subsidies to the poor Subsidize people, not houses Subject subsidies to review	Build subsidized public housing Allow for hidden subsidies Let subsidies distort prices Use rent control as subsidy
Providing infrastructure for residential land development	Coordinate land development Emphasize cost recovery Base provision on demand Improve slum infrastructure	Allow bias against infrastructure improvements Use environmental concerns as reasons for slum clearance
Regulating land and housing development	Reduce regulatory complexity Assess costs of regulation Remove price distortions Remove artificial shortages	Impose unaffordable standards Maintain unenforceable rules Design projects without link to regulatory/institutional reform
Organizing the building industry	Eliminate monopoly practices Encourage small firm entry Reduce import controls Support building research	Allow long permit delays Institute regulations inhibiting competition Continue public monopolies
Developing a policy and institutional framework	Balance public/private sector roles Create a forum for managing the housing sector as a whole Develop enabling strategies Monitor sector performance	Engage in direct housing delivery Neglect local government role Retain financially unsustainable institutions

Table 3.2: **Housing and development goals**

Source: UN-Habitat 2006; United Nations, 2015a.

Goal	Target
MDG Goal 7: Ensure environmental sustainability	Target 7c: Halve, by 2015, the proportion of people without sustainable access to safe drinking water and sanitation
	Target 7d: By 2020, to have achieved a significant improvement in the lives of at least 100 million slum dwellers
SDG Goal 11. Make cities and human settlements inclusive, safe, resilient and sustainable	11.1: By 2030, ensure access for all to adequate, safe and affordable housing and basic services and upgrade slums

3.2
Review of Existing Housing Provision

Needs and demand

The world's urban population has soared from 2.6 billion (45 per cent of the whole) in 1995 to 3.9 billion (54 per cent) in 2014.[8] With urban populations expanding at unprecedented rates since 1996, it is perhaps unsurprising that many cities are falling short in housing supply. UN-Habitat's estimates show that there are 881 million people currently living in slums in developing country cities[9] compared to 792 million in the year 2000 – and all the while the enabling approach has been in force. By 2025, it is likely that another 1.6 billion will require adequate, affordable housing.[10] This should come as a wake-up call to governments, urging them to act determinedly to enable access to housing for all urban residents.

In reality, one and the same bias has been at work across the world: middle-class formal home-ownership has been systematically "enabled", but ever-growing numbers of poor citizens have been durably "disabled" from access to adequate housing, remaining confined in single-room or informal housing, not to mention sheer homelessness. While many of the world's richest countries have significant over-provision of housing, in Eastern and Central Europe[11] and in developing countries, shortfalls of formal housing tend to be very large at present[12] and even larger going forward. In South Asia, housing shortfalls are particularly acute amounting to 38 million dwellings.[13] Furthermore, while housing for the middle class may be over-provided in many cities, the poor are generally under-housed. Over-supply for the middle classes can result in many empty dwellings (Box 3.1).

Box 3.1: Biased housing supply in China

China has eschewed the enabling approach in favour of robust top-down housing supply in support of massive rural migration and rapid industrialization since the mid-1990s. In 1997, 79 million square metres of new urban housing were built, and over four billion square metres between 2000 and 2010, or more than twice as much as needed to keep up with population growth. By 2011, annual production had reached almost one billion square metres, the unit price of which had, however, soared 179 per cent as building heights increased, standards improved and a property bubble began.

In 2011, the government of China also started to build 36 million subsidized dwellings in response to the lack of affordable housing. Despite its good intention, government's housing programmes are affordable to only 20 per cent of households at the average price and commentators report 64.5 million empty apartments (20 per cent of all dwellings) by 2010, alongside a lack of stock available to most households. Many of the empty apartments are in "ghost cities." At the same time, much of the cheapest housing in city centres is being cleared and its occupants expected to transfer to more costly high-rise apartments at the edge of cities.

Sources: Ying et al., 2013; UN-Habitat, 2013a; López and Blanco, 2014; Chang and Tipple, 2009.

Reflecting long-standing biased supplies, today the informal sector provides 60-70 per cent of urban housing in Zambia,[14] 70 per cent in Lima, 80 per cent of new housing in Caracas,[15] and up to 90 per cent in Ghana.[16] Such housing usually has at least some of the characteristics that UN-Habitat uses to define slums; poor physical condition, overcrowding, poor access to services, and poor access to city functions and employment opportunities.[17] There are also many, but unknown numbers of, people who live "on the street" individually, in groups, or as families.[18] This is not limited to countries with poor housing supply.[19]

In South Asia, housing shortfalls are particularly acute amounting to

38 million
dwellings

The informal sector provides

60-70%
of urban housing in Zambia, 70 per cent in Lima, 80 per cent of new housing in Caracas, and up to 90 per cent in Ghana.

The importance of housing for Habitat III

"For too long we have put the economy and jobs at the centre of city planning and development. People are what make cities and they would follow the jobs. It is now necessary to think about people's needs, including where they will live, and put them at the centre of city development."[20] **(Joan Clos, Executive Director of UN-Habitat).**

Housing is where successive generations find shelter to keep healthy, develop, socialize, be educated and prepare for fulfilling adult lives. In this sense, housing speaks to every dimension of personal human development, hopefully generating a double sense of identity and social belonging. Both are essential to sustainable cities and their participatory governance. If the "emerging futures" of our cities are to become sustainable, then the housing conditions of one billion slum residents must become sustainable, too.

Given that housing has slipped from the development agenda since 1996, housing shortfalls represent a challenge that is hard to measure. In 2010, as many as 980 million urban households lacked decent housing.[21] Another estimate shows that one billion new homes are needed worldwide by 2025, costing an estimated US$650 billion per year, or US$9-11 trillion overall.[22] In addition, shortages in quality are much larger than those in quantity; in Latin America, 61 and 39 per cent respectively.[23] This suggests that long-term international vision and commitment are overdue to turn housing into an integral part of planned urbanization.[24] This is why the Global Housing Strategy calls for accurate forecasts of housing needs, including improvements to inadequate, derelict and obsolete housing stock, which form the qualitative deficit.[25]

There is a general acknowledgement that enabling the market has failed to provide affordable, adequate housing for the predominant low-income households in the rapidly urbanizing parts of the world. Besides, at the dawn of 2016, many serious challenges face the housing sector. These include rapid urbanization, urban poverty, rising levels of inequality, the impact of unprecedented immigration, HIV/AIDS and environmental concerns. Given the daunting proportions of both the policy failure and the challenges around the world, housing must become a major part of international policy and the development agenda in the future. That is why UN-Habitat is proposing an

approach that places housing at the centre of the new urban agenda, as detailed later in this chapter.

3.3
Key Trends with Respect to the Provision of Adequate Housing

This section focuses on the main shortcomings of the enabling approach as it relates to government housing policies.

The decline of housing as a political priority despite increasing demand

Housing has been a major investment in developed and emerging countries during the last 20 years. Over-supply has been fuelled by economically destructive speculation in Ireland and Spain, and has resulted in wasted capital in China. At the same time, some developed countries have accrued substantial shortfalls as a result of poor policies (Table 3.3).

Brazil, Ethiopia, India, Malaysia, Singapore and countries in the Middle East and North Africa have continued to be very hands-on in supply, generating large numbers of apartments for low- and middle-income households. However, since the mid-1990s, housing for the poor majority has had a low priority in most developing countries, as most have reduced their housing activity. Most involvement by governments has been focused on helping the middle class to achieve home-ownership in a formal sector that only they can afford.

At the same time, since 1992, the World Bank made a major shift from pro-poor housing investment, in slum upgrading plus sites and services schemes, to focusing on housing finance, institutional strengthening and shelter-related disaster relief. Its focus has swung from poor to middle income countries, from small to larger loans, from sites and services or slum upgrading to mortgage refinancing.[26]

Given that housing has slipped from the development agenda since 1996, housing shortfalls represent a challenge that is hard to measure

There is a general acknowledgement that enabling the market has failed to provide affordable, adequate housing for the predominant low-income households in the rapidly urbanizing parts of the world

Table 3.3: Factors impeding housing supply in selected developed countries

Source: Lawson, 2012.

Supply-side issues	Examples
Reduction of low-cost supply	
The sale of social housing for ownership	UK, the Netherlands
Low production of social housing	Australia, Canada, the Netherlands
End of taxation incentives for new investment	Germany, recently the Netherlands
Development	
High cost of land and speculative practices	Belgium, New Zealand, Ireland, the Netherlands, US, Australia
Complex and lengthy planning approval processes	UK, the Netherlands, New Zealand, Australia
Lack/ high cost of infrastructure	UK, the Netherlands, Australia
Non-strategic approach to land use planning and land release	Ireland
Constraints on land release (e.g. urban containment policies)	The Netherlands
Community opposition to residential development and higher densities	UK
Structure and restructuring of housing stock	
A relatively high rate of demolition to new supply and investment in urban renewal	The Netherlands
Conversion of lower-cost rental housing to ownership	UK, The Netherlands, Australia
Oversupply due to major population shifts from economically weak regions	Germany
Urban decay and oversupply of poor quality dwellings	US, France, Germany
Market inefficiency	
High costs of construction	Denmark, Switzerland, The Netherlands
Low rents or expected rates of return from new building development	Denmark, Canada, Switzerland

Inequality, focus on home-ownership, speculation and neglect of rental housing

For majority of the world's inhabitants, income inequalities are currently more pronounced than they were a generation ago (Chapters 1 and 4). More than two-thirds of the world's population resides in cities where income inequalities have increased since 1980.[27] This inequality has often been increased by housing practices and policies, despite the focus on adequate housing for all. Since 1996, housing inequality has developed between generations in Europe and elsewhere; the post-1945 generation own their own homes whilst the younger generation have been unable to afford dwellings that their parents could afford. Many young professionals in developed countries are now relying on Houses in Multiple Occupancy where their parents would have bought a dwelling for themselves.

The ownership of one's own home is a widespread ambition and is the focus of most national housing policies. Throughout the world, governments have sought to encourage owner-occupation of fully-serviced single-household dwellings but, in Asia, Africa and Latin America, this has often only been feasible for the middle- and high-income groups. The World Bank's change of focus has also pointed international agendas towards increasing home-ownership. Even governments of developed coun-

tries have focused assistance on home-ownership while most households could only afford social rental housing or living as renters or owners in the informal sector. In such a context, people with special needs are pushed further towards, and even beyond, the fringes of housing supply.[28] Where housing finance has been applied, it has tended to be through mortgages directed to formal dwellings for the middle class and contingent on a down payment.

Under the enabling approach, help to the construction industry has tended to encourage housing for the middle classes. There has been almost no parallel help at the lower end of the housing market. The privatization of institutional housing has been a popular strategy among governments and local authorities not only to increase home-ownership but also to encourage labour mobility.[29] It has resulted in very high ownership rates, especially in Eastern and Central European countries, with only Poland and Czech Republic having less than 75 per cent home-ownership.[30]

Over the last 20 years, housing has attracted a lot of speculative investment driving prices up. In Korea, housing price inflation of 20 per cent per year attracted capital but greatly reduced affordability.[31] Speculation in housing often leads to high vacancy rates in Las Vegas,[32] Shanghai, Beijing, and Bangkok.[33] In Ireland, for example, there are 14,000 empty dwellings scattered across the Republic, including 700 so-called "ghost estates." Most
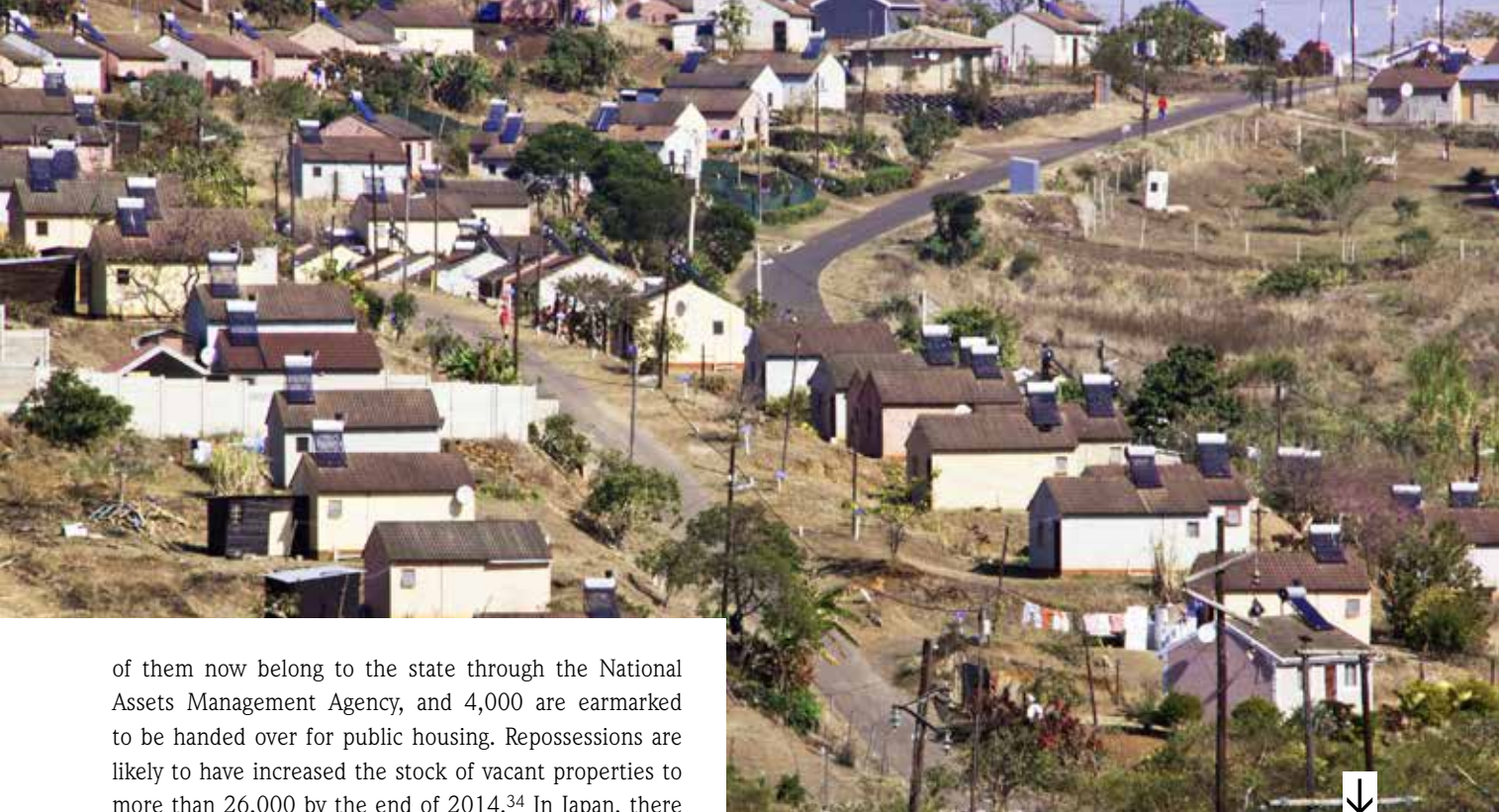
Low cost township houses fitted with solar heating panels in Verulum, Durban, South Africa, 2014.

Source: Icswart / Shutterstock.com

of them now belong to the state through the National Assets Management Agency, and 4,000 are earmarked to be handed over for public housing. Repossessions are likely to have increased the stock of vacant properties to more than 26,000 by the end of 2014.[34] In Japan, there were some 8.2 million or one in seven vacant dwellings nationwide in October 2013.[35]

One of the effects of focusing on increasing home-ownership has been that rental housing has fallen from favour and has had little enablement even though a growing proportion of low-income urban households in many countries are renters. Young and low-income households find renting both convenient and affordable. It allows job mobility, provides many women-headed households with accommodation and allows many older people to raise income from their housing by renting out rooms no longer needed for a grown-up family.[36] Even where rental housing programmes have been directed specifically at low-income households, e.g. in China, their contribution to low-income housing has been disappointing.[37]

Increasing reliance on the private sector

As the state has shrunk in so many developing countries, the private sector has been left to take up the initiative in formal housing supply, which in reality mostly provided just for the more profitable and solvent top few per cent of the population, with privileged access to services and in the best location. At the lower income levels, in developing countries, it is the informal private sector through partnerships between households and local artisan builders that continues to provide most housing, usually in tandem with informal land sub-dividers or customary owners as in the case of Sub-Saharan Africa.

Neither the formal nor the informal private construction sector has any housing solution for the 20-30 per cent of the population with the lowest incomes.

The private sector is also ineffective in crisis or emergency conditions. These accommodation issues probably need subsidies of some form, or state-provided housing.[38] In those developed countries with a strong focus on owner-occupation, the private rental market has provided housing for the poor and vulnerable but it tends to have been of poor quality.[39]

Affordability: an increasingly elusive concept

Affordable housing has been the core concern of the enabling approach. Affordable generally means housing expenditure of no more than 30 per cent of household income to one that ensures that a household has sufficient left for non-housing in addition to housing expenditure. [40]

In developed and transitional countries, affordable means housing cost at no more than 30per cent of expenditure at, or at 80 per cent of, that of the median household's income.[41] In 2009, however, as house costs continued to rise against incomes, the proportion effectively rose to 40 per cent or more for 12 per cent of households in the European Union. This proportion doubled for private renter households.[42] In the US, in 2006, one in seven households spent more than half their income on housing; in Italy 42 per cent of households are financially stressed over housing.[43] In developed countries since the 2008 financial crisis, hundreds of thousands of homes have been repossessed or subject to foreclosure.[44] State of affordability in Latin America and the Caribbean is described in Box 3.2.

Over the last 20 years, housing has attracted a lot of speculative investment driving prices up

One of the effects of focusing on increasing home-ownership has been that rental housing has fallen from favour and has had little enablement even though a growing proportion of low-income urban households in many countries are renters

Box 3.2: House prices go through the roof in Latin America and the Caribbean

Formal housing in Latin America and the Caribbean is expensive. The relationship between price and income can be up to three times greater than in the US. This becomes even more serious given the higher incidence of poverty and informality in a region where close to one-third of households are poor and 57 per cent of urban workers are informal. Urban inequality further contributes to this panorama.

For about 20 per cent of households in the 18 most representative countries, access to a basic home of 40 square meters (price: US$15,000, with a 10 per cent down payment and a 20-year mortgage at six per cent interest) would cost more than the 30 per cent income. If considering those households that could pay but, in so doing, would fall below the poverty line, the proportion would rise to 22 per cent. If the current interest rates offered by the formal banking sector in each country were used instead of the six per cent assumed above, the number would rise to 24 per cent.

Source: Blanco et al., 2014.

Since 1996, housing supply systems have been so focused on large-scale production for sale to the extent that affordable rental accommodation has been neglected, pushing up rentals beyond the reach of young people in many European cities. Developed countries promote affordable housing through tax incentives for rental investment, public subsidies to leverage private investment, and greater reliance on the land use planning system to cater for housing needs and to generate opportunities for affordable housing. The rationale is to stretch limited public funds; increase construction output, retain crucial skills, stop the decline in rental accommodation and bridge the gap in affordable housing for those between social housing and unassisted home ownership.[45]

In developing countries, the focus of affordability has been on those who are just under the formal market rather than households at or below median income. Indeed, the owner-occupied housing that is affordable to households with 80 per cent of median income is generally built by the informal sector and cannot be provided formally.[46] Even in such success stories as Tunisia, where mortgage finance dominates formal housing demand, almost half the households cannot afford the cheapest mortgage.[47] In South Africa, the cheapest formal housing is unaffordable for 64 per cent of households.[48] In China, owners find moving to a better home difficult for lack of a proper secondary market where they can capitalize on current homes.[49]

Land administration and management

The enabling approach to land focused on developing property rights through regularizing land tenure, expanding both land registration and property taxation.[50] The first two favour expansion of formal housing finance (mainly through mortgages secured on land values), while the third recognizes that households should pay enough property tax to cover their use of urban resources.

In reality, land market policies since 1996 have only helped the wealthier groups in most developing countries, driving much of the housing price increases, and raising total housing costs.[51] In Bogotá, land makes up to half the cost of social housing.[52] Access to land and dysfunctional urban land markets remain one of the most pervasive constraints on the provision of adequate housing. Access to well-located land is an emerging challenge as deployment of large-scale pro-poor strategies is embraced: new low-income housing areas are located too far away from livelihoods and transport costs are prohibitive. A number of countries have postponed or abandoned structural reforms of land and housing laws and regulations overlooking land as a major input into the provision of housing services remains overlooked.

Often a complex business, land administration can add high transaction costs to residential development. One-stop shops and easier rules and procedures can make huge differences to development efficiency. Lesotho has reduced title registration delays from six years to 11 days.[53] However, extension of cadastral surveys to informal housing areas is expensive, inciting richer households to "raid" land and housing with new full land titles.[54] In many urban areas, however, less-than-complete title guaranteeing freedom from eviction may be more useful to lower-income owners than full legal title that can be traded on a market.[55] Furthermore, community-based titles can ensure security while discouraging raiding.[56]

Many governments have considerable land holdings either because all unallocated land has been ceded to them (as in Ethiopia), or because areas have been

> Since 1996, housing supply systems have been so focused on large-scale production for sale to the extent that affordable rental accommodation has been neglected, pushing up rentals beyond the reach of young people in many European cities.

specifically taken over for government uses. In Algeria, such land is sold at 80 per cent discount.[57] Privileged access to this land and the chance to build more cheaply thereon are often granted to developers who only supply the better-off among the population.

Several countries in Europe intervene in the land market to gather land together ahead of development and/or to ensure that the gain in value from conversion to residential use accrues to the public.[58] In many countries, the easy land to develop is peri-urban and agricultural, with attendant sustainability and food insecurity concerns, especially where fertile land is scarce.[59] "Brown-field" sites are usually developed for middle- and high-income housing, benefiting from location near the city centre or employment opportunities.[60]

Among other interventions, land readjustment schemes pool together formal and informal plots for development or rationalization of infrastructure and public spaces, while enhancing tenure security. This has happened in Germany, Japan, Korea, India, Nepal and Singapore. Land swaps also show potential but have not been adequately explored.[61] Where land regularization occurs, governments may reclaim some of the added value from properties, as in Colombia and the Dominican Republic.[62]

In Turkey, the housing agency (TOKi) acquires urban land from other government entities and works with private developers who build high-value housing and split the revenue. TOKi then uses its share to fund further land acquisition and allocates the land for "affordable" housing priced at about 30 per cent below market rates.[63]

Property taxes tend to be poorly collected in many developing countries. Although local governments have the right to value and extract tax from property, they tend not to do it and lose on revenues. Taxing idle land is not common but has been used in China and the Philippines in an effort to bring urban land into residential and other use.[64] Land title is often an important issue for people displaced by conflict. On return, they can find it difficult to prove ownership, especially if their stay has been protracted in the recipient county. In post-civil war Liberia, multiple claims are being made and fake title documents fabricated.[65] This is a problem that many refugees who fled Syria to Europe will have to contend with if they ever return.

Enabling efficient markets has often been less than successful where governments have retained interests in land. In China and Ethiopia, for many privately-supplied dwellings only rights of land use are transferred to occupiers. Any profit on subsequent sale passes back to the government. This depresses the propensity of owners to move, hindering the secondary market.[66]

Development of large-scale housing strategies may be challenging in cases where new low-income housing is located too far away from livelihoods, with the cost of transport being prohibitive. Moreover, a number of countries have postponed or abandoned structural reforms to the legal and regulatory environment of the land and housing markets. On the whole, policy-makers still overlook the importance of land as a major input into the provision of housing services, and that is why the UN-Habitat National Housing Sector Profiles emphasize it as a basic requisite if future housing needs are to be met.[67]

Migration: positives and negatives for housing supply

Dramatic increases in migration and financial flows have tended to raise housing demand and prices. High-end housing in London or Dubai, for instance, is seen as a safer haven for savings than banks. Significant cross-border worker remittances flow into housing markets in Egypt, Ethiopia, Liberia, Malawi, Nepal and Ghana.[68] In Latin America (Mexico, Colombia, Ecuador, Peru, El Salvador), housing finance systems have been set up specifically for remittance money.[69] Property companies in many African routinely advertise houses for sale or construction targeted at citizens working in Europe and North America.

The movement of millions of households within the Middle East and the unprecedented mass-migration into Europe since 2015 has increased pressure on housing supplies in the reception regions.

Climate change and disasters

Housing policies today cannot ignore the likely effects of climate change, with the attendant higher frequency and numbers of casualties, especially urban fringes where the poor in large numbers live at or below sea-level, or on steep slopes.

Energy for heating and lighting residential buildings significantly contributes to greenhouse gas emissions (Chapter 1 and 5). The production of cement generates about five per cent of global carbon dioxide emissions; indeed the manufacture of one ton of cement generates one ton of carbon dioxide.[70] At the same time, regardless of their enabling roles, public authorities discourage use of much more eco-friendly earth-based materials.

3.4

Ending Urban Poverty: Improving the Lives of Slum Dwellers

The slum challenge continues to be one of the faces of poverty, inequality and deprivation in many cities in developing countries.[71] UN-Habitat defines slums as a contiguous settlement that lacks one or more of the following five conditions: access to clean water, access to improved sanitation, sufficient living area that is not overcrowded, durable housing and secure tenure.[72] Slums are the products of failed policies, poor governance, corruption, inappropriate regulation, dysfunctional land markets, unresponsive financial systems, and a lack of political will.[73]

Improving the lives of slum dwellers has been recognized as one of the essential means to end poverty worldwide. The impetus for this comes from the targets of the successive global development agendas. Upgrading slums moves the world towards a rights-based society in which cities become more inclusive, safe, resilient, prosperous and sustainable. Improving the living conditions in slums is indispensable to guarantee the full recognition of the urban poor as rightful citizens, to realize their potential and to enhance their prospects for future development gains.

Collective action in different parts of the world has shown that living conditions in slums can be improved. The fact that 320 million people were lifted out of slum-like conditions between 2000 and 2014 demonstrates that it is possible.[74] This feat made it possible to achieve, and largely surpass the MDG slum target ahead of time. This represents a positive result, even though the shortcomings of the goal have to be acknowledged, since the target was estimated at less than 10 per cent of the number of slum dwellers in the world in 2000. This achievement should motivate countries to dedicate more resources to upgrade and prevent the formation of slums.

A lasting solution to the challenge of slums can only be achieved through concerted efforts of all stakeholders. It is important to create an inclusive environment that encourages the commitment of the authorities and the engagement of the concerned communities to enhance a better understanding of the slum challenge. Similarly, a city-wide approach to slum upgrading is a more sustainable than piecemeal improvements. This makes it possible for the physical, social, legal and economic integration of slums into the public planning and urban management systems that govern cities.

Although the proportion of the urban population residing in slums today is lower than it was some two decades ago (Figure 3.1), the absolute number of slum dwellers continues to increase (Table 3.4). This clearly demonstrates the failure of cities to keep pace with urban growth.[75] Currently, one in eight people across the world live in slums. In developing countries, 881 million urban residents lived in these poor informal settlements in 2014[76] as against 689 million in 1990 (Table 3.4). This represents an increase of 28 per cent in the absolute numbers of slum

> *The slum challenge continues to be one of the faces of poverty, inequality and deprivation in many cities in developing countries*

> *Improving the lives of slum dwellers has been recognized as one of the essential means to end poverty worldwide*

> *Collective action in different parts of the world has shown that living conditions in slums can be improved. The fact that 320 million people were lifted out of slum-like conditions between 2000 and 2014 demonstrates that it is possible*

Figure 3.1: Percentage of urban population living in slums (1990-2014)

Source: UN-Habitat, Global Urban Observatory Urban Indicators Database 2015.

Legend: ● 1990 ● 1995 ● 2000 ● 2005 ● 2010 ● 2014
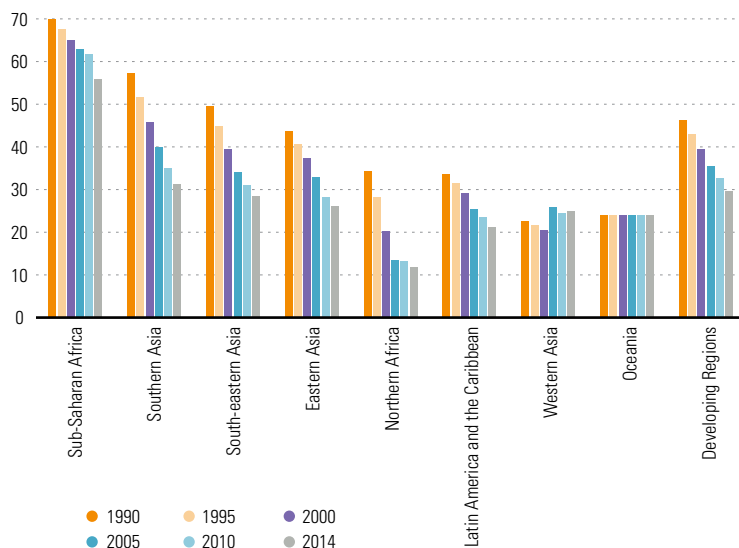
Table 3.4: Urban slum population at mid-year by region (thousands)

Source: UN-Habitat, Global Urban Observatory Urban Indicators Database 2015.

Region	1990	1995	2000	2005	2007	2010	2014
Developing Regions	689,044	748,758	791,679	830,022	845,291	871,939	881,080
Northern Africa	22,045	20,993	16,892	12,534	13,119.1	14,058.3	11,418
Sub-Saharan Africa	93,203	110,559	128,435	152,223	163,788	183,199	200,677
Latin America & the Caribbean	106,054	112,470	116,941	112,149	112,547	112,742	104,847
Eastern Asia	204,539	224,312	238,366	249,884	250,873	249,591	251,593
Southern Asia	180,960	189,931	193,893	195,828	196,336	195,749	190,876
South-eastern Asia	69,567	75,559	79,727	80,254	79,568	84,063	83,528
Western Asia	12,294	14,508	16,957	26,636	28,527	31,974	37,550
Oceania	382	427	468	515	534	563	591

dwellers over the past 14 years. In 2000, 39 per cent of the urban population in developing countries resided in slums; this declined to 30 per cent in 2014.

The percentage of slum dwellers in urban areas across all developing regions has reduced considerably since 1990, but the numbers have increased gradually since 2000 except for a steep rise of 72 million new slum dwellers in Sub-Saharan Africa. Sub-Saharan Africa alone accounts for 56 per cent of the total increase in the number of slum dwellers among developing regions between 1990 and 2014. Indeed, the number of slum dwellers in Sub-Saharan Africa has grown in tandem with growth in the region's urban population.

Despite the progress made in reducing the proportion of the urban population residing in slums, the time has come to deal with the *unfinished business* of slums, as implicitly recognize d in SDG Target 11.1: by 2030, ensure access for all to adequate, safe and affordable housing and basic services and upgrade slums.

Although developing countries have a large number of slums dwellers, it is also possible to observe the rising presence of housing deprivation and informality in the developed world.[77] Urbanization is closely associated with development; slum dwellers will be left behind in this process, if their concerns are not integrated into urban legislation, planning and financing frameworks. If the concerns and travails the urban poor remain ignored, then the 2030 Agenda for Sustainable Development will only be achieved partially, and in the process denying millions of urban residents the benefits of urbanization. The prevailing unplanned urban growth in the developing regions and the occurrence of housing informality and urban decay in the developed world need to be comprehensively addressed thought city-wide strategies where planning, urban economic development and laws and institutions would play a fundamental role.

UN-Habitat has proposed a strategy that *puts housing at the centre of the new urban agenda* meaning *at the centre of urban policies* and *at the centre of cities*. An incremental approach to slum upgrading can achieve this, providing adequate housing for low-income urban residents in areas that, in most cases, are already located close to city centre. This strategy will address the social and spatial implications of "housing at the centre" while linking with broader urban renewal strategies for planned city-infill and local economic development, and meeting the density, diversity and mixed-use requirements.

The broader, more participative and integrated the approach to slum upgrading, the more successful it is likely to be. In 2008, UN-Habitat in partnership with the African, Caribbean and Pacific Group of States and the European Commission established the Participatory Slum Upgrading Programme (PSUP). The scheme involves enhancing stakeholders' ability (including authorities and slum dwellers themselves) to understand the multi-

Although the proportion of the urban population residing in slums today is lower than it was some two decades ago (Figure 3.1), the absolute number of slum dwellers continues to increase

Slum Upgrading Project in Kibera, Nairobi, Kenya.
Source: UN-Habitat / Julius Mwelu

Box 3.3: Major achievements of the Participatory Slum Upgrading Programme

To date, implementation of UN-Habitat's Participatory Slum Upgrading Programme has resulted in the following major achievements:

- 35 countries implementing PSUP and committed to participatory slum upgrading, revising policy, legal and financing frameworks for housing, land and slum upgrading and prevention, analyzing current living conditions in slums, devising and enacting participatory responses.
- PSUP has levered almost three times its original funding through indirect and direct country contributions equivalent to 27 million Euros contributed to 15 countries.
- 51 signatories to International Declarations committing countries to implementation of the right to adequate housing for all and improved slum conditions (2009, Nairobi; 2012, Rabat; 2013, Kigali).
- Creation of National Urban Forums and coordinating bodies in 30 countries.

- National Urban Development and Slum Upgrading and Prevention Policies developed and approved in eight countries (Burkina Faso, Cameroon, Cape Verde, Fiji, Kenya, Ghana, Papua New Guinea and Uganda).
- 160 cities formally recognizing respective urban challenges with particular focus on slums and slum dwellers through a citywide, integrated approach.
- 32 city-wide Slum Upgrading Strategies integrating slums into the larger urban context through planning and development strategies.
- Secure tenure for over 800,000 slum dwellers nine countries (Burkina Faso, Cameroon, DR Congo, Ghana, Kenya, Malawi, Mozambique, Niger and Senegal);
- 67,600 slum households targeted for improved housing conditions through physical works (water and sanitation,

improved durability of constructions, public space and access roads).
- 10 per cent of programme funds committed to community-managed projects.
- More than 1,200 local and national government, NGO and CBO representatives as well as community members trained and engaged in the inclusive city-wide approach of the programme.
- South-South learning platforms established including IT-based learning and participation platforms, like MyPSUP.org.
- Gender focal points appointed in 35 countries to ensure that all actions are gender-responsive.
- 11 countries ready to up-scale the programme, with the required financing already in place.

Source: UN-Habitat, 2015a.

The broader, more participative and integrated the approach to slum upgrading, the more successful it is likely to be

dimensional nature of the slum challenge and identify and implement appropriate, sustainable responses. PSUP effectively puts slums on urban agendas and encourages the necessary policy changes, budget allocations and multi-stakeholder partnerships. Currently, PSUP is operational in 160 cities in 38 countries, providing enabling frameworks for at least two million slum dwellers.[78] Box 3.3 identifies some of the achievements of the PSUP.

3.5
Progress Made with Respect to Adequate Housing

PSUP is operational in 160 cities in 38 countries, providing enabling frameworks for at least

2 million
slum dwellers

Sub-Saharan Africa alone accounts for

56%
of the total increase in the number of slum dwellers among developing regions between 1990 and 2014

Regulatory framework

Inappropriate regulatory frameworks cause inequitable and inefficient land development. In this respect, the enabling approach calls on governments to reduce regulatory complexity, to assess the costs of regulation and remove both price distortions and artificial shortages. It also calls for no imposition of unaffordable standards or unenforceable rules, and that projects should not be designed without links to regulatory/institutional reforms.

Though some developing countries have overhauled building and planning regulations, many still cling to, even attempt to enforce, rules that are both too expen-

sive and ill-adapted for local circumstances. Expensive rules are counterproductive as they drive the majority into the informal sector where building standards are sub-par and housing does not qualify for bank loans.

Where regulations have been relaxed to encourage residential construction, benefits have accrued for lower income groups. In Hanoi and Bangkok, a key factor in affordable housing construction has been the removal of the regulatory constraint on floor-area ratios, because low-income households can afford flats in informal five-floor buildings.[79] Efforts to increase densities by altering floor area ratios or floor space indexes in Bangkok have resulted in increased residential supply.[80]

In many countries and in cities as diverse as Mumbai and New York, planning permission for middle- or high-cost housing is subject to building low-cost dwellings. In Mumbai, slum dwellers displaced by developers of high-value commercial sites must be re-housed free of charge.[81] Also in Mumbai, community groups can finance local improvements through sale of Transferable Development Rights on their central sites to others to use elsewhere.[82] In Recife, Brazil, special zoning enables enforcement of dedicated rules in informal settlements.[83] Many countries, including Vietnam,[84] have reformed laws and regulations on property rights and transactions to encourage proper market mechanisms and their major role in housing finance.

Finance for affordable housing

With regard to housing finance, the enabling approach has concentrated on developing mortgage loans. This included calls for private sector lending at positive/market rates and enforcement of foreclosure laws, with government providing prudential regulation and improved loan instruments. Under the approach, governments should not allow interest-rate subsidies, nor should they discriminate against rental housing investment or allow high default rates, while at the same time favouring resource mobilization for housing finance.

In developed countries, the financial consequences of the "sub-prime" collapse in the US have constrained mortgage lending, disproportionately affecting minority households and first-time home-owners who have been unable to take advantage of the low prices and interest rates that have followed. Mortgage debt to GDP ratio before the credit crisis varied in Europe from 20 per cent in Italy and Austria to 60 per cent in Spain, Portugal and Ireland, to 80 per cent in the UK and the Netherlands. By comparison,

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Box 3.4: Morocco's well-developed housing finance system

Morocco has the most advanced and diverse housing finance market in North Africa. Mortgage lending draws on a variety of sources: public and private commercial banks consumer credit companies and microfinance. Typical term is 20 years, housing finance can reach up to 100 per cent loan-to-value ratio and in 2014 mortgage interest rates fell below six per cent. Twenty per cent of mortgages are assisted by partial government credit guarantees on mortgages for households with low and irregular incomes. The capital market is supportive of housing finance, with a diversity of institutions beyond banking. This includes a dynamic insurance sector, growing pension funds and the Casablanca Stock Exchange. In 2002 Morocco was the first country in the region to allow securitization, which remains underused (only a few transactions for a total US$450 million).

Sources: AfDB and UN-Habitat, 2015; CAHF, 2014.

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it was 59 per cent in Singapore, 39 per cent in Hong Kong and 29 per cent in Taiwan.[85] Where home-ownership rates are high, a lower percentage of home-owners are likely to have outstanding mortgage debt than in countries where homeownership rates are low.[86]

In transitional and developing countries, the focus has been on stronger lending institutions, higher number of middle-class mortgage holders, and reaching further down the income scale where possible. Attempts to improve access to mortgage loans have been hampered by lack of capacity across specialist institutions.[87] In Sub-Saharan Africa, only South Africa has a longstanding and sophisticated mortgage banking sector amounting to 22 per cent of GDP.[88] Even after the 2007-08 financial crises, 100 per cent loans can be granted in the affordable sector of the market. In Morocco, mortgage finance is also well developed (Box 3.4). In some countries, governments encourage, or own, banks specializing in housing loans, short-circuiting the issues of affordability and commercial bank risk concern.[89]

Lending against pension contributions is used in some countries so that a loan to formal sector or government workers is secured on a pension pot rather than on land or a dwelling so the formality of land tenure is not essential. This sort of loan is common in South Africa, Namibia[90] and Ethiopia.[91] In Brazil, employers must pay 8 per cent of their employees' salaries into a pension pot, and several states draw on this for low-income housing programmes.[92] In Mexico, the government-run pension funds are still the major lenders. Despite this, there remains the

Where regulations have been relaxed to encourage residential construction, benefits have accrued for lower income groups

In transitional and developing countries, the focus has been on stronger lending institutions, higher number of middle-class mortgage holders, and reaching further down the income scale where possible

issue that most households in developing countries cannot afford housing that can attract mortgages.

The majority (50-80 per cent)[93] build their houses incrementally using savings, loans from family or employers, etc., to finance the stages in which the house is built over many years. The secondary housing markets in developing countries tend to be sluggish and non-transparent. They often suffer from high transaction costs; for example, transfer tax in Bangladesh is 12.5 per cent of gross price.[94]

Housing does not seem to have attracted the same enthusiasm in micro-financiers as entrepreneurship loans, but it has been shown to be important, particularly in Latin America, for extensions, improvements and incremental housing supply where it can finance a room, the roof, fitting out an apartment shell, down-payments towards dwelling purchase, or improving infrastructure.[95] Of the few organizations promoting housing micro-finance, one of the foremost, Global Communities (formerly CHF), has been involved in Bosnia, Ghana, Iraq, and West Bank and Gaza.[96] Latin America offers several successful examples in Bolivia, Nicaragua (PRODEL), El Salvador, and Costa Rica (FUPROVI).[97] In Ethiopia, micro-finance also helps purchasers of condominiums with their down payments.[98]

Under the enabling approach, any subsidies were to be rationalized through transparency, targeting the poor and specifically people rather than dwellings. Subsidies should be subject to review; they should not be hidden or allowed to distort prices. Governments and local authorities should not build subsidized public housing nor use rent control as subsidy.

These principles notwithstanding, many countries have provided hidden subsidies for middle class housing over the last 20 years. In Europe and North America, various forms of subsidies promote investment in owner-occupation and private rental housing, and more generally leverage investment in housing.[99] However, home-ownership subsidies, e.g. mortgage payment tax relief or Home Purchase Certificates,[100] tend to benefit only the non-poor.[101] Given the gap between the cost of the cheapest formal housing, and the financial capacities of prospective middle-class owners, subsidies are popular with governments in transitional and developing countries because they allow the rising middle class to find housing of a standard to which they aspire. The middle class has

Housing does not seem to have attracted the same enthusiasm in micro-financiers as entrepreneurship loans

also benefited from privatized institutional housing and subsidized "affordable" housing.[102]

Where governments have built housing for low-income households, it had to come with significant subsidies. Still, in most developing countries, subsidies appear to benefit very few households compared with the need[103] and have a built-in bias against poorer households, even though they are paid for through taxes,[104] as they usually require a minimum income threshold of affordability or proof of formal employment. In some Latin America countries[105] and in South Africa, maximum incomes of a few multiples of minimum wage are set for better targeting of the poor. In its successive incarnations over two decades, South Africa's subsidized housing programme has provided two million dwellings free of charge on serviced plots.

Housing subsidies may also have non-housing objectives, e.g. for population redistribution or worker mobility. In Liberia, they are used to attract back and maintain a cadre of educated professionals following years of civil war.[106] Furthermore, even in highly-regulated societies, it is difficult to maintain effective targeting of supply-side subsidies, even though they are meant to be easier to administer than demand-side.[107] The failures to reform both the housing sector and attendant subsidies have gone hand in hand over the past 20 years, and inefficient subsidy systems have endured.

Community-led finance and development

In developing countries and in the absence of adequate housing finance and official neighbourhood upgrading programmes for the majority, some international NGOs, such as Slum/Shack Dwellers' International, have stepped in with community-based savings and loans systems, supported by sophisticated lobbying. Operating through local affiliates and women's savings groups, an important element of their operations is the Urban Poor Funds (UPF) for settlement upgrading.

The Urban Poor Funds is an account held at a level above the savings group into which small payments are made by all the members, in addition to their own savings. While individual savings accounts continue to vouch for holders' personal creditworthiness, aggregation of thousands of tiny additional amounts enables the UPF as a financial partner of pro-poor improvements with municipal authorities and other contributors. These umbrella accounts ultimately add up to many millions of dollars under the control of those NGOs, earning them a

respected place at national and international financiers' tables. In individual urban areas, this mechanism enables representatives of the urban poor to take their place in negotiations on city-wide issues.[108]

Community-driven development has increased in importance since 1996 to be considered by the World Bank and other institutions a major channel for local services.[109] It has the potential to make neighbourhood upgrading more responsive to residents' demands, more inclusive, more sustainable, and more cost-effective than top-down programmes.[110]

Assisting the construction industry

The enabling approach sought to organize the building industry in four related ways: eliminating monopoly practices, encouraging small firm entry, lowering import controls, and supporting research. The approach advocated against long permit delays, restraints on competition, and public monopolies. Further recommendations included support to small-scale construction with dedicated credit mechanisms.[111]

Many governments have indeed re-organized building industries but emphasis has been on firms building for the middle classes rather than the poor majority. The property lobby has reaped the benefits of PPP housing projects, encouraging governments to favour formal developments to the detriment of realistic efforts benefiting the poor. This is how in Accra or Lusaka, consortia with foreign contractors seem to have received tax breaks, import duty holidays, subsidized or free land, favourable loans, etc., instead of the small local builders who provide housing for the majority.[112] In Chile, the *Cámara Chilena de Construcción* was a prime mover in designing the original capital subsidy programme.[113] In some countries, assistance to formal contractors has led to oversupply of upper-middle and high-income housing, as in Algeria.[114] In Addis Ababa, Dubai and Doha, as in many cities in China and India, major construction projects focus on the middle class, as well as attracting foreign companies.

Smaller contractors, however, have received little of the help recommended in Table 3.1 even though they build the housing occupied by the majority of households. Still unrepresented in policy-making consultations and absent in subsequent programmes, these builders

> Many governments have indeed re-organized building industries but emphasis has been on firms building for the middle classes rather than the poor majority

have instead often felt the heavy hand of bureaucracy or ineptitude "disabling" them from effective housing supply.

Little progress has been made towards appropriate standards for materials, including substitution of performance-based, more environmentally-friendly earth-based and organic materials for high energy-consuming cement and burnt bricks. A major problem is that the regulations in force in many countries are still are materials-based rather than performance-based.

Upgrading poor neighbourhoods

Improving housing and services in existing poor-quality neighbourhoods is an obvious way significantly to improve the lives of slum dwellers. It allows them to continue with their social and economic networks while also improving their housing quality. Upgrading poor neighbourhoods should, therefore, have been a key activity since 1996.

After 1996, a multi-sectoral approach was adopted, with improvements to land tenure, infrastructure and social services, but improved housing was the entry point. Upgrading neighbourhoods has continued to be a major activity in the last 20 years but housing has ceased to be the entry point. Instead, upgrading programmes now focus more on infrastructure: improved or first access to services, especially water and sanitation.[115]

Formal security of tenure is no longer seen as the prerequisite for upgrading. Experience shows that more flexible and readily available forms, like simple house registration, gives residents confidence against the risk of eviction and access to service connections— and the passage of time will do the rest.[116]

Community participation can at many stages both preserve residents' sense of belonging and ensure that the services provided are what local people want, value and are ready to look after. Where such participation is sought at the planning stage, or is prioritized, it is likely to be very influential in the project's success.[117]

Some countries have made good progress and some less so, but upgrading has not generally gone to scale as a programmatic activity that would eradicate poor housing conditions across cities.[118] Among the most successful countries are Tunisia[119] and Thailand where the Baan Mankong Programme[120] was designed to upgrade 200,000 dwellings by 2011. The success of such schemes may be tempered

> Improving housing and services in existing poor-quality neighbourhoods is an obvious way significantly to improve the lives of slum dwellers

because upgrading almost always increases housing costs; secure tenure and better infrastructure come at the cost of the financial insecurity of a debt.[121]

Improving access to infrastructure

The right to adequate, affordable water and sanitation is implicit and acknowledged in various international declarations, covenants, conventions and statements.[122] Adequate housing includes access to water, sanitation, etc., so the enabling approach favoured coordi-nating land development amongst infrastructure agencies, emphasizing specific and recovery, effective demand and improving slum infrastructure.

Great strides have been made in water supply since 1990. Indeed, the MDG target for improved drinking water was met in 2010— well ahead of the 2015 dead-line.[123] The WHO-UNICEF Joint Monitoring Programme estimates that over 91 per cent of the total world and 96 per cent of urban population currently have access to improved drinking water (Table 3.5). Despite the progress

Table 3.5: Regional and global estimates for improved drinking water

Source: World Health Organization/UNICEF, 2011.

Region	Year	Use of drinking water sources (percentage of population)															Progress towards MDG target	Proportion of the 2015 population that gained access since 1990 (per cent)
		Urban					Rural					Total						
		Improved					Improved					Improved						
		Total Improved	Piped on premises	Other improved	Unimproved	Surface water	Total Improved	Piped on premises	Other improved	Unimproved	Surface water	Total Improved	Piped on premises	Other improved	Unimproved	Surface water		
Sub-Saharan Africa	1990	83	43	40	13	4	34	4	30	32	34	48	15	33	26	26	Not met	43
	2015	87	33	54	11	2	56	5	51	29	15	68	16	52	22	10		
Northern Africa	1990	95	86	9	5	0	80	33	47	17	3	87	59	28	11	2	Not met	34
	2015	95	92	3	5	0	90	78	12	9	1	93	86	7	6	1		
Eastern Asia	1990	97	79	18	2	1	56	11	45	35	9	68	30	38	25	7	Met target	39
	2015	98	88	10	2	0	93	56	37	5	2	96	74	22	3	1		
Eastern Asia without China	1990	97	94	3	3	0	92	2	90	2	6	96	67	29	2	2	Met target	18
	2015	99	96	3	1	0	96	74	22	3	1	98	91	7	2	0		
Southern Asia	1990	90	50	40	9	1	66	7	59	29	5	73	19	54	23	4	Met target	44
	2015	96	56	40	4	0	91	17	74	8	1	93	30	63	6	1		
Southern Asia without India	1990	93	59	34	6	1	73	11	62	19	8	79	25	54	15	6	Met target	39
	2015	92	62	30	8	0	86	19	67	12	2	89	36	53	10	1		
South-eastern Asia	1990	90	42	48	7	3	63	5	58	25	12	72	17	55	19	9	Met target	40
	2015	95	51	44	5	0	86	17	69	10	4	90	33	57	8	2		
Western Asia	1990	95	85	10	4	1	70	43	27	22	8	85	69	16	12	3	Met target	48
	2015	96	92	4	4	0	90	83	7	8	2	95	89	6	4	1		
Oceania	1990	92	74	18	5	3	37	11	26	22	41	50	27	23	19	31	Not met	26
	2015	94	74	20	4	2	44	11	33	16	40	56	25	31	13	31		
Latin America & the Caribbean	1990	94	88	6	5	1	63	37	26	17	20	85	73	12	8	7	Met target	35
	2015	97	94	3	3	0	84	68	16	10	6	95	89	6	4	1		
Caucasus and Central Asia	1990	95	83	12	4	1	79	29	50	11	10	87	54	33	8	5	Not met	19
	2015	98	91	7	1	1	81	38	43	10	9	89	61	28	5	6		
Developed countries	1990	99	97	2	1	0	93	79	14	7	0	98	92	6	2	0	Met target	10
	2015	100	98	2	0	0	98	89	9	1	1	99	96	3	1	0		
Developing countries	1990	93	68	25	6	1	59	11	48	29	12	70	31	39	22	8	Met target	41
	2015	95	72	23	5	0	83	28	55	12	5	89	49	40	8	3		
Least developed countries	1990	80	29	51	16	4	43	2	41	34	23	51	7	44	30	19	Not met	42
	2015	86	32	54	12	2	62	3	59	27	11	69	12	57	23	8		
World	1990	95	79	16	4	1	62	18	44	27	11	76	44	32	17	7	Met target	35
	2015	96	79	17	4	0	84	33	51	12	4	91	58	33	7	2		

made, 663 million people worldwide still lack improved drinking water.[124]

The global population with improved sanitation facilities increased from 54 per cent in 1990 to 68 per cent in 2015 (Table 3.6). Notwithstanding this increase, the MDG target for sanitation was missed by almost 700 million people.[125] Most developing regions are lagging behind in meeting the MDG sanitation target. Currently, 2.4 billion people worldwide still lack access to improved sanitation. At the same time, improved sanitation was available to 82 per cent of the world's urban population with another 10 per cent sharing unimproved facilities.

As shown in Chapter 1, there has been widespread privatization of infrastructure during the last 20 years. Evidence from Argentina, Bolivia, Mexico and Nicaragua shows that privatization has delivered both increased access to services and/or reduced prices for the poor majority, but in the case of Cochabamba, Bolivia, it has reduced access and/or increased prices. In Sub-Saharan Africa, privatized infrastructure has achieved

Table 3.6: Regional and global estimates for improved sanitation

Source: World Health Organization/UNICEF, 2015.

Region	Year	Population (000)	Percentage urban population	Urban Improved	Urban Shared	Urban Other Unimproved	Urban Open Defecation	Rural Improved	Rural Shared	Rural Other Unimproved	Rural Open Defecation	Total Improved	Total Shared	Total Other Unimproved	Total Open Defecation	Progress towards MDG target	Proportion of the 2015 population that gained access since 1990 (per cent)
Sub-Saharan Africa	1990	510 118	27	39	30	21	10	18	8	29	45	24	14	26	36	Not Met	17
	2015	988 784	38	40	34	18	8	23	11	34	32	30	20	27	23		
Northern Africa	1990	119 863	49	90	6	2	2	54	5	12	29	71	6	7	16	Met Target	41
	2015	177 451	56	92	7	1	0	86	8	2	4	89	7	2	2		
Eastern Asia	1990	1 236 934	29	71	5	22	2	41	2	48	9	50	3	40	7	Met Target	36
	2015	1 487 313	57	87	6	7	0	64	3	31	2	77	5	17	1		
Eastern Asia without China	1990	71 505	71	-	-	-	-	-	-	-	-	-	-	-	-	Not met	-
	2015	85 727	77	82	10	6	2	51	7	17	25	68	9	10	13		
Southern Asia	1990	1 191 647	27	54	15	9	22	11	3	6	80	22	6	7	65	Not met	32
	2015	1 793 616	35	67	19	7	7	36	8	7	49	47	12	7	34		
Southern Asia without India	1990	322 757	29	66	11	17	6	26	8	18	48	37	8	19	36	Not met	41
	2015	511 225	40	77	15	8	0	57	16	14	13	65	16	11	8		
South-eastern Asia	1990	443 735	32	69	9	9	13	38	5	18	39	48	6	15	31	Not met	39
	2015	633 031	48	81	10	2	7	64	10	10	16	72	10	7	11		
Western Asia	1990	126 752	61	94	1	3	2	58	2	23	17	80	2	10	8	Met Target	50
	2015	228 476	70	96	4	0	0	89	5	6	0	94	4	2	0		
Oceania	1990	6 461	24	75	9	13	3	22	3	59	16	35	4	48	13	Not met	15
	2015	10 863	23	76	10	11	3	23	3	60	14	35	5	48	12		
Latin America & the Caribbean	1990	445 206	71	80	6	8	6	36	3	18	43	67	5	11	17	Not met	36
	2015	630 065	80	88	7	4	1	64	7	17	12	83	7	7	3		
Caucasus and Central Asia	1990	66 308	48	95	3	2	0	86	1	12	1	90	2	8	0	Met Target	24
	2015	83 078	44	95	5	0	0	96	2	2	0	96	3	1	0		
Developed regions	1990	1 153 510	72	96	3	1	0	90	3	7	0	94	3	3	0	Not met	10
	2015	1 268 643	78	97	2	1	0	91	2	7	0	96	2	2	0		
Developing regions	1990	4 147 024	35	69	10	12	9	29	4	25	42	43	6	20	31	Not met	32
	2015	6 032 677	49	77	13	7	3	47	8	17	28	62	10	12	16		
Least developed countries	1990	509 191	21	37	22	26	15	15	7	25	53	20	10	25	45	Not met	27
	2015	939 932	31	47	28	20	5	33	12	28	27	38	17	25	20		
World	1990	5 300 534	43	79	7	8	6	35	4	23	38	54	5	17	24	Not met	29
	2015	7 301 319	54	82	10	6	2	51	7	17	25	68	9	10	13		

improvements in services in most cases.[126] In several cities in South Asia, NGOs and civil society have acted as intermediaries representing neighbourhoods to local government and public utility companies to jointly raise funds for community toilet blocks and water supply. [127]

3.6
A New Approach to Housing in the New Urban Agenda

If cities' "emerging futures" must be sustainable, housing must be placed at the centre of urban policies.[128] With rapid population growth, high levels of poverty and pervasive urban inequality; it is evident that housing is inseparable from urbanization and should be a socioeconomic imperative.[129] As demonstrated in this chapter, the housing policies put in place over the last 20 years through the enabling approach have not succeeded in promoting adequate and affordable housing. Governments have backed away from direct supply without giving sufficient consideration to the markets and regulatory framework to enable other actors in the process to step forward and provide adequate and affordable housing. After a long period "in the wilderness," housing is emerging as an important sector once again.

UN-Habitat's strategy paper: *Housing at the Centre of the New Urban Agenda* seeks to reestablish the important role of housing in achieving sustainable urbanization.[130] The strategy proposes to position housing at the centre of national and local urban agendas. The strategy also seeks to shift the focus from the simple construction of houses towards a holistic framework for housing development, supported by urban planning, that places people and human rights at the forefront of urban sustainable development. At the national level, the goal is to integrate housing into national urban policies and into UN-Habitat's strategic thinking on planned urbanization. National and local authorities should reassume a leading role in responding to housing needs, encouraging pro-poor market mechanism and engaging with all stakeholders, especially poor and vul-

nerable.[131] At the local level, the importance of housing must be reinforced within appropriate urban planning and as part of the development of cities and people.

With the "*Housing at the Centre*" approach, UN-Habitat will seek to reestablish housing problems and opportunities in the international development agenda in an increasingly strategic manner and in relation to the future of urbanization. To reposition *housing at the centre* of sustainable development, this framework proposes a twin-track approach: curative, involving improvements to current housing stock such as slum upgrading; and preventive, involving building new housing stock.[132]

In the next sections, policies relevant to the developed countries and the aspiring middle classes of transitional and developing countries will be followed by those relevant to the majority in the developing countries.

Developed countries and for the aspiring middle class in transitional and developing countries

Maximal extension of mortgage housing finance

Mortgages against property values are by far the cheapest form of home financing, and therefore should be extended down the market, but with due regard for repayment default risk. Governments must consider how transaction costs can be reduced, including low-cost land titling and uncomplicated ways of establishing legal safeguards and ownership. Loans close to or more than 100 per cent of house value and those in foreign currencies should only be used with very great caution.

Improve choice in tenure and consumer rights

Rent laws should ensure an appropriate balance between the rights of the landlord to evict troublesome tenants and the rights of the tenant to remain in their dwelling without fear of summary eviction. Normally, prices should be left to the market as rent control tends to damage the affected housing stock in the medium to long terms. Instead of landlords subsidizing tenants, housing allowances should be paid to the lowest income earners to improve their ability to afford rental housing. Where they are lacking, consumer rights should be introduced to protect buyers of housing from poor workmanship by builders. In addition, consumers should be protected from mortgage lenders who encourage consumers to buy dwellings which are likely to fall in value against the rest of the market.

Ensure appropriate supply for poorest, disadvantaged and elderly households

For some types of households, housing supply is relatively inadequate even in the wealthiest of developed nations. These include the poorest and those household with disabilities and HIV/AIDS, the elderly and very young, ethnic minorities, nomads and homeless people. It is incumbent on governments to provide appropriate housing and infrastructure solution for these groups along with an appropriate mix of social interventions. In such housing, there may be no alternative but subsidized social housing.

Encourage return of residences in city centres

As historic city centres are conserved and improved, and as commerce and retailing vacate spaces in city centres, cities should grasp the opportunity to re-establish residential occupation there. This will not only ensure good prospects for city centres but also provide a choice of housing solutions to households who value the convenience and vitality of central locations.

Avoid privatization of public rental housing where it converts it to private rental

Where public rental housing has been privatized for the benefit of occupiers, it has often been converted to private rental tenure in short order. This should be avoided wherever possible.

Transitional and developing countries

Improve supply chains to increase housing stock in line with need and demand

It is vital to recognize that the main housing supplier for the 60-90 per cent majority in developing countries is the informal sector. The Housing Strategy must recognize that single artisans and small-scale building contractors are the key suppliers of housing to the majority; continuing to ignore them in favour of the relatively small formal sector supply would be perverse.

In developing countries, especially in Sub-Saharan Africa,[133] many households are unlikely ever to find themselves in a position to sell property. Therefore, secondary housing markets hardly exist, making it impossible for them to capitalize on the value of their property in times of need or to move to more expensive housing. Thus, the "housing ladder", so important in conventional property mechanisms, is weak to non-existent in many devel-

oping countries and any arguments on households filtering up through the housing stock are unlikely to be helpful. On the other hand, the ability to alter and extend ("transform") housing enables households to improve without moving—including those living in presumably completed dwellings.[134]

Adopt realistic affordability thresholds

As suggested throughout this chapter, affordability is the crucible of housing policies; yet, this remains misunderstood in most developing countries. The current focus on those households that are marginally too poor to afford current mortgages helps only a few, while portending the risk of default on housing loans. Against this background, it is vital that the Housing Strategy takes a view of affordability that is appropriate to each region and is linked in some way to local median household expenditures. Moreover, locally appropriate and affordable building and planning regulations should be encouraged and continuously assessed for sustainable supply for the majority of the population.

Encourage incremental construction through regulatory framework and finance

Incremental construction is too important in current housing supply in developing countries to be ignored by policymakers. Regulations on financing, construction, planning, and infrastructure supply must take account of and enable incremental development.[135] Neighbourhood servicing policies should take account of the likely growth in population over the years as housing is consolidated and transformed to reflect residents' changing needs and aspirations.

Enabling more efficient incremental building and extensions through small loans (US$500-5,000) repaid over one to three years, may well be the most effective housing supply strategy available to governments to assist the poor majority. This type of support is already available in the Philippines.

Selective housing provision for vulnerable groups

Housing policies must not lose the focus on the poorest and most vulnerable. At the bottom of the income scale, government support should deliberately focus on households to strengthen their ability to afford adequate housing, especially vulnerable groups (women, migrants, persons with disabilities and HIV, elders and youth) and offer some subsidy to reduce the costs of slum upgrading.[136] At the same time, forced evictions

With the "Housing at the Centre" approach, UN-Habitat will seek to reestablish housing problems and opportunities in the international development agenda in an increasingly strategic manner and in relation to the future of urbanization

It is vital to recognize that the main housing supplier for the 60-90 per cent majority in developing countries is the informal sector

Incremental construction is too important in current housing supply in developing countries to be ignored by policymakers

Housing policies must not lose the focus on the poorest and most vulnerable

which create and reinforce vulnerability, must not be continued.[137] Better targeting to low-income earners would enable, or enhance, government assistance to more households. This should not be taken as a signal for governments to be involved in "low- to middle-income housing" that is only affordable to households above median income.

Develop appropriate alternatives to single household dwellings

In many developing countries, despite all efforts to reduce costs, enhance efficiency and improve design, basic formal sector housing is too expensive for most households. This is largely because housing finance keeps focusing on formal single-household dwellings with all services and full tenure security, when it is clear that this format is only suitable for the better-off not the majority poor. Instead, micro-loans for multi-occupied housing types and extensions to existing housing are probably the most effective way forward for the majority in need of new or improved accommodation.

Time has come to recognize that, especially in much of Sub-Saharan Africa,[138] the main problem is not that housing is too expensive, but that incomes are too low to afford basic formal housing. Therefore, any subsidies should be targeted only to the poor. Demand-side subsidies tend to be more equitable but usually require complex administration. Supply-side subsidies should be limited to neighbourhoods targeted at the poorest.

Ensure choice of tenures reflects need

Land titling exercises, once seen as a necessary precursor to housing improvements, should be de-coupled from slum upgrading programmes. When implementing any part of pro-poor housing supply, the right level of perceived land tenure should be in place but that might fall short of legally secure tenure. Land administration, titling and allocation procedures should be streamlined for speed and simplicity, and result in sufficient security to allow confidence in developing simple dwellings.

Forms of joint titling, such as community land trusts as used in the US[139] and Kenya,[140] may lead to a more equitable land distribution than the individualized holdings currently used in most countries.

Promote rental housing with fair conditions for landlords and tenants

The supply of rental housing should be a major focus in the Housing Strategy, ensuring that a com-

prehensive range of options is available to the majority of the population. In Latin America and the Caribbean, rental housing is viewed as an efficient and cost-effective remedy for the quantitative and qualitative housing deficit that currently affects about 40 per cent of the region's households.[141] Affordability may call for subsidies or housing allowances.

It is important that governments regulate the relationship between landlords and tenants in a way that allows security of tenure for the renter whilst allowing the landlord to evict recalcitrant renters.

A regulatory framework suitable to all income groups

In many countries, the existing regulatory framework does not favour housing supply. A regulatory audit[142] and/or an urban housing profiling exercise[143] would result in more enabling frameworks. Building codes should be performance-based and planning regulations should specify plot sizes, plot space per household, etc., that are sustainable in the long run, allowing multi-occupied housing and incremental building, where more affordable. Technocratic solutions and rules-of-thumb on affordability and appropriateness are to be shunned in favour of stronger beneficiary participation in, and transparency of, such decision-making.[144]

Promote and improve informal sector supply

In developing countries, since the informal sector provides for most housing needs, policies should encourage informal sector contractors and make them more efficient through training, front-end financing, better access to materials and market information, together with improved apprenticeships through co-operation between training institutions and informal builders.

Promote community-driven housing supply

Community-led finance for housing and services has proved to be very effective and should be encouraged. This, and other forms of housing micro-finance, should focus on the cost of building one or two rooms or of carrying out a particular building operation such as installing a roof. Such funding would greatly improve both the efficiency and the quality of the new development.[145] Finance for this could, therefore, be extremely important for upgrading the housing stock.[146]

Infrastructure provision based on access to improved water and sanitation should be provided, wherever possible, through community-led processes and leave

local people in charge of management at the local level. Appropriate technologies should be encouraged.

It may be simpler to promote the necessary people-centred and community-driven housing supply systems at local authority level than at central government level. Thus, it is vital that local governments that are given the duties of planning and implementing housing policies should receive the financial and personnel resources to allow them to fulfil their duties effectively.

Address the challenge of homelessness

Homelessness is a particularly intractable issue which has been worsening over the last 20 years. Homeless people should be included in the Housing Strategy as a priority group. The recent formation of the Institute of Global Homelessness at De Paul University, Chicago, is a positive step. It aims to include both developed and developing countries' homelessness in its research and advocacy.

Homeless people should be included in the Housing Strategy as a priority group

Notes

1. UNCHS and ILO, 1995; Tibaijuka, 2009.
2. The Global Strategy for Shelter to the Year 2000 was adopted by the UN General in Resolution 43/181 on December 20, 1988.
3. UNCHS, 1991.
4. You, 2007.
5. World Bank, 1993; Malpezzi, 1990.
6. UN-Habitat, 2006; Payne and Majale, 2004; the regulatory framework has been particularly neglected.
7. UN-Habitat, 2012b.
8. United Nations, 2014a; United Nations, 2014b.
9. UN-Habitat, 2015b.
10. Woetzel et al., 2014.
11. Economic Commission for Europe, 2014.
12. In Armenia, for example, an eighth of households lack permanent accommodation or need urgent housing assistance (Stephens, 2005).
13. Nenova, 2010.
14. UN-Habitat, 2012c.
15. Hernandez and Kellett, 2008.
16. UN-Habitat, 2012b.
17. This is not universal, however, as cities with very large informal sectors invariably have some very high quality dwellings therein.
18. Tipple and Speak, 2009.
19. Busch-Geertsema et al.,2014.
20. http://unhabitat.org/affordable-housing-should-be-at-the-centre-of-cities-joan-clos/ , last accessed 22 April 2016.
21. UN-Habitat, 2009.
22. McKinsey Global Institute, 2014.
23. UN-Habitat, 2011b.
24. UN-Habitat, 2011b.
25. United Nations, 2015l.
26. Buckley and Kalarickal, 2006.
27. UN-Habitat and CAF,2014.
28. Lawson, 2012.
29. van Ham et al., 2010.
30. UN-Habitat, 2011a
31. Chung and Kim, 2004.
32. Nathanson and Zwick,2014.
33. Pornchokchai and Perera, 2005.
34. McDonald, 2014.
35. Japan Times, 2015).
36. UN-Habitat, 2003d.
37. Yi and Huang, 2014).
38. Tipple and Speak, 2009.
39. Lawson, 2012).
40. Yuen et al., 2006).
41. Woetzel et al.(2014).
42. Lawson, 2012).
43. UN- Habitat, 2011b.
44. Fuentes et al., 2013.
45. Lawson and Milligan, 2007.
46. A series of country studies in Sub-Saharan Africa, conducted by the Centre for Affordable Housing Finance in Africa has shown how, in most states in the region, only a few per cent of the population have incomes high enough to attract a mortgage.
47. Salheen, 2012.
48. Landman and Napier, 2010.
49. Yang and Wang, 2011.
50. World Bank, 1993.
51. Buckley and Kalarickal, 2006.
52. UN- Habitat, 2011b.
53. UN- Habitat, forthcoming.
54. Woetzel et al., 2014.
55. Payne, 2002.
56. Midheme and Moulaert, 2013.
57. Salheen, 2012.
58. Lawson, 2012.
59. As in Egypt (Salheen, 2012).
60. Salheen, 2012.
61. Buckley and Kalarickal, 2006;Woetzel et al., 2014.
62. UN-Habitat, 2011b.
63. Woetzel et al., 2014.
64. Woetzel et al., 2014.
65. UN-Habitat, 2015c.
66. Duda et al., 2005; Ambaye, 2012.
67. See, for example, UN-Habitat, 2010b; UN-Habitat, 2012b; UN-Habitat and ESCAP, 2010; and UN-Habitat, 2015c.
68. International Organization for Migration, 2010; Meheret and Martin, 2009; UN-Habitat, 2010b; UN-Habitat, 2012b; UN-Habitat and UN-ESCAP, 2010; UN-Habitat,2015c.
69. UN-Habitat, 2011b.
70. Rubenstein, 2012.
71. UN-Habitat, 2003c.
72. UN-Habitat's operational definition for a slum household was agreed through an Expert Group Meeting convened in 2002 by UN-Habitat, the United Nations Statistic Division and the Cities Alliance.
73. UN-Habitat, 2003c.
74. The Millennium Development Goals Report, July 2015.
75. Hermanson
76. This figure has been calculated using just four out of the five slum household's deprivations in UN-Habitat's definition, as security of tenure cannot be accurately calculated yet. The 881 million can indeed be considered a global minimum.
77. UNECE, 2009; UN-Habitat, 2013e.
78. The Participatory Slum Upgrading Programme (PSUP): http://unhabitat.org/initiatives-programmes/participatory-slum-upgrading/
79. Bertaud, 2014a.
80. Woetzel et al., 2014.
81. Woetzel et al., 2014.
82. Nainan, 2008; Burra, 2005.
83. UN-Habitat, 2011b.
84. Tran and Yip, 2008.
85. Sassen, 2012.
86. Neal, 2015.
87. UN- Habitat,2011b; UN-Habitat, 2012a.
88. CAHF, 2014.
89. Badev et al., 2014.
90. UN-Habitat,2011c.
91. Interview with CBE and HDB officials, Addis Ababa, 2014
92. UN-Habitat, 2010c.
93. Ferguson and Smets, 2010
94. Nenova, 2010.
95. Ferguson and Smets, 2010; Greene and Rojas, 2008.
96. http://www.globalcommunities.org/devfinance accessed 1st May, 2015.
97. UN-Habitat, 2011b.
98. Interview with Addis Credit and Saving Institution.
99. Lawson, 2012.
100. As in former Soviet states (Stephens, 2005).
101. Coady et al., 2004.
102. Gulyani and Bassett, 2007.
103. UN- Habitat, 2011b.
104. Even though the poor may not pay income tax, they usually pay taxes on purchases.
105. UN-Habitat, 2011b.
106. UN-Habitat, 2015c.
107. The argument is that subsidizing a relatively few fixed assets is easier to administer than subsidizing relatively many households who can move around and/or change their circumstances.
108. Archer, 2012
109. Gasparre, 2011.
110. World Bank, 2003.
111. Erguden, 2001.
112. UN-Habitat, 2012b; UN-Habitat, 2012c.
113. Gilbert, 2012.
114. Salheen, 2012.
115. Gulyani and Bassett, 2007.
116. Gulyani and Bassett 2007.
117. Choguill, 1996.
118. Gulyani and Bassett, 2007.
119. Salheen, 2012.
120. Meaning "Secure Housing."
121. Chutapruttikorn, 2009.
122. UN-Habitat, 2003b.
123. World Health Organization/UNICEF, 2015.
124. World Health Organization/UNICEF, 2015.
125. World Health Organization/UNICEF, 2015.
126. Nellis, 2007.
127. UN-Habitat and ESCAP, 2010.
128. UN-Habitat, 2015b.
129. UN-Habitat, 2015b.
130. UN-Habitat, 2015d.
131. UN-Habitat, 2015d
132. UN-Habitat, 2015d
133. UN-Habitat, 2010b;
134. Tipple, 2000.
135. Wakely and Riley, 2011.
136. Gulyani and Bassett, 2007.
137. UN-Habitat, not dated.
138. UN-Habitat, 2010b; UN-Habitat, 2012b; UN-Habitat, 2012c; UN-Habitat, 2015c
139. Andrews and Childress, 2015.
140. Midheme and Moulaert, 2013.
141. Blanco et al., 2014
142. Payne and Majale, 2004.
143. UN-Habitat, 2011d.
144. Gulyani and Bassett, 2007.
145. Israel's Project Renewal has demonstrated this most convincingly (Carmon, 1992; Tipple, 2000).
146. Carmon, 1992.

The Widening Urban Divide

QUICK FACTS

1 Today the world is more unequal that it was twenty years ago: 75 per cent of the world's cities have higher levels of income inequalities than two decades ago.

2 Opportunities across diverse individual abilities and cultural backgrounds that historically characterize urban dynamics have stalled in many regions of the world.

3 Too many cities today fail to *make sustainable space* for all, not just physically, but also in the civic, socioeconomic and cultural realms.

4 The spatial concentration of low-income unskilled workers in segregated residential quarters acts as a poverty trap with severe job restrictions, high rates of gender disparities, deteriorated living conditions, social exclusion and marginalization and high incidence of crime.

POLICY POINTS

1 Cities are the sites of innovation. They are the places where new economic ideas crystallize and where heterogeneous groupings of people learn to co-exist as neighbours.

2 The heterogeneity, density and diversity of cities, which is what makes them nodes of economic innovation and democratic progress, has to be managed and planned.

3 The challenge of exclusion from urban civic spaces can be tackled head-on through 'the right to the city,' and a rights-based approach.

4 Habitat III comes at the right time not only to renew the international commitment to inclusive cities.
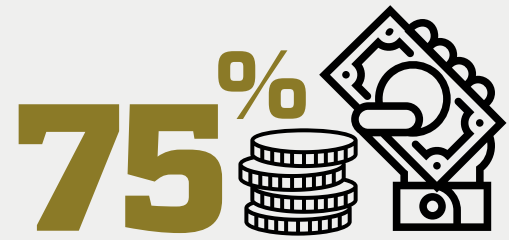
75% of the world's cities have higher levels of income inequalities than two decades ago.

The world is not only divided by differentiated access to opportunities, consumption, public spaces and services, education, technology and employment, but more and more by access to income.
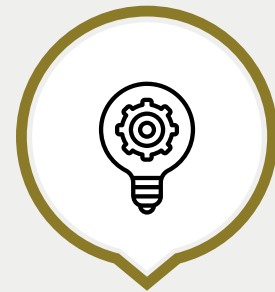
There is an urgent need at this juncture for new planning visions, strategies, policies and tools that can transform our planet of cities into a planet of inclusive cities.

Occupy Wall Street, Ferguson, Baltimore, Gezi Park are all **PROTESTS** against **EXCLUSION**

TUNISIA

Fast economic **growth**
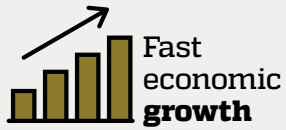
Still **informal** labor force accounted for **47%**

LOS ANGELES

54% Labor Force was **informal**

61% of labor force were **UNDOCUMENTED**

UAE
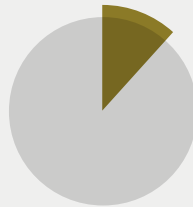
20% Citizens
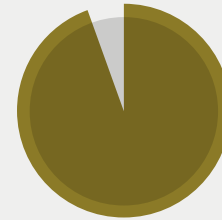
95% Labor force is made of migrants

- 2010 -
Inequalities in the world
(Gini Coefficient)

Region	Gini
Latin America & Caribbean	0.5
Africa	0.45
Asia	0.4
Eastern Europe & Central Asia	0.35

UN-Habitat international alert line

0.47 Gini Coefficient means

RICHEST **50%** INCOME

POOREST **3%** INCOME

POPULATION
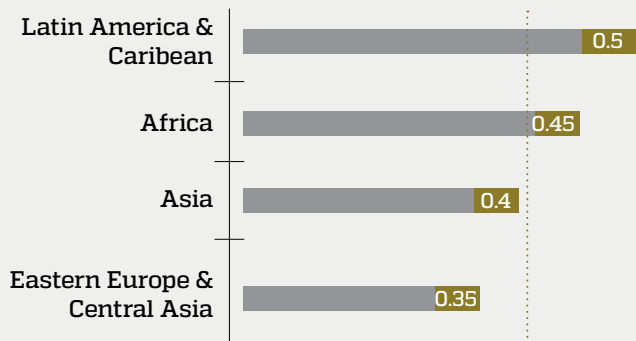
OVER **46%** are in vulnerable employment accounting for 1.5 billion people globally

63% Africa's labour force is trapped in vulnerable employment

Poor people are also excluded from social and political life. The places where they live seem to concentrate numerous disadvantages that end up by reproducing and exacerbating other forms of marginalization and exclusion. Varanasi, India - October 2015

Source: Eduardo L. Moreno

Urban history shows us that cities are the sites of innovation. They are the places where new economic ideas crystallize, where heterogeneous groupings of people learn to co-exist as neighbours, and where democratic experiments emerge to make way for previously excluded social groups to be included as genuine decision-makers. The high density of people in cities facilitates economic growth through better sharing, matching and learning, and as Alfred Marshal famously said, just the sheer concentration of people leads to new ideas because "ideas are in the air." Not only do cities feature high densities of people, but their high densities also force people of different religions, nationalities, ethnicities and sexual orientations to live and work alongside one another, and in doing so, they get to know "the other," leading to a cosmopolitan respect for differences.

> The high density of people in cities facilitates economic growth through better sharing, matching and learning... but their high densities also force people of different religions, nationalities, ethnicities and sexual orientations to live and work alongside one another

Just as cities are sites of new opportunities and inclusion, they can also turn into sites of deprivation and exclusion. The 2008-2009 Occupy Wall Street protests across cities in the US were a collective uprising by low and middle-class groups to protest against their exclusion from the sharing of urban wealth. The occupation of Gezi Park in Istanbul against the proposed redevelopment of a public park into a shopping mall was a collective demand to the city government to not exclude the vast majority of the public who enjoyed the free open space for a small minority of publics (developers, more affluent shoppers) who would benefit from the building of the shopping mall. The eruption of violence in Ferguson, Baltimore and other American cities in 2015 over racialized policing is the symptom of a deeper malaise of spatial segregation, where low-income, African-American populations have historically been segregated into neighbourhoods that cut them off from better schools, jobs and housing in the rest of the city.

In short, there is nothing natural about the form and character of the city. Cities are socially produced, and fair rules of the game (Chapter 6) and active planning interventions (Chapter 7) play a key role in creating varying degrees of urban inclusion and exclusion. The most conventional of planning instruments, zoning, took its definitive form in the post-World World II context in Western cities, and was used to separate the different uses that inhabit the city into harmonious zones. But, as amply evident from the protests of the past decade over urban inequality, there is a dark side to zoning. The history of urban planning is replete with instances of powerful groups within societies who have used zoning and other planning instruments to keep out groups that they consider

> Just as cities are sites of new opportunities and inclusion, they can also turn into sites of deprivation and exclusion

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to be undesirable. Racial covenants, discriminatory lending practices, state-sponsored infrastructure and a host of other public policies created the Fergusons that we see today in many parts of the world: cities that are distinctly divided into white and black neighbourhoods; rich and poor areas; affluent and deprived neighbourhoods. These exclusionary mechanisms are further explained in Chapter 6 through the notion of "invisible" and "hidden" powers in which political and policy deliberation processes and forums are not an equal playing field.

The social production of inclusion/exclusion within cities, then, is not new. But, we stand now at a unique tipping point where our planet is, for the first time in its history, predominantly urban. There is an urgent need at this juncture for new planning visions, strategies, policies and tools that can transform our planet of cities into a planet of inclusive cities. The need for a new urbanization model that contains mechanisms and procedures that protect and promote human rights and the rule of law is part of the guiding principles for a New Urban Agenda, as further elaborated in Chapter 9. At this critical juncture of the global urban transition, we can fall back on *laissez faire* planning and practices and let the market and other forces drive urban growth (this, as the urban protests show us, can have disastrous consequences). Or we can seize this moment of a global social ferment to imagine new socially inclusive futures for our 21st century cities.

Habitat II made a commitment to turning "inclusive cities" into reality; however, the world today looks very different from how it did in 1996. Global flows of capital, people and ideas across national boundaries have accelerated, and cities are the staging posts for these encounters. City governments have to deal with daunting challenges like how to attract hyper-mobile capital while also making sure the needs of their urban residents are met, how to manage the social hostilities that could arise as diverse social groups start living

in close propinquity to one another, and how to mediate amongst different groups as they compete for the same limited urban resources. Today, the world is more unequal that it was twenty years ago, according to UN-Habitat/CAF, 75 per cent of the world's cities have higher levels of income inequalities than two decades ago.[1]

Habitat III comes at the right time not only to renew the international commitment to inclusive cities, but to also to act as a catalyst for timely dialogue on the new planning theories and practices as well as the much-overdue policies and actions that can move our urban societies in the direction of inclusive cities (this is part of the fundamental components that the New Urban Agenda should include as elaborated in Chapter 10).

4.1
People Excluded and Places of Exclusion[2]

Never before have the cities of this world appeared so starkly as they do today as nodes of economic, social, cultural and political links within self-contained if ever-expanding spaces.[3] Never before have so many new-comers been attracted to these concentrations of wealth and productive capacity than today – nor these resources been so inequitably distributed that "the urban divide"[4] between rich and poor has never looked so wide.

The redistribution of wealth and opportunities across diverse individual abilities and cultural back-grounds that historically characterizes urban dynamics seems to have stalled in many regions of the world; this is largely because the interactions of interests, concerns, norms and sanctions commonly referred to as "law," [5] are

no longer working in favour of all urban residents. Too many cities today fail to *make sustainable space* for all, not just physically, but also in the civic, socioeconomic and cultural dimensions attached to collective space – spawning slums, informal settlements, informal businesses and jobs, hand-to-mouth livelihoods, destitution and disenfranchisement. By contrast, prosperous cities (as defined by the UN-Habitat City Prosperity Index – CPI) make *physical* space for all through land use regulations, planning and housing; *socioeconomic* space for all through facilitating frameworks as well as decent work opportunities and conditions; prosperous cities also make *civic* space for all through effective recognition of rights and cultural diversity (Chapter 10). Yet, people continue to be excluded from socioeconomic and cultural spaces, and places of exclusion coexist more and more with enclaves of prosperity, as the following review clearly indicates.

Exclusion from socioeconomic space

Within the planning profession, a small but influential group of scholars argue for an urban theory of justice, and for mainstreaming the principles of equity, democracy and diversity into the everyday workings of urban space and policies.[6] This means that the formal political and socioeconomic spheres make space for newcomers, instead of turning access conditions into a series of impossible legal, regulatory and other hurdles that effectively maintain the dominance of vested (largely land-based) interests, and other forms of hidden powers as explained in Chapter 6).

In developed countries, where wages are kept

Karial slum, in contrast to structured housing units to the right. Dhaka, Bangladesh.
Source: UN Photo / Kibae Park

Box 4.1: Global employment vulnerability

Poor job quality remains a pressing issue worldwide. The incidence of vulnerable employment – the share of own-account work and contributing family employment, categories of work typically subject to high levels of precariousness – is declining more slowly than before the start of the global crisis. Vulnerable employment accounts for 1.5 billion people, or over 46 per cent of total employment. In both Southern Asia and Sub-Saharan Africa, over 70 per cent of workers are in vulnerable employment.

In addition to limited access to contributory social protection schemes, workers in vulnerable employment suffer from low productivity and low and highly volatile earnings. There are also significant gender gaps in job quality. Women face a 25 to 35 per cent higher risk of being in vulnerable employment than men in certain countries in Northern Africa, Sub-Saharan Africa and the Arab States.

Source: International Labour Office, 2016.

Too many cities today fail to make sustainable space for all, not just physically, but also in the civic, socioeconomic and cultural dimensions attached to collective space

low by global competition, foreign and local property speculation keeps driving housing prices upward, pushing less affluent categories of the population ever farther to the peri-urban peripheries – including staff of such basic services as police, hospitals and public transport. In emerging and developing countries, where hand-to-mouth livelihoods prevent capital formation, little is done to acknowledge "urbanization" and to grant effective land and/or housing rights to millions of urban residents. Such social exclusion has direct repercussions on the socioeconomic spaces of our cities. In developing countries, the lack of investment from local dominant classes, results in thin domestic industry on the ground, turning local employment into a collective survival strategy in low capital, low-productivity, low-wage, labour rights-free enclaves. Micro- and family-enterprises produce goods or services in makeshift workshops, if not in the open air like the roadside furniture makers in Nairobi. The predicament is similar in the manufacturing sector, which is often part of international "value chains" which in the name of global competition ignore labour rights. The result is that on the whole, in emerging and developing countries alike, at times the formal and informal economic spaces hardly make any difference in terms of labour rights and socioeconomic inclusion (Box 4.1).

Prosperous cities make physical space for all through land use regulations, planning and housing; socioeconomic space for all through facilitating frameworks as well as decent work opportunities and conditions; prosperous cities also make civic space for all through effective recognition of rights and cultural diversity

The world is seeing a surprising phenomenon in developing countries today that was hardly anticipated by economists: as these countries witness dramatic surges in their economic fortunes, they simultaneously experience a spurt in informal employment. Economists of the

1950s and 1960s, such as Arthur Lewis, had argued that the formal and informal economies are separate, and that as the formal economy becomes more prosperous, it will absorb surplus labour from the informal economy and the informal economy will cease to exist. And yet, in countries as varied as Tunisia and Mexico, rapid economic growth of the past few decades has been accompanied by an even faster growth in the informal economy.

Tunisia, for instance, experienced an economic slump in the 1980s. The country started liberalizing its economy from 1986 onwards, and its average growth rate has been steadily increasing since then. It was during this period of fast economic growth that the informal economy also grew the fastest, accounting for nearly 47 per cent of the non-agricultural population in the late 1990s.[7] In Mexico, economists not only showed the positive correlation between economic growth and the informal economy, but they went a step further to show the contribution of the informal economy to economic growth: the informal economy "provides low-cost labour, inputs, goods, and services to both formal and informal enterprises, and low-cost goods and services to the general public, especially poorer households."[8]

In Mexico and Tunisia, as in many other countries in the developing world, growth in the informal economy is related to globalization. This is the case, for instance, with the global supply chains in the clothing industry, where for a single firm, the cotton may be grown in a country where land and labour are cheap, it is exported to another country where the yarn is produced, and then shipped maybe to Bangladesh. Simultaneously, thread, buttons and other components are manufactured in other countries, and brought into Bangladesh. Once assembled there, the items are exported to high-end markets. The firms belong in the formal sector, not the workers. In Tunisia, during the country's fastest growth period, over 54 per cent of the labour force consisted of informal workers who were subcontracted by large export-oriented formal enterprises.[9] Amongst these informal workers, females are predominant, being preferred over males for a number of reasons: willingness to work for lower wages, lower propensity to organize compared with male workers, and higher degrees of pliancy.

The story is not too different in developed countries. Globalization scholars have pointed to the changing nature of the global economy and its impact on American cities, for instance. Immigration flows, outsourcing of jobs to developing countries, and the retrenchment of social

welfare programmes have deeply affected economic life in Western cities, as Chapter 8 urban economies further expounds. Middle-class workers who until recently had secure formal-sector jobs and reliable safety nets now find themselves expelled from the labour market. "Expulsions" instead of forms of exclusion are taking place in these countries with social groups who until just a couple of decades earlier were secure participants in formal labour markets.[10] Moreover, informal workers in developed countries are mostly undocumented migrants from lower-income countries who, because of their legal status, fear going to the police or seeking out legal help, thus further entrapping them within these informal conditions. It is these socially and politically excluded groups that make up the bulk of Los Angeles County's informal workforce: in 2005, it was estimated that undocumented workers made up 61 per cent of the informal labour force in Los Angeles County and 65 per cent for the sole city.[11]

Further, evidence shows that the informal economy is not just a developing country phenomenon. Recent scholarship points to the growing informalization of the urban economy in the US, thus challenging the conventional view that the informal economy is just a transitional phase on the path to an advanced industrial economy[12]. In the US, for instance, the neighbourhood of Harlem in New York City was documented to have a thriving informal economy exceeding one billion dollars.[13] The findings of the study led a large American bank to recognize the financial demand at the bottom of the pyramid and to open two new branches in Harlem. The finding that informality is cyclical, i.e. grows in parallel with economic growth, has led to widespread concern that our societies are now "growing unequally."[14] On the one hand, the recent past has seen an unprecedented increase in wealth accumulated, the world's middle class has grown at a record rate, and income per capita, as well as capital and property values have increased considerably in most parts of the world. On the other hand, economic inequalities have increased and incomes have never been as polarized as they have in the past two decades. Asia, for instance, featured the highest economic growth rates in 2012, with aggregate annual GDP growth rate reaching seven per cent (2005 purchasing power parity); but inequality also increased, by four per cent between 1990 and 2008.[15] OECD countries saw their own overall Gini coefficient increase from 0.29 at the end of the 1980s to 0.316 by 2010, with sharp rises in traditionally more egalitarian countries like Finland and Sweden (Box 4.2).[16]

> Immigration flows, outsourcing of jobs to developing countries, and the retrenchment of social welfare programmes have deeply affected economic life in Western cities

> More than two thirds of the world's population lives in cities that are more unequal today than 20 years ago

Box 4.2: **The rich-poor gap is widening**

Income inequalities have become a universal concern. The world is not only divided by differentiated access to opportunities, consumption, public spaces and services, education, technology and employment, but more and more by access to income. More than two thirds of the world's population lives in cities that are more unequal today than 20 years ago.[18]

The gap between rich and poor is widening in developing countries and emerging economies but also, more surprisingly, in those countries that were considered as the most egalitarian.[19] Although in global terms poverty reduced by half from 43 per cent in 1990 to 21 per cent in 2010 and the middle class increased by 450 million people, income inequalities continue to grow. According to the World Bank, the world's Gini ratio increased from 0.65 points in 1980 to 0.70 in 2010,[20] pointing to

higher inequality even as wealth accumulated like never before.

In 2010 Latin America and the Caribbean remained the most unequal region in the world with a Gini coefficient slightly below 0.5 in 2010, compared with Africa's 0.45. Least unequal countries were high-income nations (with Gini coefficients around 0.30), followed by Eastern Europe and Central Asia (0.35). Asia stood in between (0.4), exactly on the edge of UN-Habitat's "international alert line."[21] In general statistical terms, a Gini coefficient of, say, 0.47 means that the richest 20 per cent of the population earn slightly more than half of total income, while the poorest 20 per cent earn only three per cent of that income.[22]

As for urban inequalities, the evolution is sharply contrasted across regions, particularly in the developing world, as summarized below.

Latin America and the Caribbean:

inequalities remain the steepest in the world although this is the only region in the world where they are decreasing. One in every three Latin Americans is poor and one in every eight lives in extreme poverty. On average, the multiple between the incomes of the poorest 10 per cent and the richest stands at 28, including up to 50 in Brazil.[23]

The urban Gini ratio for the region was 0.494 around the year 2010, denoting an income concentration way above the international alert line. In eight countries – Brazil, Dominican Republic, Colombia, Guatemala, Chile, Argentina, Bolivia and Nicaragua – the ratio is above 0.5. In another seven countries – Honduras, Ecuador, Costa Rica, Panama, Paraguay, Mexico and El Salvador– inequalities are "high" (between 0.49 and 0.45), compared with the "relatively high" coefficients of Uruguay and Peru (below

0.42 but still above the alert line).[24]

UN-Habitat and CAF have compiled a unique mass of data and information on income/consumption inequality in LAC, involving a database for 320 cities in 18 countries, which represent more than 85 per cent of the LAC population.[25] On this basis, it was determined that overall, urban inequality dropped from 0.517 in 1990 to 0.494 (Gini coefficients) in 2010, reflecting the trend in almost two-thirds of cities, with increases in others. The best performing countries were Peru (with a 15.4 per cent drop), Uruguay and Mexico (14 per cent) and Panama (13.5 per cent). Worst performing were Colombia (a 14.5 per cent increase in urban inequality), Costa Rica (14.3 per cent), the Dominican Republic (9.6 per cent) and Ecuador (5.26 per cent).

The UN-Habitat-CAF study shows significant variances in income and consumption inequality across the urban and the national scales, confirming that aggregate national values are seldom apt to describe what happens in all urban settings (in eight out of 12 of the countries, the Gini coefficients of the least and the most unequal city diverts 45 per cent from the national average). The study concluded, "in order to reduce inequalities, in addition to a stable economy and growth, strong institutions, effective social programmes and strong links between the various levels of government are required." In Peru, for instance, the overall urban Gini coefficient decreased by 15.4 per cent thanks to improved social and fiscal policies, which expanded access to public services and opportunities.[26]

Africa: any available information about nationwide or urban income inequality is scant and fragmented. Some time ago, the British Overseas Development Institute (2006) saw inequality on the rise while making exceptions for the Gambia, Kenya, Mauritania and Tanzania). Earlier, the UN Economic Commission for Africa (2004) found that in Ethiopia, Mozambique, Rwanda and Uganda,

the income gap was widening

UN-Habitat has collected data on income/consumption inequality in urban areas in 24 countries from national statistics offices and other official sources over a period of 20 years (1990-2010). Again, the results are rather mixed, and in general terms African cities come second only to LAC for unequal incomes and consumption, combining the lowest per capita incomes and major social divides in health, nutrition, education and basic services.

The most unequal cities in the region and probably in the world are in South Africa: in Buffalo, Ekurhuleni (East Rand), eThekwini (Durban), Johannesburg, Port Elizabeth and Tshwane (Pretoria), Gini coefficients stand above 0.7, higher than the 0.64 ratio found in Lagos, Nigeria. Another seven cities (out of 42 in the African sample) feature Gini coefficients above 0.5 ("very high inequality"). For all these extremes and the high average, though,

> significant variances in income and consumption inequality across the urban and the national scales, confirming that aggregate national values are seldom apt to describe what happens in all urban settings

seven cities in the sample remain below the international alert line (0.4), with "moderate" degrees of income concentration.[27] However, from Ethiopia to Congo to Guinea-Bissau to Sierra Leone, these numbers denote a higher prevalence of poverty over wealth.

Progress towards equality across same-country urban areas has been very uneven. Between 2003 and 2013, while income distribution has improved in six countries – Algeria, Benin, Côte d'Ivoire, Rwanda, South Africa and Uganda – it has deteriorated in another six – Botswana, Egypt, Ethiopia, Mozambique, Tanzania and Zambia. The largest increases in urban income inequality were recorded in Botswana and Zambia and the most significant reductions happened in Côte d'Ivoire and Uganda, as per the existing sample.[28] All these figures are to be considered with caution, since data was compiled using various sources

and methods of calculation. In various countries urban data is available only for one point in time and in general inequalities remain quite high. Still, the data suggests an urgent need for African countries to address income inequality since this economic divide has the potential to hinder development and stall progress.

Asia-Pacific: the economic growth rate slowed down to around six per cent in 2014 from seven per cent one year before, but the region remains the global leader[29] for growth – and for poverty reduction, too. Between 1990 and 2010, more than 716 million Asians have been lifted out of poverty, with the rate falling from 54 to 21.5 per cent of the overall population.[30]

This would suggest that economic growth and income inequality do not necessarily go hand in hand. Still, according to the Asian Development Bank, inequality in the region rose by four per cent of Gini coefficient between 1990 and 2008 and the trend has apparently continued in various countries in recent years. In major economic powerhouses such as China, India and Indonesia, inequality indicators are deteriorating.

Whilst the sample of Asian cities with comparable data is very limited, the highest degrees of inequality are found in Hong Kong; Ho Chi Minh City, Viet Nam; and Chiang Mai, Thailand, with Gini coefficients above 0.5. Least unequal are Chittagong and Dhaka, Bangladesh; Fuzhou, Xi'an and Benxi, China, with Gini coefficients around 0.35 and below the international alert line – but here again denoting widespread poverty and poor public services. A new sample surveyed by UN-Habitat showed that in all but one of seven cities, inequalities had steepened between the years 2000 and 2014: Hong Kong, Colombo, Delhi, Jakarta and Bangkok, with the last two recording the highest increases. Only in Manila did inequalities remain stable. If anything, this provides some indication of the steeper urban inequality at work in the region.

A good example of the role local government policies can play in making cities more economically inclusive comes from eThekwini, South Africa. Formerly known as Durban, the city has been praised for a renewal project (Warwick Junction), which has opened spaces to informal businesses such as street vending.[17] The new planning approach was a joint cooperative initiative between public officials and organized street vendors, highlighting the suspension of traditional master plans in favour of a more collaborative approach. This included the type of inter-departmental coordination and participatory planning needed for street trading, bringing public agencies, which otherwise work in silos, into collaboration with one another. The municipality also made sure that street vendors and their preferences guided the (low-budget) design, facilitating project ownership. This experience shows how planning and other rules can be turned from forbidding to facilitating and inclusive through participatory decision-making, in the process recognizing the social and economic value of the informal services sector. Ensuring equitable urban development and inclusive growth and empowering civil society are fundamental principles of what the New Urban Agenda should address (Chapter 9).

Exclusion from the collective sociocultural space

The 1970s saw the rise of a number of defining social movements – the feminist movement, the civil rights movement, and more recently, the lesbians, gays, bisexuals and transgenders (LGBT) movements – that marked a clear shift from the class-based struggles of the earlier decades. These movements were not just about socio-economic injustice. They are instead about a cultural injustice, rooted in a struggle for recognition and the positive re-valuation of cultural diversity.[31] Many countries maintain laws and social practices that shame, discriminate, harass, and even criminalize, lesbians, gays, bisexuals and transgenders. This can involve a socioeconomic dimension such as dismissal from paid work or denial of welfare benefits. However, these groups demand positive recognition of their identity rather than any material redistribution of resources. The Human Rights Campaign, the largest dedicated civil rights organization in the US, maintains a Municipal Equality Index,[32] including "non-discriminatory laws" with regard to employment, housing and public amenities; the "municipality as employer," (focusing on equivalent benefits and protec-

tion, and preference for fair-minded, non-discriminatory procurement; and "municipal services."

Exclusion from the cultural space also affects gender relations. Feminists have long pointed to the inequalities in access to economic opportunities due to the fundamental division between paid, "productive" work (typically outside the private home space), and unpaid, "reproductive and care-giving (typically based outside the home space) work." Within the paid labour force, women face socio-economic exclusion, as labour markets are divided into "the higher-paid, male-dominated, manufacturing and professional occupations and lower-paid, female-dominated "pink-collar" and domestic service occupations.[33] Gender-related income gaps are significant, even in the formal labour force in developed countries. In the US, a survey found that as of 2013, the median full-time working woman's average earnings were 78 per cent of her male counterparts.[34] Women also earn less in terms of health insurance, retirement savings or paid leave.

Women also face exclusion from mainstream social interactions, including "sexual assault, sexual exploitation, and pervasive domestic violence; trivializing, objectifying, and demeaning stereotypical depictions in the media; harassment and disparagement in all spheres of everyday life… exclusion or marginalization in public spheres and deliberative bodies, and denial of full legal rights and equal protection."[35] Female exclusion can also be entrenched in the physical urban space.[36]

Some countries have tackled women's poor access to mainstream sociocultural space through fiscal

Many countries maintain laws and social practices that shame, discriminate, harass, and even criminalize, lesbians, gays, bisexuals and transgenders

Exclusion from the cultural space also affects gender relations

Some countries have tackled women's poor access to mainstream sociocultural space through fiscal change

Community at discussion on water supply and sanitation. Kaski Nepal.

Source: D. McCourtie / World Bank, CC BY 2.0, https://creativecommons. org/licenses/by/2.0/ legalcode

Exclusion from the mainstream sociocultural space also pervades the arts, media and culture, often in tandem with economic exclusion

Migrant groups face harsher discrimination than others because of the visible rise of islamophobia in Western countries

Fewer than 20 per cent of the UAE's population are citizens, and as many as 95 per cent of the labour force in the private sector is made up of migrants

Unequal distribution of civil rights has implications for political rights

change.[37] For instance, governments support gender equality through priority budgetary allocations to those public services with larger impacts on the everyday lives of women. In some countries, more investment in girls' education may have positive spill over effects on women's access to viable jobs. In others, specialized training and skill development for women and microcredit can empower them to develop their own business initiatives.

India has taken inclusion of women into the political space a step further with political reservations for women (up to 33 per cent) in local governments, recognizing that different sociocultural groups have different preferences for the types of public goods they want public resources to be spent on, e.g. water supply.[38] These findings make a strong case for positive discrimination policies in the democratic system to ensure that various sociocultural groups, with their different preferences, have an equally strong voice in deciding on budgetary allocations.

Exclusion from the mainstream sociocultural space also pervades the arts, media and culture, often in tandem with economic exclusion. In most cities, cultural amenities are generally located in the most affluent neighbourhoods. This has prompted Medellín, Colombia to launch a "social urbanism" project, including public parks and a library by a world-renowned architect deployed in the poorest neighbourhood.[39] Minority groups, who in many cases are also economically underprivileged, may also find that their language is excluded from official dealings, signs or public information broadcasts.[40] In this respect, one of India's most historically excluded groups, the Dalits, have now set up their own Chamber of Commerce to provide institutional support to an expanding business community and to publicize their specific concerns. Dalit entrepreneurs use their economic resources to remedy cultural exclusion, demonstrating that the line between economic and cultural exclusion is extremely thin, if not blurred.[41]

Exclusion from political space

The oldest question confronting democracies is that of political space, i.e. boundaries: who should be included within the specific space of a given political jurisdiction, and by extension, who has the right to participate in civic space— i.e. the democratic decision-making process— within that jurisdiction? This question has become more crucial under the double pressure of economic globalization represented by cross-border migrants and investors. Migrants often lack even the most basic

civic rights in host countries, and mature democracies such as those of Western Europe are now facing a serious threat of de-democratization as more and more social groups are excluded from the democratic process.

Immigration and the role of immigrants is one of the most politically charged debates in Western countries. In the EU, an opinion survey found that in 2014, immigration was the third most frequently mentioned issue in member states, after unemployment and economic conditions,[42] with 57 per cent of the general public taking a negative view of the "immigration of people from outside the EU." Resentment of immigration is partly fuelled by the economic crisis and the intense competition for scarce jobs. It is also fuelled by xenophobic attitudes and low tolerance to diversity. EU citizens recognized that migrants come to their countries in search of better economic prospects, and there is a fear amongst the "local people" that these migrant outsiders are taking employment opportunities from them. Besides the economic threat, migrants from outside the EU are also perceived with strong negative stereotypes that associate them with criminal activities such as acquiring visas illegally, evading taxes, involvement in corrupt business activities and so on.[43] Certain migrant groups face harsher discrimination than others because of the visible rise of islamophobia in Western countries.[44] These strong feelings of distrust and even hostility stand in the way of any political changes that seek to include migrants, especially those from outside the EU, within the EU's political community. Some governments have reneged on earlier pledges to grant migrants the vote in (if only) local elections. Other industrialized societies, including the US, are not immune from their own immigration challenges, with undocumented workers facing the severest forms of political, economic and social discrimination largely stemming from their illegal (undocumented) status.

Besides North America and Europe, the UAE receives the largest influx of migrants, mainly from South Asia. Fewer than 20 per cent of the UAE's population are citizens, and as many as 95 per cent of the labour force in the private sector is made up of migrants.[45] Cities like Dubai have seen a spectacular building boom in the past few decades, which would not have been possible for this migrant workforce. Labour legislation regulates maximum working hours, industrial safety, minimum wages and benefits for workers and the prevention of child labour, but enforcement, if any, is weak. However, the rights of workers to organize, to form trade unions, and to go on strike are

not recognized.[46] Migrant workers in the UAE and other Gulf Cooperation Council countries cannot be considered migrant workers, as they work on a temporary basis and according to fixed-term employment contracts. Therefore, the immigration laws applicable in Western countries cannot be applied to these workers."[47] Migrant workers in the Gulf countries are subject to some of the most blatant violations of human rights, including unacceptably low wages, long workdays during peak hours of summer months, overcrowded and segregated living conditions in labour camps located in remote areas, and debt bondage (e.g. confiscation of passports by private employers).

Exclusion from universal suffrage, i.e. political rights, is not the only form of political exclusion. T. H. Marshall's defined citizenship as a "status bestowed on all those who are full members of a society."[48] In addition to political rights, include civil rights (equality before the law and the rights necessary for individual freedom) and social rights (the right to basic social and economic welfare). This categorization of citizenship rights is particularly relevant in rapidly urbanizing countries where the most vulnerable social groups have political rights, but lack civil and social rights. In many developing countries, poorly planned urbanization has priced more people out of formal land markets, forcing them to make their homes in informal and unauthorized settlements (Chapter 3, the Fate of Housing). Though the democratic ideal is for all citizens to be treated equally, in practice, informal residents are not treated at par with formal residents.[49] They are often denied civil rights; their associations, for instance, are not granted the same status as those of formal associations. Unequal distribution of civil rights has implications for political rights. Countries around the world are experimenting with new participatory models of planning, but critics point out that formal associations, which represent the interests of more affluent, middle-class groups within society, hijack these participatory processes, as explained in Chapter 6.[50] Lack of equal social rights, including basic public services, goods and amenities, is the defining and most visible characteristic of informal settlements. A common perception is that extension of such basic services would be akin to government endorsement of land law transgressions. As a result, slum residents will often gain access through power plays with public authorities, rather than as bearers of rights.[51] In China, rural migrants to cities make up a large share of the labour force but are

> *Lack of equal social rights, including basic public services, goods and amenities, is the defining and most visible characteristic of informal settlements*

not entitled to the housing, health, schooling and other public services available to established citizens and often end up living in overcrowded, poorly serviced rental accommodation in secluded spaces known as urban villages.[52]

The challenge of exclusion from urban civic spaces can be tackled head-on through "the right to the city," rights-based approaches and "just sustainabilities" (Chapter 5). Originally a call for residents' political participation in the shaping of the city, the "right to the city" was codified at the 2004 World Social Forum by social movements into the World Charter on the Right to the City, and was the theme for the UN-Habitat 2010 World Urban Forum.

A practical example of the "right to the city" can be found in Ireland's capital city. The Dublin municipality has granted non-Irish, non-EU residents the right to vote in local elections[53] regardless of legal status. This effectively breaks the time-honoured link between civic rights and nationality. The political inclusion mandate is taken one step further with voter education and awareness campaigns. In Colombia, the government guarantees basic services – water supply, sanitation, electricity, waste collection, telephone and gas – to all, including slum-dwellers. The lack of basic amenities is a defining feature of informal settlements, and is conventionally motivated by lack of formal tenure; but Colombia's guarantee effectively breaks this link to bring slum-dwellers within the mainstream space of shared basic services.[54]

Spatial exclusion

New optical fibre networks that within nano-seconds transmit information from one corner of the world to another; and Internet/social media that has made it possible to connect, mobilize and organize people dispersed in far-away places into new networks. These technological innovations have resulted in new urban landscapes that would have seemed too futuristic and only remotely possible nearly 20 years ago, during the Habitat II conference. However, instead of bringing together far-flung networks and integrated (if virtual) urban expanses, ICTs instead splinter physical space into highly unequal, fragmented environments. This new intertwining of technology with the social, economic and political spaces have been called the "space of flows": information technology functionally integrates all high-value spaces, while simultaneously bypassing and excluding those of a lower value.[55]

> *The Dublin municipality has granted non-Irish, non-EU residents the right to vote in local elections regardless of legal status*

> *Instead of bringing together far-flung networks and integrated (if virtual) urban expanses, information and communication technologies (ICTs) instead splinter physical space into highly unequal, fragmented environments*

> *Life expectancy in the immediate environs of these internationally renowned hospital facilities is amongst the lowest in the nation and comparable to many of the poorer countries of the world*

The spatial concentration of low-income unskilled workers in segregated residential quarters acts as a poverty trap

ICTs can support advocacy and empowerment, enabling excluded groups to leapfrog existing barriers and become better integrated within urban society

The situation is not that dissimilar in the very material world of underground water supply networks in Mumbai, India. The municipality subsidises good-quality water supply to affluent gated condominiums, along the way criss-crossing beneath informal settlements that are deprived of any access to that or any other water network. In India can also be found the paradox of low-paid women who work in some most technologically advanced, cutting-edge hospitals, but have no access to the services offered there.[56] The paradox is that "life expectancy in the immediate environs of these internationally renowned hospital facilities is amongst the lowest in the nation and comparable to many of the poorer countries of the world."[57] This is an example of "Just Environmental Sustainability," as elaborated in Chapter 5), These examples highlight how the various spaces where people interact on a daily basis are kept strictly separate, instead of being unified, by exclusive rules that fail to recognize the needs of those physically, though not socially, more proximate. ICTs provide the ultimate illustration of this new ordering of urban space, whereby geographically distant regions that are of high-value to the global economy are seamlessly connected through the most advanced technology, but physically proximate regions are disconnected and severed from one another.

It often happens that such intra-urban spatial inequalities are strongly correlated with ethnicity: for instance, "Puerto Ricans and Haitians in New York, Mexicans in Los Angeles and San Francisco, barefoot *indianos* in Mexico City, *nordestinos* in São Paulo, Jamaicans in 1960s' London, Algerians in Paris, Turks in Frankfurt, and Malays in Singapore."[58] As documented by UN-Habitat, the spatial concentration of low-income unskilled workers in segregated residential quarters acts as a poverty trap, which is characterized by six distinct challenges: (a) severe job restrictions; (b) high rates of gender disparities; (c) deteriorated living conditions; (d) social exclusion and marginalization; (e) lack of social interaction, and (f) high incidence of crime.[59] Segregation is a proxy for the "social distance" between groups, i.e. segregated minority populations who would benefit from spatial proximity to higher-income white groups, lack access to the quality schooling, safety and social connections that could lead to new employment opportunities. In Paris, the Index of Dissimilarity[60] revealed that 32 per cent of all residents would have to be relocated if an even mix of French, Maghrebis

It takes political will to integrate, rather than further fragment, the built environment of any city.

and Africans had to be achieved.[61] The spatial segregation of largely immigrant, low-income groups in suburban Paris affects their social status, and neighbourhood segregation prevents those unemployed from securing jobs.

Sub-national data is scarce in developing countries where a proxy for spatial exclusion is the proportion of slum compared with non-slum areas in any given city. The new feature is the juxtaposition of high-income enclaves with slums. Medellín, Colombia is segregated between the affluent South and the poor North, whereas in Mogadishu the polarization works the other way round.[62] Inequality is more visible under a spatial than any other (e.g. income) perspective and the contrast of the "citadel" with the "ghetto"[63] can generate mistrust, alienation, tension or unrest.

As for ICTs, research suggests that (Chapter 5) they are more likely, by themselves, to exacerbate than remedy existing inequalities, because whoever already wields power will have better access to, and control over, these technologies (Chapter 1). However, given favourable conditions, ICTs can support advocacy and empowerment, enabling excluded groups to leapfrog existing barriers and become better integrated within urban society (including banking and credit services), as in Kenya.[64] In Boston and St. Louis (US), ICTs strengthen communication and dialogue between citizens and public officials.[65]

Redevelopment of distressed urban areas used to be top-down, with little opportunity for far-flung local communities to have their preferences and voices heard by distant federal officials. Today, videos carry the voices of local stakeholders to planning offices and federal agencies, giving them a reach, which would not have possible without the use of technology. Local stakeholders can also give feedback on urban programmes in their neighbourhoods. In Brazil and Colombia, some slum communities and associations publicize both issues and achievements through local TV broadcasts *(favela cameras)*.[66] These examples show how ICTs can facilitate more decentralized and inclusive urban governance.

Infrastructure networks are occasionally perceived as splintering urban space. It takes political will to integrate, rather than further fragment, the built environment of any city. A good example is the case of Medellín, Colombia, which being spread over a valley and overhanging hills is one of the most spatially divided cities in the world. Till the early 2000s, the residents of
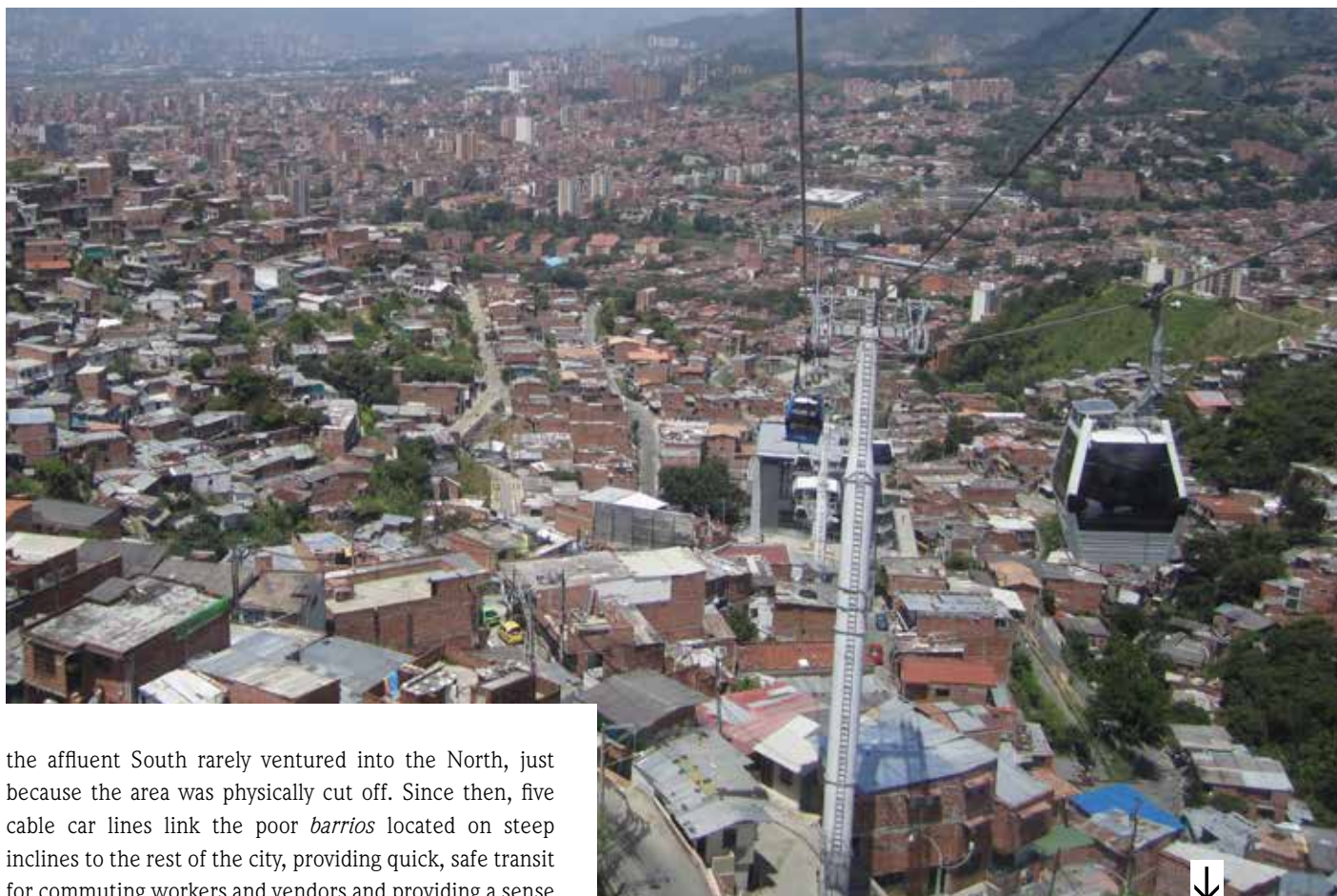
the affluent South rarely ventured into the North, just because the area was physically cut off. Since then, five cable car lines link the poor *barrios* located on steep inclines to the rest of the city, providing quick, safe transit for commuting workers and vendors and providing a sense of civic belonging to one single urban space.

In reality, these multiple forms of exclusion work in tandem with one another. For instance, informal settlements or slums are not just an expression of economic exclusion (the poor unable to afford formal land/ housing), but can also be produced at the intersection of these various forms of exclusion (Chapter 5 "Just" Environmental Sustainabilities). Those living in the poorest urban neighbourhoods may be internally displaced, cross-border, war or climate refugees and/or belong to ethnic, religious, racial and/or despised minorities. The high correlation between caste and poverty in India is a case in point, with minorities accounting for 10 to 15 per cent of an urban population, which makes up close to half the slum dwellers.[67] Lack of legal status (as in the case of undocumented migrants) further compounds civic exclusion. This in turn further reproduces spatial inequality, as those with political voice and/or money power have more access to decision-makers and are able to leverage urban amenities for their own benefit (Chapter 6 Rules of the Game). Better schools, parks, health facilities and trans-

portation networks for the high-income areas further fuel economic exclusion, as those confined to poorly serviced, low-income neighbourhoods are cut off from the decent formal jobs.

This vicious cycle where one form of exclusion reinforces another can only be broken through active public policy, such as in the eThekwini and Medellín cases. In the former, street vendors were not criminalized, but instead seen as hard-working citizens who have as much of a right to work in the city as any other "formal" workers do. In the latter, the mayor took a progressive stance to locate high quality transport and cultural amenities in the poorest neighbourhoods.

A view of Medellín's slums and the innovative cable car on the Aburrá valley in Colombia. 2012

Source: Julius Mwelu/ UN-Habitat

Multiple forms of exclusion work in tandem with one another

4.2

The New Urban Agenda: Unfinished Business and Emerging Forms of Exclusion and Marginalization

Against the backdrop of global interdependencies and conflicts, the role of cities – both in relation to their hinterland as well as to international economic flows – is rapidly changing. Consequently, new urban policies are needed to harness the benefits that arise from different groups of people living in close proximity to one another, rather than letting these heterogeneous urban conditions combust into intolerance, xenophobia and widening inequalities. In other words, the heterogeneity, density and diversity of cities, which is what makes them nodes of economic innovation and democratic progress, must be managed and planned, short of which these very variables that make successful cities can transform them into places of social exclusion and inequality. Cities like eThekwini, Dublin and Medellín show how inclusive planning has the capacity to augment civic, socioeconomic and sheer physical space for all. The **components** of the New Urban Agenda are focused on desired directions of change for urban areas in the context of national development.

> The heterogeneity, density and diversity of cities, which is what makes them nodes of economic innovation and democratic progress, must be managed and planned

Local authorities, however, are not all by themselves in a position to make cities more inclusive – far from it: instead, it takes coordinated action between local and higher tiers of government (Chapter 6). National laws, regulations and policies play an important role in enabling or constraining local actors to achieve inclusive urban spaces. The components of what can constitute the New Urban Agenda integrate these elements as frameworks for local action (Chapter 10). Local authorities in China and Vietnam, for instance, wield only limited control over migrant rights and access to basic services,

> National laws, regulations and policies play an important role in enabling or constraining local actors to achieve inclusive urban spaces

as domestic registration systems rest with national policies. Global pressures, as reflected in rankings based on business/economic competitiveness, force cities to prioritize characteristics such as physical size or GDP over redistributive/socially progressive programmes, with little concern for participatory planning and inclusive decision-making. Local governments then have to be seen as part of more comprehensive governance solutions to ensure synergies and complementarities of interventions across different tiers.

Largely derived from the findings of a previous edition of the *State of the World's Cities* report with regard to economic, social, political and spatial exclusion, this section of the Report concludes with a discussion of some policy levers for more inclusive, sustainable cities.[68]

A reinvigorated notion of urban planning and design…

One of the most common instruments used by planners to regulate and manage urban population and spatial growth is the master plan. And yet, the traditional master plan that focused only on the physical development of the city has now become an outdated, exclusionary planning model (Chapter 7). It is incumbent on the New Urban Agenda to revisit this planning model, retaining any positive aspects that are susceptible of reducing negative externalities (based on "just sustainabilities") and maximizing more positive ones – while promoting a reinvigorated notion of urban planning and design, which should feature as a major tenet of this agenda.

> Local governments then have to be seen as part of more comprehensive governance solutions to ensure synergies and complementarities of interventions across different tiers

Rigid, top-down zoning plans only ensure that much of urban life takes place outside their own dictates, as is the case with informal economic activities. The socioeconomic patterns these plans lay out largely formalize and "freeze," in both concrete and tarmac, the dominant political and economic interests of the time, which by definition have little concern for the poor (Chapter 6). Urban authorities around the world routinely demolish thriving open-air informal markets and move them into concrete structures in new locations, without any concern for traders' or customers' needs. Many of these redeveloped markets have fallen into disuse, with serious adverse effects on informal livelihoods. In contrast, the eThekwini case shows how new spatial planning can recognize informal vendors not as deviants, but as fully legitimate workers, and how their

Sustainable Urban mobility is an important component of urbanization. Inclusivity is key in planning urban transport. Bogota, Colombia.

Source: Embarq, CC BY 2.0, https://creativecommons.org/licenses/by/2.0/legalcode

needs can be integrated into formal planning. eThekwini also shows how spatial planning can support economic opportunities for the poor, while at the same time providing the light-handed type of that reduces any potential for conflicts between the economy and transport so that the informal trade and transport flows do not hinder each other. The New Urban Agenda must respond to the institutional conditions under which local governments can creatively and pragmatically make urban space more inclusive (Chapter 10).

Similarly, a reinvigorated notion of urban planning and design must keep up with changing patterns of labour mobility. In India, for instance, the high costs of urban land are pushing formal manufacturing firms into peri-urban areas.[69] This means that workers, particularly unskilled labour, must commute to peri-urban instead of more central areas,[70] which calls on planners to provide affordable transport and infrastructure.

It must be stressed here that the effects of climate change can pose unexpected challenges for urban planning, as they can, by themselves, result in spatial inequality and destitution. For instance, along the coastal areas of Dakar, sea level rise is gradually turning proper conventional housing into slums (according to the UN-Habitat definition), making power, water and sanitation supplies impractical, undermining structures, causing overcrowding as households regroup in any viable sheltered space that remains – ultimately wiping out any tenure rights as the ocean takes over whole properties and residents need to relocate.

... At the appropriate scales

Still, local governments retain a major role towards the reinvigorated urban planning and design of cities. In the 1996 Istanbul Declaration, national governments explicitly recognized "local governments as our closest partners, and as essential in the implementation of the Habitat Agenda." In the area of sustainable development, as environmental concerns started getting mainstreamed into the development agenda, the role of local governments was again deemed as crucial when it comes to identifying local sustainability priorities and implementing attendant long-term action plans. The Rio+20 (2012) conference called on local governments to take the lead in developing multi-stakeholder, long-term strategic plans that are tailored to specific citizen needs. As the notion of equality is more and more integrated into the development agenda, local conditions – history, geography, culture, local labour markets, local governance and institutions – play important roles in inequality reduction. UN-Habitat and CAF have demonstrated that not all the factors behind inequality originate at the national level, and not all responses to inequality should come from the national government either. Strong local authorities are therefore needed, with more collaborative governance mechanisms articulating the various tiers.[71]

New spatial planning can recognize informal vendors not as deviants, but as fully legitimate workers, and how their needs can be integrated into formal planning

The New Urban Agenda must respond to the institutional conditions under which local governments can creatively and pragmatically make urban space more inclusive

not all the factors behind inequality originate at the national level, and not all responses to inequality should come from the national government either

Participation in urban planning is a much-needed corrective to modernist forms of planning that have been dominated by technocratic decision-making

Calling for higher urban densities, which would alleviate the destructive burden which unsustainable urbanization keeps imposing on peri-urban areas and beyond

However, larger conurbations, mega-regions and urban corridors are the "shape of things to come,"[72] with governance challenges described as "the law/space mismatch."[73] Though the problem is not new, the scale is unprecedented: China's Hong Kong-Shenzhen-Ghangzhou (Pearl River Delta) mega-region, for instance, is home to 120 million (or almost 2.5 times the population of, for instance, Colombia).

Though metropolitan and larger city-regions have long struggled with the issue of translocal or regional planning, there are few successful examples of regional institutions. Many are either structured as State/regional governments, taking away power from local authorities, or as advisory bodies but with little grip on reality. This is one of the major governance challenges for urban planning: experimenting with new institutions that have jurisdictional authority over the scale of the problem but, at the time same, must not undermine local democracy - and this calls for adequate forms of metropolitan and regional governance that can address territorial imbalances and different forms of inequality and exclusion (Chapter 6, urban governance and legislation).

With the right types of participation...

The Urban Management Programme (UMP) is a scheme jointly run by UN-Habitat, UNDP and the World Bank, which already in the late 1980s and early 1990s marked a shift away from "management" to "governance." UMP purports to "supplement the largely technocratic processes used by urban managers in dealing with a range of urban issues, with a more inclusive approach of city consultations that promote participation and empowerment."[74] One of the main achievements of UMP took the form of decentralized networks of anchor institutions in various regions, institutionalizing processes through which constituencies and these public institutions engage in public deliberations on the future of the city, together with co-creation of new forms of knowledge and expertise. These institutional legacies provided the foundation for the Cities Alliance's programme, City Development Strategies (CDS), as the new form of long-term strategic, participatory planning for urban development.

Participation in urban planning is a much-needed corrective to modernist forms of planning that have been dominated by technocratic decision-making, as suggested by SDGs indicator that proposes a direct participation of the civil society in urban planning and

management. Such modernist plans – where planners make rules for every small detail (right up to lighting intensity on a street) and attempt to integrate the various bits that make up a complex urban society into an integrated whole – have been called a "closed" system of planning. In this system, the urban plan was the context, and whatever lay "outside the plan" was indeed out of mind (Chapter 9). Such a system results in the "Brittle City," where users have no flexibility to adapt urban form to their diverse needs and aspirations. This argues in favour of an "open" system of planning, where, for instance, the edges between individual neighbourhoods are designed to be ambiguous, and where urban form is purposely left incomplete so that it can evolve with changing times. These open cities are planned to bring together different people who vary by class, ethnicity, religion and sexual orientation into a dissonant urban space, and it is in this dissonance that people take ownership over their city.[75]

Finally, the very forms and types of participation matter as much as participatory decision-making. Participation is a time-consuming process, with citizens expected to show up at successions of various meetings. In South Africa, many participants have complained of burnout and "talking shops."[76] However, various types of participation in complex governance are available, depending on variables such as participant selection, modes of communication and decision-making (are participants listeners, deliberators, or experts?), and the connection between citizen contributions (advisory or binding?) and final outcomes[77] (Chapter 6). With regards to planning, given the pace and scale of urban change, new modes of participation must give residents a genuine voice in decision-making, with due regard for the real-life (time, and other) constraints of public officials. The notion of "just sustainabilities" can help in this respect (Chapter 5).

Today, too many legal and planning frameworks effectively freeze the distribution of physical, socio-economic and cultural space, resulting in destitution for large numbers among residents in what remains one and the same shared, humanized space with the same rights attached under international law.

Sociability is experienced through collective presence in one and the same space and environment,[78] with the climate crisis forcing cities to seek a fresh material dimension to the democratic project,[79] opening up unexpected perspectives. Consequently, if urban environments are to be kept sustainable, more citizen engagement is needed at local level, with some form of insti-

tutional recognition for what amounts to a stewardship function in the public interest.[80] Ultimately, the phenomenon currently known as "urbanization" amounts, from a sheer physical, spatial perspective, to anarchic, unsustainable extension of non-environment-friendly settlements —both informal, non-planned, under-developed (slums) and developed (gated communities)— over expanses of non-urban land. This form of horizontal urbanization (sprawl, both formal and informal) is largely divisive (both spatially and socially), whereas sustainable, more vertical urbanization is inherently more inclusive in all respects. The current predicament comes as a challenge to (reinvented) planning, calling for higher urban densities, which would alleviate the destructive burden which unsustainable urbanization keeps imposing on peri-urban areas and beyond. But then, such novel planning is possible only (as suggested earlier) at the intersection of the physical and the civic spaces with a "city that plans" (Chapter 7).

Cities cannot sustainably augment or make space for all. As such, this calls for the construction of more vertical neighbourhoods, including a common civic sense, which can only be brought about by inclusive, participatory governance, treating sustainable residential densities as a public good (Chapter 9). Cities need to put in place a new monitoring framework to assess how their policies and plans are impacting on the life of their citizens. This framework can ensure the continued engagement of stakeholders in order to enhance the inclusiveness, legitimacy and accountability agenda, as proposed in Chapter 10).

In this respect, it is worth mentioning here that a few years ago Ecuador, host to the 2016 Habitat III conference, went one intriguing step further: the new Constitution formally recognizes natural environments as "political subjects," with local people acting as official agents.[81] This reverses humankind's conventional relationship to nature, not just redistributing power and responsibilities to urban residents but also, just as importantly, ushering current and future generations into a newly found, global history of nature.[82]

For all these reasons, the widespread destitution in cities and nations experienced by citizenry in cities and nations, must be curbed – as prescribed by the governments of this world under the Sustainable Development Goals, through "just sustainabilities," and for the sake of prosperity as defined by UN-Habitat.

Notes

1. UN-Habitat, CAF and Avina, 2014.
2. Robin, 2001.
3. Wihtol de Wenden, 1992.
4. UN-Habitat, 2010a.
5. Poche, 1992.
6. Susan Fainstein stands out as a pioneering scholar in this respect (2010).
7. Charmes and Lakehal, 2004.
8. WIEGO, 2016.
9. Charmes and Lakehal, 2004.
10. Sassen, 2014.
11. Flaming, Haydamack, and Joassart, 2005.
12. Williams and Windebank, 2001; Mukhija and Loukaitou-Sideris, 2014.
13. Social Compact and Fleet Community Banking Group, 2001.
14. OECD, 2008 and UN-Habitat, 2014.
15. UN-Habitat, CAF and Avina, 2014.
16. OECD, 2008.
17. Skinner, 2009; SAIA(undated).
18. UN-Habitat, CAF and Avina, 2014.
19. OECD, 2011.
20. UN-Habitat, CAF and Avina, op cit
21. Ibid.
22. UN-Habitat, 2010a.
23. UN-Habitat, CAF and Avina, op cit.
24. Ibid.
25. This database includes very small (pop. under 100,000) cities (38 per cent), small (100,000-500,000) cities (35 per cent), intermediate (500,000- one million) cities (12 per cent), large (one to five million) cities (12 per cent) and very large (over five million) cities (3 per cent).
26. UN-Habitat, CAF and Avina, 2014.
27. UN-Habitat (2015) database in the Statistical Annex.
28. Refer to Statistical Annex.
29. IMF, 2015b.
30. UN-Habitat, CAF and Avina, op. cit.
31. Fraser, 1997.
32. Human Rights Campaign Foundation, 2014.
33. Fraser, 1997.
34. Whitehouse Blog, 2014.
35. Fraser, 1997.
36. Raibaud, 2015.
37. Seguino, 2012.
38. Duflo, 2005.
39. Mazzanti, 2010.
40. UN-Habitat, 2010a.
41. Menon and Nigam, 2007.
42. TNS Opinion and Social, 2014.
43. Ibid.
44. Fetzer and Soper, 2002.
45. Lori, 2011.
46. Ghaemi, 2006.
47. Ibid.
48. Marshall, 1950.
49. Chatterjee, 2008; Holston, 2008.
50. Fernandes, 2006; Harriss, 2006; Budny, 2007.
51. Benjamin, 2008.
52. Chan, 2009; Zhao, 2013.
53. Dublin Office for Integration, 2009.
54. Aristizabal and Gomez, 2002
55. Castells, 2011.
56. Harvey, 2000.
57. Ibid.
58. Ibid.
59. UN-Habitat, 2010a.
60. This index measures the spatial distribution of different income and ethnic groups within a city.
61. Gobillon and Selod, 2007.
62. Marchal, 2006.
63. Friedmann and Wolff, 1982.
64. The UN-Habitat City Prosperity Initiative conducted an analysis of the positive role of ICT in sustainable urban development, 2014.
65. Schön, Sanyal, and Mitchell, 1999.
66. Agier, 2015.
67. UN-Habitat, 2010a.
68. UN-Habitat, 2010a.
69. Ghani et al, 2012.
70. Chandrasekhar and Sharma, 2014.
71. UN-Habitat, CAF and Avina, 2014.
72. UN-Habitat, 2010a.
73. Balakrishnan, 2014.
74. Mehta, 2005.
75. Sennett, 2007.
76. Fainstein, 2000.
77. Fung, 2006.
78. Poche, op. cit.
79. Charbonnier, 2015.
80. Villela-Petit, 2007.
81. Descola, 2015.
82. Chalier and Schmid, 2015.

05

"Just" Environmental Sustainabilities

QUICK FACTS

1 By 2030, global demand for energy and water is expected to grow by 40 and 50 per cent respectively.

2 Solid waste management dominates municipal annual budgets in low- and middle-income countries, with shares of 30 to 50 per cent

3 In urban areas, climate change impacts like heat waves, heavy precipitations and droughts can compound one another, making disaster risk management more complex.

4 Faced with extreme events, cities increasingly understand that novel ways are called for to build resilience, in the process contributing to a more equitable environment

5 Although developed countries provide those less developed with financial support for climate change mitigation, it falls short if the on-going rise in global temperatures is to be contained.

POLICY POINTS

1 A human rights-based approach to the urban environment emphasizes our universal dependence on unadulterated, abundant resources.

2 Mainstreaming the notion 'just sustainabilities' into urban planning and policies will challenge dominant, outdated preconceptions, while taking in specific local ecological constraints.

3 New planning approaches are emerging that offer a range of possibilities to finance environmental action and recognize its valuable contribution beyond purely economic valuation.

4 Strengthening multi-level governance approaches is essential to achieving low-carbon cities and raising standards of urban resilience in the future.

URBAN AREAS FACE FOUR BROAD ENVIRONMENTAL CHALLENGES:

> providing public services in an equitable manner;

> addressing environmental risks, from pollution to climate change impacts;

> minimizing the negative impacts of land transformations in the use of resources, biodiversity and ecosystems;

> and responding to the global call for decarbonization and rationalizing the use of resources.

Environmental planning and **management** are essential to the advent of sustainable cities. This must include planning for resilience in the face of disasters.

Urban areas
are emerging as sites of opportunity for **effective** environmental action. •

A review of sustainable development policies and implementation that followed the conference in Rio 1992, the MDGs, the LA21, Habitat II, including the constitution of global city networks, have recognized delivering sustainability - particularly just sustainabilities - requires good global and effective environmental governance. Ensuring justice and equity in the process of environmental planning and management is crucial towards a just and sustainable city.

Just sustainabilities policies, already advanced by community groups and some local governments, have four pillars that build upon previous experiences of sustainable development in urban planning:

Improving people's quality of life and wellbeing.

Ensuring justice and equity in terms of recognition, process, procedure and outcome.

Meeting the needs of both present and future generations, that is, considering simultaneously intra- and intergenerational equity.

Recognizing ecosystem limits and the need to live within the possibilities of this planet.
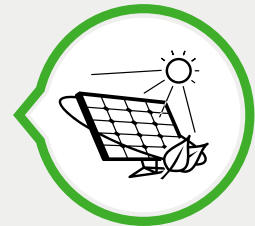
Representatives from different sectors play a key role in delivering urban sustainability. These include:

Urban communities
have played a leading role in;

> climate change action,

> influencing policy and practice for the reduction of GHGs emissions at the global level.

Academia

Private corporations

Research foundations

Philanthropies

Community organizations and citizen groups

Urban development enables human communities to expand the amount of space available to them even as the surface of planet Earth appears to be more finite than ever.[1] This is the apparent paradox that can turn urbanization and environmental sustainability into a workable challenge. Beyond more verticality and density, this realization speaks to the transformative power of urbanization, a notion that has increasingly been recognized over 40 years of global policy-making through a succession of challenges and breakthroughs.

The 1976 Vancouver Declaration described uncontrolled urbanization as a problem leading to over-crowding, pollution and general deterioration of living conditions in urban areas.[2] In 1992, along with the final declaration of the UN Conference on Environment and Development held in Rio de Janeiro, representatives from 173 countries adopted Local Agenda 21 (LA21), which was advanced by local authorities, and is now operational in some 1,200 localities in over 70 countries.[3] Agenda 21 stressed the need for sustainable settlements as well as for "conservation and management of resources for development" and participatory decision-making. The scheme has made a lasting mark on governance systems.[4] The 1996 Istanbul Declaration re-emphasized the importance of specific local circumstances in the pursuit of sustainable urban environments.[5] Habitat III should ensure an equally positive agenda for urban sustainability, with workable proposals for effective change and in full compliance with Sustainable Development Goals (SDGs). While empirical evidence confirms that urbanization acts as a major factor of socio-economic development, it also has all-too visible negative effects on ecosystems, biodiversity and resource use, with pollution[6] a threat to public health.

Climate change has emerged as a central issue in urban agendas.[7] Globally, the number of natural disasters is increasing in both intensity and frequency (4,000 between 2003 and 2012, compared with 82 in 1901-1910).[8] Natural disasters are particularly detrimental to the urban poor and their recognized human rights to decent living conditions, since unplanned urbanization and inadequate infrastructure[9] leave them more exposed than the rest of the population. The risks from global warming are expected to intensify in the years ahead and fresh pressures are emerging. Indeed, by 2030, global demand for energy and water is expected to grow by 40 and 50 per cent respectively.[10] This will likely accelerate biodiversity loss and spur the spread of infectious diseases. Consequently, adaptation to climate change must continue to mobilize local action, alongside preservation of biodiversity.

The transformative role urbanization can play in environmental sustainability has been increasingly recognized.[11] When well-planned and managed (Chapter 2), urbanization, together with building design and transport modalities, provides a welcome opportunity to devise resilience strategies, in the process reducing resource use, entrenching incremental development gains and managing vulnerability vis-a-vis all plausible hazards.[12] Action in urban centres is critical to global climate change adaptation[13] and "decarbonization" (i.e. "net zero" planet-warming emissions).[14] The discrete agendas of environmental conservation and sound urbanization can be brought to converge if and when environmental planning addresses the structural (largely spatial) underpinning factors.

Accordingly, "sustainable cities" was one priority area at the 2012 UN Conference on Sustainable Development ("Rio+20"). The theme was discussed against the background of Sustainable Development Goals (SDGs) and as a component of the UN-sponsored Post-2015 Development Agenda.[15] SDG 11 prescribes "inclusive, safe, resilient and sustainable" cities.[16] This comes as a universal recognition that human life in all its dimensions is inseparable from the wide variety of physical (either natural or, increasingly, man-made) circumstances that give humankind vital sustenance. To a broader extent than their predecessors the Global Development Goals (2000-2015), SDGs now provide for

Urban development enables human communities to expand the amount of space available to them

Natural disasters are particularly detrimental to the urban poor and their recognized human rights to decent living conditions

Urbanization acts as a major factor of socio-economic development, it also has all-too visible negative effects on ecosystems, biodiversity and resource use, with pollution a threat to public health

Overview wind power mills in the town of Palencia, Spain
Source: Jose Angel Astor Rocha / Shutterstock.com

all humankind's living arrangements (and effective basic rights) on planet Earth, and that is why those goals are inseparable from each other, too. Since a higher proportion of humankind is now living in towns and cities, it is incumbent on urban governments, each in its own way, to provide for durable life support systems through adequate planning— and for the benefit of their population as a whole, since slums and other dimensions of urban poverty are a manifestation of unsustainable, environmentally detrimental living arrangements.[17] These were the dynamics behind Habitat II, which gained impetus with implementation of LA21— thus, Habitat III should be an opportunity to give these dynamics further momentum in the face of mounting pressure from climate change.

The multi-dimensional challenges to sustainable planning are daunting, yet many cities have developed promising examples of environmental action, in an effort to restore and preserve ecological balance, changing consumption and production patterns, promoting ecological efficiency and striving for social equity. A comprehensive human rights-based approach to urbanization would contribute to environmental sustainability policies, as resources and risks determine the standards of living and

access to basic resources.[18] Aiming to inspire an effective urban agenda, this chapter introduces the notion of "just sustainabilities" to address urban environmental, alongside economic welfare and social justice issues.[19] Emerging in the early 2000s, just sustainabilities offer a more nuanced definition of sustainable development since the Brundtland Commission: the need to ensure a better quality of life for all, now and into the future, in a just and equitable manner, whilst living within the limits of supporting ecosystems.[20] Anchored by just sustainabilities ideals, this chapter reviews current urban environmental challenges, and analyses key trends in urban environmental planning, moving from guiding principles to sector-based initiatives. This is followed by a discussion on key issues governing and financing urban sustainability. Finally, it concludes that achieving healthy cities depends on planning approaches that deliver just sustainabilities[21] in relation to urban environmental challenges and their manifestations in specific locations.

5.1
Today's Urban Environmental Challenges

Cities typically face four main types of environmental challenges, including three types of threat to, and one from, the natural milieu:

◗ effective equal access to resources and urban public services contributes to poverty alleviation.

◗ managing environmental hazards requires a risk-based approach, fully taking in the uncertainties inherent to environmental information and climate change.

◗ the effects of urban expansion on land conditions make it impossible to consider any town or city in isolation, highlighting the need to recognize the variety of specific spatial connections and impacts (such as biodiversity loss and deforestation).

◗ a low-carbon world calls for changes to resource consumption and an effective if gradual shift to more sustainable societies.

Many developing country cities seek to deploy new infrastructure and systems in a bid to compete in the global economy and attract foreign investors
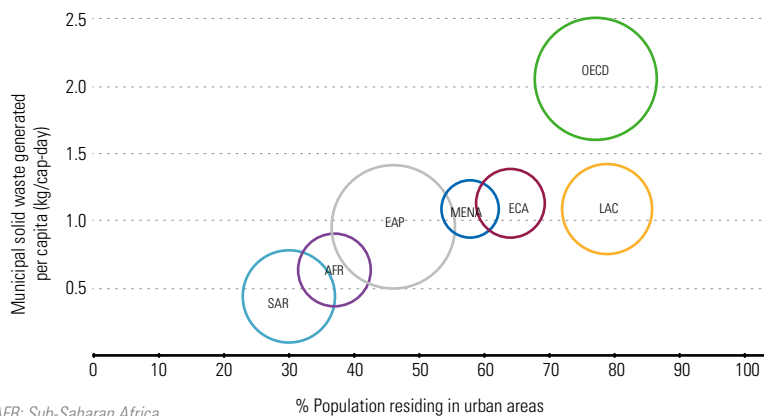
Equal access to resources and services

Cities must ensure universal access to basic services like water, sanitation, waste management, energy, food, and mobility, which are crucial to socioeconomic welfare, public health and the urban environment. Many developing country cities seek to deploy new infrastructure and systems in a bid to compete in the global economy and attract foreign investors.[22] However, such efforts only enhance persistent inequalities, as they do little to alleviate acute deprivation and low living standards, particularly in informal settlements.[23] In Africa as a whole, the average urban sanitation rate stood at 54 per cent in 2010, with diseases like cholera still plaguing urban areas.[24] Similarly, in Sub-Saharan Africa electricity was available to only 32 per cent of the urban population in 2011, with power shortages in at least 30 countries.[25] In the Latin America-Caribbean (LAC) region, overall proportions are comparatively higher but access to basic services remains inequitable: in 2010, over 20 per cent of the urban population still had no access to improved sanitation, 6 per cent lacked access to safe water and 7 per cent to electricity.[26] It is incumbent on urban planners to understand the implications of inequitable access to infrastructure within the context of their city's environment and resources.

Solid waste management dominates municipal annual budgets in low- and middle-income countries, with shares of 30 to 50 per cent according to the World Bank. Waste is correlated to economic development and population[27] (Figure 5.1). In developing country cities, informal pickers typically represent five per cent of urban jobs, but are unable to provide proper solid waste management a citywide scale.[28]

Other cities are reaping the benefits of integrated management and public-private partnerships (PPPs). However, PPPs require thorough assessment and mitigation of the risks to private partners, public officials and financial investors. Norway's Tonsberg Waste to Energy PPP converts sewage sludge, food waste, organic commercial waste and manure into biogas for heating, electricity production and fuel for biogas (an alternative fuel for buses, which in Norway use approximately four million gallons of gasoline/diesel annually).[29] Nonetheless, despite increased technical skills provided by the private sector, enhanced financing mechanisms, improved institutional capabilities and regulatory frameworks are needed.

A "just sustainabilities" perspective on infrastructure emphasizes alternatives for underserviced areas

Figure 5.1: Waste management per capita and urbanization rates in the main regions of the world

Source: Vergara and Tchobanoglous, 2012.

AFR: Sub-Saharan Africa
EAP: East Asia and Pacific
ECA: Eastern and Central Europe
LAC: Latin America and the Caribbean
MENA: Middle East and North Africa
OECD: member countries of the Organization for Economic Cooperation and Development
SAR: South Asia Region

and maintaining reliability and accessibility through partnerships with community groups, universities, the private sector and NGOs.[30] Participatory governance enables communities to control public service delivery, achieving effective convergence between entitlements and public policy.[31] In Dar es Salaam, Tanzania, community groups in fringe areas mobilize fund-raising and external technical assistance for water supply and sanitation roads and drainage channels.[32] However, community-based approaches may reduce incentives for governments to monitor and eventually run service provision.[33] In LAC, service delivery is led by the public sector, but significant gaps remain in capital expenditure: infrastructure fluctuates between two and three per cent of the region's GDP, when five per cent would close the existing gap[34] not including an estimated additional 0.6 per cent of GDP for capital expenditure in climate change adaptation and mitigation.[35] With rapid urbanization, new mechanisms are necessary if infrastructure and basic services associated with better living standards are to be provided, and if poverty and inequalities are to be reduced against a background of finite resources.

Are environmental risks and climate change impacts manageable?

Across the world in 2002, inadequate water, sanitation and hygiene caused four per cent of all deaths and 5.7 per cent of the estimated total of diseases.[36] A parallel trend, from London to Shanghai, is air pollution, particularly in rapidly growing and industrializing cities with increasing rates of motorization.[37] In urban areas, climate change impacts like heat waves, heavy precipitations and droughts can compound one another, making disaster risk management more complex (Figure 5.2).

However, the physical effects, timeframes and associated migration potential of such climate-related disasters differ significantly across urban areas and continents, with resettlement widely viewed as a last resort.[38] Accordingly, Habitat III presents an opportunity to include environment-linked migration in the New Urban Agenda, as addressed by the UNISDR Sendai Framework for resilience building, the UN Principles on Housing and Property Restitution for Refugees and Displaced Persons, and the World Bank Guidelines on Involuntary Resettlement.[39]

Efforts to build urban resilience can benefit from integrating climate change adaptation with existing efforts in disaster risk reduction, and other similar planning processes.[40] Resilience refers to a city's capacity to

Figure 5.2: **Risks from climate change, as reported by 110 cities to the Carbon Disclosure Project (CDP)**

Source: Based on data from https://www.cdp.net/CDPResults/CDP-Cities-2013-usage-summary.pdf.
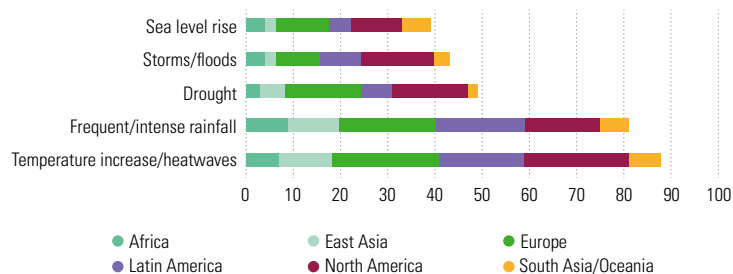
cope with disasters, including ability to address the structural factors underpinning vulnerabilities and to build more sustainable communities.[41] Local authorities and other urban stakeholders have an essential role to play here. In this respect, the UN Office for Disaster Reduction (UNISDR) has set out a number of practical recommendations.[42] Since then, UN-Habitat, together with the Technical Centre for Disaster Risk Management and Urban Resilience (DiMSUR) has developed and successfully tested a participatory methodology, known as the City Resilience Action Plan (CityRAP) (Box 5.1). Clearly, sustainable development is relevant to all cities and each in its own way (Chapter 2). Resilient infrastructure and services may not come cheap, but unit costs decrease as urban density rises, and the benefits remain significant.[43]

Both the UN-Habitat and the "just sustainabilities" approaches to urban resilience look beyond the natural environment, and take in other dimensions such as long-term, participatory in-situ slum and infrastructure upgrading,[44] relocation to improved sites, institutional development and building both awareness and local capacity to respond and adapt.[45] In this respect, Pakistan's Orangi Pilot Project Research and Training Institute supports local capacity building for the purposes of planning, implementation and low-cost financing of basic sanitation in more than 300 communities in Karachi.[46] Arab cities like Amman, Cairo, Casablanca and Rabat have launched urban "greening projects" in response to climate change.[47] Faced with extreme events, more cities understand that novel ways are called for to build resilience, in the process contributing to a more equitable environment.

Participatory governance enables communities to control public service delivery, achieving effective convergence between entitlements and public policy

Accordingly, Habitat III presents an opportunity to include environment-linked migration in the New Urban Agenda

Efforts to build urban resilience can benefit from integrating climate change adaptation with existing efforts in disaster risk reduction, and other similar planning processes

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Box 5.1: The UN-Habitat City Resilience Action Plan

UN-Habitat has developed a new tool, which enables fast-growing small- and medium-size towns to overcome their lack of capacities, experience, information and resources and to kick-start resilience action planning over a five-week programme. Instead of imposing a predefined model or involvement of outside technical experts, the City Resilience Action Planning ("City RAP") tool leverages local knowledge and abilities, including stakeholders and communities. After a week's training programme, participants engage in local government self-assessment, participatory risk-mapping and cross-sector action planning. Together they set priorities for the short term, which can be met with currently available resources, including the medium (2-3 years) and longer (10 years) terms (to be resourced), which local governments validate, with support from UN-Habitat and other international staff along the process.

Source: UN-Habitat, City Resilience Action Planning Tool, 2015.

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Managing urbanization, land transformation and biodiversity

Cities exist in continuous interaction with their surroundings, through many diverse two-way links. However, empirical studies in Mali, Niger and Tanzania demonstrate how urban and rural households now rely on both rural- and urban-based resources and exchanges for access to land, water, markets and diversified livelihoods.[48]

Urban sprawl, as induced by spatial expansion,[49] is not homogeneous: in industrialized economies it causes loss of arable land and more pollution-inducing mobility.[50] In developing countries, sprawl results from rigid land markets at the peri-urban interface and is a challenge to basic service provision– especially against a background of institutional fragmentation.[51] In less developed countries, rising suburbanization results in low densities and exponential expansion of the urban footprint in regions like LAC[52], compared with increased inequality and social exclusion in industrialized countries.[53]

Faced with these changes in peri-urban land patterns, it is essential for urban planners to set appropriate guidelines regarding both density (to be increased) and mixed land uses (for a better balance among residential, commercial and leisure uses of land, favouring non-motorized mobility). It is for local authorities to develop and implement such policies and plans. These should also include preservation of agricultural land (and any land that sustains biodiversity, water quality and groundwater recharge), including fragile and coastal areas and others in need of protection. The World Bank's Land Governance Assessment Framework emphasizes the benefits of integrating land use planning, public land management and revenue collection, while recognizing historical specificities in urban areas.[54] Finally, as meeting points between individuals and communities, public spaces have a major role to play in sustainable cities.[55]

Urbanization affects biodiversity and ecosystems.[56] Ecosystem services through rooftop gardens, "vertical forests" and green corridors benefit both residents and urban biota.[57] However, the need remains for improved – including participatory – governance, as emphasized by Cities and Biodiversity Outlook (CBO)[58] (Box 5.2).[59]

Responding to decarbonization imperatives

A shift from fossil fuels to renewable energies and improved efficiency is needed to cut planet-warming emissions to a "net zero."[60] Estimates of carbon emissions (Figure 5.3) attribute between 67 and 76 per cent of global energy use to urban areas.[61]

Rapidly urbanizing areas must respond to increasing infrastructure needs. At the same time, urban

Resilient infrastructure and services may not come cheap, but unit costs decrease as urban density rises, and the benefits remain significant

Changing Course in Urban Transport: Strategies to manage traffic in Asia like here in Xian must include a wide range of measures. The "Avoid-Shift-Improve" approach is central to reducing dependence on individual car dependency. It also ensures a high level of mobility while minimizing greenhouse gas emissions.

Source: Armin Wagner / Asian Development Bank, CC BY 2.0, https://creativecommons.org/licenses/by/2.0/legalcode

Box 5.2: The *Cities and Biodiversity* Outlook: 10 main messages

1. It is for urban areas to remedy their own negative effects on the natural environment through development and implementation of adequate solutions
2. With proper planninc and management, cities can retain substantial components of native biodiversity
3. Quantifying the value of ecosystems and/or attaching qualitative values enables mainstreaming of ecological factors into city management
4. Proper planning and resources can result in mutual benefits for human and environmental healthiness
5. Urban green spaces can contribute to climate-change mitigation.

6. Existing food systems and associated ecosystems can be maintained if their degree of biodiversity is increased, improving global food security in the process
7. Urban and environmental planning provides opportunities and formal legal mechanisms for biodiversity conservation through design guidelines, building codes, zoning schemes, spatial plans and strategic choices, all coupled with effective enforcement
8. Cities have an essential role to play in environmental governance focusing on both the urban landscape and the remote ecosystems that are affected by

urbanization
9. Cities test our capacity to live together and to create environments that are socially just, ecologically sustainable, economically productive, politically participatory and culturally vibrant
10. Fostering creativity, innovation and learning is essential if the global challenge of preserving biodiversity in the face of unprecedented urbanization is to be met.

Source: Secretariat for the Convention on Biological Diversity, 2012.

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sprawl and motorization come hand in hand with the expansion of slums and gated communities, and the associated social divide[62] (with the better-off classes producing the bulk of emissions).[63]

The pursuit of lower- or no-carbon cities has spawned numerous initiatives, such as harmonized instruments for emission inventories (Chapter 2) and alternative financing mechanisms and business models, infrastructure building, changing consumer behaviour and technological diffusion.[64] Regardless of national approaches and circumstances, some basic options are available. In its 2014 report, the Intergovernmental Panel on Climate Change (IPCC)[65] highlighted the three pillars of "deep decarbonization," as follows:

i. energy efficiency and conservation (transport, buildings, manufacturing)
ii. low-carbon electricity (nuclear, solar, hydro, wind geothermal), or coupling fossil fuels with carbon capture and storage (CCS)
iii. switching to lower carbon fuels (as in (i.)).

Under a "just sustainability" perspective, decarbonization must combine with service provision. The urban poor typically rely on polluting low-efficiency fuels, but also on renewable energy production or micro-grids, which can provide sustainable, "clean" energy.[66] However, the practical policy implications of decarboni-

Figure 5.3: Comparison between individual city and national carbon footprints per capita

Source: Sovacool and Brown, 2010.

● Metropolitan per capita carbon footprint (metric tons)
● National average carbon footprint (metric tons)
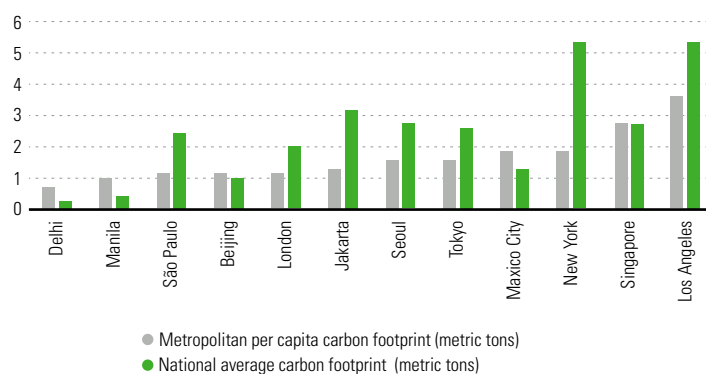
zation in urban areas are still not well understood. For example, restrictions on energy use may compromise access to traditional, non-commercial sources, which calls for attention to the interactions between climate change mitigation and environmental justice.[67] Overall, awareness of harmful emissions has launched the urban world on a transition towards a sustainable energy future.[68]

A shift from fossil fuels to renewable energies and improved efficiency is needed to cut planet-warming emissions to a "net zero

The urban poor typically rely on polluting low-efficiency fuels, but also on renewable energy production or micro-grids, which can provide sustainable, "clean" energy

5.2
Trends in Urban Environmental Planning and Management

This section examines the key trends shaping urban environmental planning and management. First, it analyses the relationships between national and local actors, and how this can be redefined through multi-level governance, Secondly, it reviews integrated planning developments since Habitat II. Thirdly, it reaffirms the relevance of participatory approaches towards environmental management. Thereafter, it discusses the rise of eco-cities and how they are changing ecology and sustainable development discourses. Finally, it highlights sector-based innovations that may help achieve just sustainabilities.

National, local and multi-level governance

Urban environmental issues appear at various spatial scales and should be tackled at various levels through multi-tier governance: municipal, metropolitan or supramunicipal (Table 5.1), as long as they are addressed at a proper, i.e. *ecological scale, overcoming institutional boundaries.*

LA21 Chapter 28 emphasized local governments' role as mediators between citizens and other institutions, at both national and international levels. Local climate change mitigation has been encouraged by positive experiences supported by urban networks like ICLEI — Local Governments for Sustainability, Cities Alliance, the Inter-American Development Bank's urban initiatives, and the C40 Cities Climate Leadership Group.[69] Since 2008, UN-Habitat's Cities and Climate Change Initiative has expanded to over 45 cities in 23 countries, with neighbourhood pilot projects, climate strategies and coordination of partners at national and world levels.[70]

South Korea's "green growth" policies [71] encourage cities to promote new technologies, energy efficiency, renewables, "green" buildings and higher density-oriented public transport.[72] Although local authorities depend on various multi-level governance arrangements to guide policy actions, theirs remains a crucial role when it comes to achieving "just sustainable" societies, and that is why they should be supported by other tiers of government.

Integrated approaches to environmental planning

Integrated environmental management tackles related issues like urban management and governance, integrated spatial planning, economic wellbeing and competitiveness, social inclusion and environmental stewardship – as increasingly recognized after the Rio and Istanbul conferences. However, deregulation of public service provision has tended to marginalize urban planning, turning attention away from the perceived gap between "green" (rural-environmental) and "brown" (urban, particularly the poor) agendas.

Table 5.1: National and local environmental planning and management

Source: Adapted from UN-Habitat,2014; Cities Alliance,2007.

Environmental challenges	National level policies	Local level policies
Resource use	Diversification of energy resources Water pricing reform	Infrastructure planning Local environmental education
Environmental risks	Adaptive social protection programmes Public health programmes	Air quality management
Land and related issues	Diversification of agriculture Land management policies and property rights	Physical planning, zoning Infill and brownfield incentives Restrictions on development of vulnerable land Green space zoning Greenbelt boundaries
Decarbonization imperatives	Energy pricing, taxes and subsidies Sustainability and diversification of economic sectors Low-carbon policies	Incentives to increase density Education campaigns

Table 5.2: Instruments for environmental integration

Source: modified from Cities Alliance,2007.

Type of intervention	Type of instrument	Examples	Objectives
Policy	Information Instruments	Training, research and awareness campaigns	Produce and share environmental information
	Voluntary Instruments	Codes, labelling, audits	Incentives for eco-friendly behaviour
	Economic instruments	Taxes or subsidies	Account for environmental costs of certain activities
	Regulatory instruments	Controls, bans, quotas, licensing, standards	Applicable to specific outcome
Process instruments	Developing a vision	Events bringing together various stakeholders	Develop a city vision
	Baseline studies	Background studies of a city	Understanding current neighbourhood or city conditions
	Development priorities	Dialogue forums and consensus conferences	Ensure an open definition of multiple priorities and contrasting values that will inform the planning process
Planning instruments	Environmental profile	Systematic analysis of background environmental conditions in a given area	Provide a common understanding of city sectors interaction with the environment and governance
	Environmental footprint and targets	Resource footprinting Material flows analysis	Assess the city's ecological carrying capacity
	Impact assessment tools	Strategic Impact or Sustainability Assessment	Assess the impact of specific policies and programmes
	Monitoring systems and indicators	Systems to take measurements at regular intervals	Specify progress against objectives and revise the planning process
Management instruments	Environmental budgets and audits	EcoBudget, EMAS or ISO 14001	Periodic revision of environmental management procedures

Table 5.2 shows the variety of instruments used to implement LA 21 in Bangkok; Bayamo, Cuba; and Manizales, Colombia. The general lesson is as follows:[73]

1. Environmental issues can be integrated in urban planning through City Development Strategies

2. Broader-based participation improves focus and relevance, enhancing implementation in urban planning strategies

3. Various instruments are available that combine development, social justice and environmental preservation objectives.

Still, considerable barriers to integrated management remain, including rigid sector-based ("silo") approaches and fragmented institutions. However, experience shows that when ecological resource use is planned around existing environmental and social constraints, collective wellbeing, and a city's attractiveness, are enhanced. For instance, in Freiburg, Germany, or Stockholm, Sweden, integrated urban planning is based on significant citizen participation and consensus building.[74] Given their multi-dimensional nature, "just sustainabilities"

> Experience shows that when ecological resource use is planned around existing environmental and social constraints, collective wellbeing, and a city's attractiveness, are enhanced

require long-term integrated urban planning, and one that speaks to the vision all residents share for their city.

The central role of participatory planning

Sustainable urban development processes must be based on an integral approach, which must comprise all the dimensions the population recognize as essential to their individual and collective wellbeing.[75] Through participatory planning, citizens can be heard[76] and become a reliable, inexpensive source of information for spatial planning, decision-making, and identifying both resources and the needs of vulnerable groups. Participation enhances local ownership, improves governance and accountability,[77] and helps mobilize and allocate budget resources to local priorities. Still, managerial- and technocratic-style planning remains predominant,[78] regardless of agreed development goals.[79] Tension can emerge between local managers' strategic objectives and citizens' demands for immediate action;[80] still, participation has a crucial role to play in environmental outcomes, including strategic planning and sector-based initiatives.

From a "just sustainabilities" perspective, which is related to the "right to the city" agenda,[81] par-

> Deregulation of public service provision has tended to marginalize urban planning, turning attention away from the perceived gap between "green" (rural-environmental) and "brown" (urban, particularly the poor) agendas

Modern Dutch houses with
solar panels on the roof.
Source: Allard One / Shutterstock.com

Box 5.3: An eco-city project in India

Palava is a private, mixed-use urban development 40 km northeast of Mumbai, India.
Developed by the local Lodha Group with foreign architects and engineers Palava will
house over one million families once completed. Given local water scarcity, Palava
resorts to rainwater harvesting and grey water recycling.

Source: Lodha Group, 2014.

From a "just sustainabilities" perspective, which is related to the "right to the city" agenda, participatory planning opens up forums where the citizenry can develop their own visions for the city

ticipatory planning opens up forums where the citizenry can develop their own visions for the city. This would suggest that broad-based, participatory planning works well as a long-term process, enabling local authorities to build legitimacy for investment in sustainability.

Technologically-driven sustainable urbanism

The private sector can play a crucial role in urban sustainability through cross-sector partnerships with government and civil society. Recently launched, privately-led "eco-" or "smart" cities[82] typically showcase private sector engineering and design capacity for sustainable urban development[83] (Box 5.3: An Eco-city Project in India), largely based on new digital technologies. Built from scratch by the Yellow Sea, Songdo, South Korea is the world's first "smart city," where electronic sensors monitor roads and the water, waste and electricity systems in a constant drive for efficiency. However, such a technocratic focus favours top-down action by municipal experts and planning elites, to the detriment of social equity.[84]

The private sector can play a crucial role in urban sustainability through cross-sector partnerships with government and civil society

Innovation cannot be embraced for its own sake and instead must respond to genuine needs— first and foremost the need for more liveable cities for all as embedded in SDGs. This (together with participatory governance) is the background against which appropriateness of "smart cities" and gated communities, as development models for the future, is to be carefully considered.[85]

Innovation cannot be embraced for its own sake and instead must respond to genuine needs - first and foremost the need for more liveable cities for all as embedded in SDGs

Consistent with SDGs, an alternative perspective on eco-friendly urban technologies stresses more bottom-up policies that can bring about the type of development the population actually wants. Sweden's Hammarby Sjöstad eco-district shows[86] that ICT alone cannot substitute for integrated management and participatory planning. More valuable interactions are preferable, like citizen science, which enlists residents to gather scientific data, monitoring local biodiversity, identifying pollution "hotspots" and mapping vulnerabilities to disasters.

Such "science" can in turn be mobilized to solve complex problems and hold local governments accountable.[87] In New Haven (Connecticut, US), residents use SeeClickFix.com, a local advocacy website, to report on public issues affecting their neighbourhood and to monitor developments.[88]

Sector-based initiatives for healthier urban environments

Habitat II came as a rallying call behind integrated urban management and away from conventional sector-based responses, particularly where local authority fragmentation made it difficult to gauge progress against environmental objectives.[89] However, experimental approaches which privilege multiple actions in separate locales are legitimate,[90] and policy integration is not necessarily in a position directly to solve some problems (e.g. noise pollution).[91] Whatever the specific modalities, local interventions in specific sectors also have the potential to deliver "just sustainabilities."

Habitat II came as a rallying call behind integrated urban management and away from conventional sector-based responses, particularly where local authority fragmentation made it difficult to gauge progress against environmental objectives

Transport, in a sustainable perspective, takes in whatever mobility mode (including walking) people require for their overall wellbeing.[92] Instead of motor vehicles,[93] the focus is on healthier (less pollution and carbon emissions) and fairer cities, where inclusive public transport remedies structural inequalities.[94] In Medellín, Colombia, cable cars provide slum-dwellers the safe access to the city centre they badly need for economic reasons, with minimal environmental impact.[95] "Smarter" mobility also involves (electric) car and bike sharing.[96]

Housing programmes (Chapter 3) can generate substantial savings in resource use and carbon emissions (Box 5.4). Still, sustainability must be fully mainstreamed in new housing designs; existing buildings must be upgraded and rehabilitated. However, unplanned housing can come with efficient space use and higher densities, while local construction techniques can reduce the embodied energy of buildings, improving performance and enabling materials recycling. Low-cost solar water heaters and lamps benefit the urban poor.[97] General progress can be measured with tools like Japan's Comprehensive Assessment System for Built Environment Efficiency (CASBEE).[98]

Sustainable centralized **energy** (power, gas) systems involve efficient grid management and alternative sources, but full transition to sustainability requires a model overhaul.[99] A post-networked society,[100] based on decentralized networks, calls for consumer micro-generation[101] (Box 5.5).

Pioneering community-led energy projects make power more accessible to the vast majority of urban populations.[102] Namibia's Electricity Control Board is investigating decentralized supply for small communities, mobilizing their resources to improve costs, access and healthiness.[103] In Haiti, affordable micro-grid and community-based retail energy ventures complement conventional access.[104]

In many cities, participation has improved **water, sanitation and waste management,** empowering residents without fully displacing the public sector's responsibility for service provision.[105] In Pune, India, community involvement in solid waste management and recycling has changed behaviour patterns, improved livelihoods and facilitated composting.[106] However, social stigma and health hazards remain for those involved,[107] which goes to show that community initiatives must be supported by political commitment to social cohesion.[108]

In principle, local governments are well placed to **improve resilience against disasters** through structural developments, education, community-based prevention, commercial insurance policies, proper regulatory enforcement, coordinated emergency response, and reconstruction. In Mexico, Romania and New Zealand, teaching of disaster-related subjects in schools is mandatory.[109] The UNISDR Sendai Framework for urban resilience and disaster risk reduction engage urban areas through high-profile events and city-to-city learning opportunities, tools, capacity-building and partnerships.[110] In Curitiba, Brazil an integrated, multidisciplinary and partic-

ipatory approach involving community and local leaders, civil society and government agencies protects households in the high-risk Audi União shantytown, combining improved infrastructure, social inclusion and relocation avoidance.[111] Business involvement in disaster risk reduction is generally confined to corporate social responsibility (emergency relief).[112]

Local governments can encourage **nature conservation** through social and economic development, including recognition of traditional livelihoods and cultures. Eco-friendly agriculture and provision of common land should be integrated into the planning of urban and peri-urban areas. "Green" planning approaches emphasize urban-nature relationships and patterns, through green belts and land-use zoning.[113]

Box 5.4: Financing eco-technologies in Mexico's housing sector

In 2009, Mexico's National Workers' Housing Fund (INFONAVIT) developed a housing finance scheme known as "Green Mortgage" in partnership with a housing subsidy body, to encourage use of energy-efficient systems and technologies for low-income households. "Green" mortgages include up to US$1,250 in subsidies to make up for the cost of additional eco-technologies, including:

- Electricity: energy-saving lamps, roof and wall thermal insulation, reflective coatings and voltage optimization
- Gas: gas and solar water heaters
- Water: ecological toilets and sprinklers, water saving devices, isolating and flow control valves
- Health: purified water filters and supply, waste separation containers.
  So far, over 900,000 Green Mortgage credits have been granted, with USAID, Germany's Environment Ministry and GIZ supporting the scheme with resource sharing and advisory services.

Source: BSHF 2014; Castán Broto and Bulkeley, 2013.

Box 5.5: Decentralized energy provision, Sydney

In a bid to reduce carbon emissions by 70 per cent by 2030 from 2006 levels, Sydney, Australia is introducing a "tri-generation" scheme, whereby small-scale power generation systems use bio-waste and accumulated waste for heating and cooling. The scheme is expected to meet 70 per cent of the city's electricity requirements by 2030.

Source: City of Sydney 2013.

Unplanned housing can come with efficient space use and higher densities, while local construction techniques can reduce the embodied energy of buildings, improving performance and enabling materials recycling

Restoration and preservation of cultural vestiges and heritage areas can enhance civic pride, create a unique sense of place and identity, and attract both visitors and investors, in the process creating a variety of jobs, as has happened for instance in Hoi An and Hue, Viet Nam; Siem Reap, Cambodia; Luang Prabang, Lao PDR; and Jakarta (Box 5.6). Easy access to multicultural activities contributes to social inclusiveness, especially amongst low-income groups— another way of sharing urban space and evolving a common vision for a city.[114]

5.3
Governing and Financing the Transition to Sustainable Cities

If adequately empowered, local authorities can achieve sustainability through various modes of governance,[115] including improved services and appropriate regulations, with partnerships supporting and enabling private or civil society initiatives.[116] Securing resources in support of policies and stakeholder cooperation for effective environmental action can prove to be a challenge, though.

Cross-sector partnerships facilitate urban governance against a background of climate change,[117] coordinating various stakeholders at various scales, with enough flexibility to deal with uncertain futures and changing demands.[118] The extent to which PPPs can extend services from privileged to underprivileged groups is limited, though.[119] Cross–sector partnerships can go further, such as local savings groups and land-sharing schemes.

Leveraging finance for urban environmental action

Local governments have access to diverse financing sources for urban environmental action, including taxes, revenues and intergovernmental transfers. Alternative own sources include recycling waste and collecting biogas in dumping sites.[120] In eThekwini, South Africa three waste-to-energy plants generate an annual

US$3.2 million in revenues through sales of carbon credits and electricity.[121] Micro-finance can help micro-enterprises to become involved in "green" urban strategies. In LAC, the Regional Initiative for Inclusive Recycling involves urban communities in over a dozen countries in an effort to strengthen the financial and commercial linkages of informal waste pickers with formal recyclers.[122]

Municipalities can provide economic incentives in favour of efficient resource use and minimal waste as an alternative to environmental or "green" levies (like Ecuador's tax on plastic (PET) bottles) which effectively enforce the "polluter pays" principle.[123] In Tuzla, Bosnia vehicle tax revenues go to environmental improvement projects.[124]

Where resources are scarce, user fees can make municipal services "greener" and support more resource-efficient alternatives. In Paris and London, businesses fund bike hire schemes as a quid pro quo for advertising space.[125] Capturing land values can fund public transport, as in Hong Kong.[126]

Multi-level governance reallocates authority to various tiers of government both vertically and horizontally, involving various stakeholders[127] and also enabling resource transfers. National governments may compensate local authorities for environmental service provi-

sion, through direct lump-sum contributions to specific programmes or matching grants.[128] In Eastern Europe and Central Asia, intergovernmental transfers are made available when local services cannot be entirely funded by user charges— making local governments dependent on national policy and reducing incentives for own-revenue base expansion.[129]

Further sources of funding include the Clean Development Mechanism (CDM). The scheme currently provides emission reduction credits for projects in Bogotá, Dhaka and São Paulo which can be exchanged and used by industrialized countries to meet their own targets under the Kyoto Protocol.[130] However, cities have not yet accessed carbon finance on any large scale, given the low number of current CDM projects in urban areas.[131] The World Bank Institute has proposed institutional reforms for access to carbon finance by individual cities,[132] which are currently piloted in Amman, Jordan.

The "financing climate change adaptation initiative" established by multi- and bi-lateral agencies provides loans or grants either directly from one government to another or indirectly through non-governmental organizations, the UN system or other multilateral agencies. A good example is the multi-donor Urban Climate Change Resilience Trust Fund (UCCRTF) administered by the Asian Development Bank (ADB).

Although industrialized countries provide those less developed with financial support for climate change mitigation, it falls short of needs if the on-going rise in global temperatures is to be contained. New forms of financing are needed, such as facilitated by information technologies and crowd-funding as a complement or an alternative to local micro-finance for global Internet-based cooperation. [133]

Decision-making beyond cost-benefit analysis

Environmental decision-making emphasizes the need to shift away from overreliance on cost-benefit analysis (CBA), which privileges the present monetary value of different options.[134] On its own, CBA is not suitable with regard to the many dimensions of environmental services, or quantifying environmental benefits, or contested perceptions of the actual values of various resources. By contrast, environmental planning is an

open-ended dialogue where participation and innovation are essential, and where life-cycle costing, multi-criteria evaluation and eco-budgeting can help.

Life-Cycle Costing (LCC) is used in project development and appraisal, focusing on potential costs and various associated externalities.[135] Urban authorities use LCC for infrastructure and large transformation projects. Since the methodology identifies environmental costs and benefits it lends itself well to stakeholder deliberation of various alternatives,[136] but requires detailed information.

Multi-criteria analysis (MCA) is used for sustainability assessments at neighbourhood scale, comparing various options in relation to well-defined criteria beyond financial benefits and costs. MCA assists local governments in procurement procedures as it can integrate multiple criteria (costs, bidder's reputation, etc.).[137] When combined with participatory methods, MCA can justify decisions beyond cost, providing alternative or complementary evaluation ranking and criteria.[138]

Environmental auditing is promoted by ICLEI through the so-called "ecoBudget," which enables any local authority not just to set environmental budgets for the annual fiscal cycle but also to plan, monitor and report natural resource consumption within its territory-— in the process demonstrating the validity of sustainability policies to the taxpayer and the public at large (Box 5.7).

> *Environmental planning is an open-ended dialogue where participation and innovation are essential, and where life-cycle costing, multi-criteria evaluation and eco-budgeting can help*

> *Environmental decision-making emphasizes the need to shift away from overreliance on cost-benefit analysis (CBA), which privileges the present monetary value of different options*

Box 5.7: Implementing an ecoBudget

In 2006 in India, the Guntur Municipality adopted the ecoBudget format, with targets and indicators for water quality and quantity, waste management, green space surface areas and air quality. Water management was the main priority (monitoring water pollutants, structural improvements, upgraded water supply metering) – with tangible results. This highlights two success factors for ecoBudgets – strong political commitment and selection of relevant environmental issues – and two (potential) challenges: inadequate public involvement and cross-sector coordination. Implementation in Tubigon, Philippines showed that the ecoBudget cycle can require support from higher tiers of government.

Source: http://www.gunturcorporation.org/genx/ICLEI_News/July_2006.pdf and http://www.unep.org/Urban_Environment/PDFs/ICLEI_Ecobudget.pdf.

5.4
Concluding Remarks and Lessons for Policy

The world has become predominantly urban but this is no reason to overlook our natural environment – quite the contrary. More and more humans choose to move to the city, in the process transforming urban spaces – together with our shared environment. It is for governments worldwide to ensure that when "making space" for urbanization they meet the needs of the challenging dynamics driving both human advancement and the natural environment that gives it basic sustenance. There is no escaping the solidarity of environmental and socioeconomic governance of urban and rural areas. Space is the most basic defining condition of "the total human being"[139] which in turn resonates with recognized human rights (and "just sustainabilites"). This is why integrated management of the urban environment must be both democratic and participatory for all.

This chapter, through a variety of practical local examples, amply demonstrates that this apparently daunting endeavour is within reach of any town or city, if only step by step. In other words, urbanization and environmental preservation represent a workable mutual challenge. Worldwide, any town or city is endowed with one of the basic tenets of sustainable urban prosperity as defined by UN-Habitat, namely, the environment – and one that they must make as "productive" as possible in terms of long-term collective prosperity. Since the environment pervades all dimensions of human life, its proper management provides all sorts of leverage, to set the transformative power of cities going. Building resilience to climate change is not just an urgent imperative for many towns and cities; it is also a good way to familiarize with local environmental issues, adjusting policies and institutions in the process. Participatory governance is there on the ground to provide much-needed "mediators of change" towards "just sustainabilities"; combined with citizen knowledge, this is as good a means as any to trigger a broad-based, sustainable dynamics – and to maintain the momentum over time.

This chapter recommends the following towards a New Urban Agenda:

◗ Acknowledging the interdependence of the environmental and urban agendas

◗ Emphasizing the interconnection of local and global environmental agendas and climate change as an urban issue

◗ Re-imagining the paradigm of sustainable development to emphasize "just sustainabilities"[140]

◗ Reaffirming the need for reformed urban planning to achieve "just sustainabilities" in cities[141]

◗ Addressing the multiscalar aspects of environmental challenges, involving multiple stakeholders and interdisciplinary research

◗ Recognizing the innovation potential of the various stakeholders in urban governance, including business, civil society and the citizenry; and

◗ Using participatory planning to mainstream the right to the city[142] and to develop effective environmental programmes.

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5. UN, 1996.
6. Seto et al., 2012.
7. UN-Habitat, 2011e.
8. UNDP 2014.
9. Revi et al. 2014.
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11. United Nations, 2014d.
12. United Nations, 2014c.
13. Revi et al. 2014.
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15. BMZ, 2014.
16. Open Working Group of the General Assembly on the Sustainable Development Goals, 2014.
17. Griggs et al. 2013.
18. United Nations, 2014d.
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20. Agyeman, J, Bullard, R. D, and Evans, B. eds, 2003
21. Rydin, 2013.
22. UN-Habitat 2015i; Siemens, PwC and Berwin Leighton Paisner, 2014.
23. Alkire and Santos, 2014.
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27. World Bank, 2012.
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29. KPMG, 2012.
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40. UN-Habitat, 2015j; UN-Habitat and DiMSUR, 2015; World Bank, 2011b.
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42. UNISDR, 2012.
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44. Roberts, 2008.
45. Satterthwaite et al., 2007.
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91. Weber and Driessen, 2010.
92. Urry, 2007.
93. Barter, 2004.
94. Levy, 2013.
95. Brand and Dávila, 2011.
96. ICLEI, 2011; Intelligent Energy Europe, 2008.
97. Ilha and Ribeiro, 2012
98. Murakami et al., 2011.
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100. Coutard and Rutherford, 2011.
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103. ESI AFRICA, 2014.
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105. Allen, Hofmann et al., 2008; Mitlin, 2008; Satterthwaite et al., 2015.
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116. Morgan et al., 2014.
117. Castán Broto et al., 2015.
118. Okereke et al., 2009; Schroeder et al., 2013.
119. see for example: O'Malley, 2004; Siemiatycki, 2011; Ferreira da Cruz et al., 2013; Sengupta, 2013; Baletti, 2014.
120. Suocheng et al., 2001.
121. Gumbo, 2014.
122. This platform is the result of a collaboration between foundations, civil society, national and local governments, and multilateral agencies. More details at www.reciclajeinclusivo.org
123. An environmental law principle whereby the polluter pays for the environmental damage of which they are responsible.
124. Castán Broto, 2012.
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127. Liesbet and Gary, 2003.
128. Kumar and Managi, 2009.
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06

Rules of the Game: Urban Governance and Legislation

Most legal framework remain very similar to what they were at HABITAT II

QUICK FACTS

1 Although most countries have embarked on decentralization, the results are generally falling short of the ambitions set out at Habitat II.

2 Inefficient or impracticable legislative reforms reflect the dominance of 'universal' technical concerns and replication of foreign 'best practice' that disregard local circumstances.

3 Planning regulations in developing and transition countries are often too detailed, and inflexible, making compliance so challenging that people tend to bypass them altogether.

4 Genuine accountability and administrative capacity to implement public policies based on accurate information about local conditions are essential for decentralization to contribute to economic development.

POLICY POINTS

1 Good quality urban law contributes to investment, strong economic performance and wealth creation, as it provides predictability and order in urban development.

2 Effective local governance rests on participatory service delivery planning, budgeting, management and monitoring. When endowed with appropriate legal powers, adequate financial allocations and the human capacity they can drive the transformation agenda.

3 The critical ingredient for successful legal reform is credibility. Credibility is enhanced when laws are culturally resonant and enforceable.

4 A focus on basic, essential statutory and derived legislation that can be enforced will provide the most effective support to sustainable urban development.

PRIVATE INTEREST   **PUBLIC INTEREST**

Urban Law provides rules to
MEDIATE and **BALANCE**
competing interest

Hidden Powers

> prevent formal political and policy deliberative processes

> exclude certain voices and interests

> minorities are rendered **invisible**

Decentralization
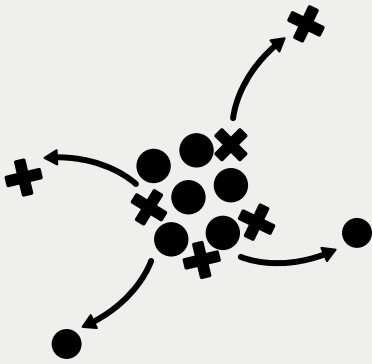
1. Administrative Decentralization > PLANNING +MANAGING is transfered from Central Government to Local (Delegation)

2. Political Decentralization > Delegation of political power, authority and resources

3. Fiscal Decentralization > Redistribution of resource form central to subnational government

4. Devolution > Political and fiscal decentralization

5. Deconcentration > Territorial redistribution of central power

Urban governance

delivers **sustainable development** when it is;

> environment-friendly,

> participatory,

> accountable,

> transparent,

> effective and efficient,

> equitable and inclusive, and

> abides by the rule of law.

Ineffective decentralization

reasons;

> weak legal framework,

> lack of political will,

> poor capacity for implementation,

> under-resourced local authorities,

> poorly trained personnel, and

> inadequate political representation.

Sustainable human settlements development requires the active engagement of civil society organizations, as well as the broad-based participation of all people. It equally requires responsive, transparent and accountable government at the local level. Civic engagement and responsible government both necessitate the establishment and strengthening of participatory mechanisms, including access to justice and community-based action planning, which will ensure that all voices are heard in identifying problems and priorities, setting goals, exercising legal rights, determining service standards, mobilizing resources and implementing policies, programmes and projects *(Habitat Agenda 1996: par. 181).*

6.1
New Times, Intensifying Pressures

Urban development unfolds over decades and frequently outlives its architects, both literal and metaphorical. Good quality urban law provides predictability and order in urban development, from a wide range of perspectives, including spatial, societal, economic and environmental, and, through this, contributes to investment, strong economic performance and wealth creation.

The quality of human settlements and urban governance affect the quality of life of billions of individuals. Choices made in relation to settlements have tangible positive or negative effects on social justice, good governance, democratic decision-making, economic development, upholding fundamental rights and transparency. Against this background, urban legislation has an important role to play: defining conditions for formal/informal access to land, infrastructure, housing and basic services; laying out rules for planning and decision-making; pushing for improved livelihoods and living conditions as law sets requirements for urban development initiatives. Urban legislation also sets the background against which urban authorities, local governments and communities are expected to fulfil respective mandates and respond to emerging challenges. The effect of legislation is important: it can set effective frameworks for sustainable development, or accentuate inequalities and exclusion. Urban law is necessary to provide a set of rules to mediate and balance competing public and private interests, especially in relation to land use and development: it creates a stable and predictable framework for both public and private sector action, guaranteeing inclusion of the interests of vulnerable groups and providing a catalyst for local and national discourse.

The Habitat Agenda, adopted in 1996, acknowledged the role of local authorities and the importance of participation as fundamental to achieving the universal goals of adequate shelter for all and safer, healthier, more liveable, sustainable and productive human settlements.

The quality of human settlements and urban governance affect the quality of life of billions of individuals

...legislation...can set effective frameworks for sustainable development, or accentuate inequalities and exclusion. Urban law is necessary to provide a set of rules to mediate and balance competing public and private interests, especially in relation to land use and development

The policy outcome of Habitat II commits governments as follows: *"We adopt the enabling strategy and the principles of partnership and participation as the most democratic and effective approach for the realization of our commitments. Recognizing local authorities as our closest partners, and as essential, in the implementation of the Habitat Agenda, we must, within the legal framework of each country, promote decentralization through democratic local authorities and work to strengthen their financial and institutional capacities in accordance with the conditions of countries, while ensuring their transparency, accountability and responsiveness to the needs of people, which are key requirements for Governments at all levels."* (Istanbul Declaration on Human Settlements, 1996).

One of the preconditions for this is the establishment and consolidation of democratic local government empowered with the requisite human and financial resources to carry out their legally enshrined responsibilities.

The Habitat Agenda further argues for a leadership role on the part of local government in enabling "partnerships for action" and ensuring full and equal participation by all, especially those that are typically discriminated against or marginalized, e.g. children, youth, women, disabled and indigenous populations.

At first glance, the Habitat Agenda and associated efforts by the international development community have been extremely influential. Most countries in all regions of the world have embarked on decentralization,[1] often formally ensconced in the principles set out in 1996. However, results have been highly variable, generally falling short of the ambitions set out at Habitat II.[2] The reasons are numerous and circumstantial, but can be summarized as follows: (1) weak legal frameworks; (2) lack of political will (or, conversely, partisan politics between central and local government) along with (3) poor capacity for effective implementation; (4) under-resourced local authorities, due to lack of inter-governmental fiscal frame-

People enjoying the Riva promenade. This spot has become the city's most important public space. December, 2012, Split, Croatia.

Source: Donatas Dabravolskas / Shutterstock.com

works that empower primary tiers of government, also (5) hindering joined-up service delivery, synergies and institutional alignment (both vertical and horizontal); (6) poorly trained political and administrative personnel; and (7) inadequate political representation, feeding popular disenchantment and even resentment. Generally speaking, inefficient or impracticable legislative reforms reflect the dominance of "universal" technical concerns and replication of foreign "best practice" that largely disregard both local circumstances and opportunities for effective review and adjustment.[3]

The most deeply felt by-product of the current global economic system is ever-steeper inequality and the social-cultural damage it is causing (see Chapter 4).[4] The challenges facing African urban youth — the "face of the precariat"[5] — offer a telling illustration. Only 28 per cent of Africa's labour force holds regular, stable wage-earning jobs, while 63 per cent are mostly trapped in vulnerable employment,[6] making decent homes and family life unaffordable. Therefore, it is not surprising that 61 per cent of urban dwellers in Sub-Saharan Africa live in informal settlements, with attendant deprivations. Stark as they are in Africa, these trends prevail in most developing regions and can also be found among the "working poor" or repossessed home-owners with nowhere to sleep but their cars in some cities in the OECD area[7] where de-industrialization and the housing bubble have left scars. Youth unemployment rates remain high in Spain, Portugal, Greece and Eastern Europe, as well as in some Arab countries and Central America.

Outdated or inadequate urban laws generate inequality, as they interfere with the beneficial interactions between resources, abilities and backgrounds that historically create opportunities for all in the cities of the world: (1) they are unable to secure a hold on on-going urban transformations or to anticipate current and future challenges; (2) they maintain the socioeconomic status quo and the grip of self-perpetuating élites; finally (3) they exclude hundreds of millions from the effective benefit of their recognized, unconditional human rights. Growing urban inequality too, has deeply-felt spatial effects (Chapter 4). More and more poor people do not live under the shelter of the law and the opportunities it affords. Urban land markets, infrastructure systems and public space provisioning are becoming unequal as well, contributing in no small measure to insecurity in the poorer neighbourhoods of many Latin American, African and Asian cities.[8] Amidst these trends, conventional urban planning has proven singularly ineffective and often complicit (Chapter 7).[9] Millions of women and men around the world are denied access to tenure security, property and land rights, to basic services and to economic opportunities simply on the basis of gender, skin colour, ethnicity or beliefs, without regard for capabilities and skills.

Inadequate laws deny equal opportunity and protection to specific segments of the population, acting as barriers and biases against the poor and marginalized groups through institutions and processes that are too difficult and costly for them to access, or through corruption and abuse of power. Disadvantaged minorities are poorly represented in political structures and decision-making bodies, and consequently have little control over decisions that affect them. Now, as per universally agreed Sustainable Development Goals, it is for national laws to make space for all in our cities and beyond, instead of nurturing discrimination, exclusion and destitution from one generation to the next. Good quality laws promote inclusion of vulnerable groups, contribute to poverty alleviation and promote social cohesion.

Urbanization, together with climate change and sustainable development, reconfigures the spatial constraints where governments deploy public policies with supporting laws and regulations, and a fresh, well-adapted dispensation of powers and rules is overdue if governments are to keep in control. Cities must respond to these challenges with well-adapted urban laws that

Outdated or inadequate urban laws generate inequality, as they interfere with the beneficial interactions between resources, abilities and backgrounds that historically create opportunities for all in the cities

Good quality laws promote inclusion of vulnerable groups, contribute to poverty alleviation and promote social cohesion

Box 6.1: What is urban law?

Urban law is the broad ranging, collection of diverse policies, laws, decisions and practices that govern the management and development of the urban environment. Urban law has several defining characteristics:

- It governs the crucial functions of towns and cities and reflects the rights and responsibilities of the residents and users of these urban areas. The functions are diverse, including urban planning, municipal finance, land administration and management, infrastructure provision, mobility and local economic development, among others.
- It is present at various levels, from internationally recognized rights, such as the right to housing, to national legislation and on to municipal rules or by-laws that often govern local issues such as provision of services or management of public space.
- It often has a dual character, with an apparently neutral technical nature accompanied by a complex social aspect, including the potential for differential effects on different groups within the urban environment - with those more vulnerable, such as the poor and the socially marginalized, being of particular concern.

Source: United Nations, 2015j.

govern the relationships among people, define mechanisms of interaction, together with novel ways of reaching agreements and building consensus.

"The success of the SDGs will be determined to a large extent in the world's cities, which lie at the fulcrum of employment creation, eradication of extreme poverty, inclusive economic growth, and environmental sustainability."[10] However, the fundamental prerequisite for this is democratic urban governments endowed with appropriate legal powers, adequate financing assignments and the human capacity to drive a transformation agenda. In this regard, it is worth noting that since the early 1980s, the imperatives of legal reform aimed at democratic decentralization and citizen empowerment, have been the subject of vigorous debate.

This grounds well behind urban public policy, and was aptly crystalized in the 1996 Habitat Agenda. However, today's serious challenges (rising inequality, intensifying environmental stress and volatility, continual economic crisis, low-intensity and violent conflicts – together with unprecedented technological opportunities) suggest that over the past 20 years, substantive decentralization has been hindered by lack of political will[11]

> The success of the SDGs will be determined to a large extent in the world's cities... the fundamental prerequisite for this is democratic urban governments endowed with appropriate legal powers, adequate financing assignments and the human capacity to drive a transformation agenda

and inadequate financial mechanisms. Consequently, efforts at decentralization have created a logjam, instead of the continuum of powers and policies it is supposed to be. Nonetheless, governments confirmed their commitment at the Rio +20 Summit (2012), and reinforced it at the Sustainable Development Goals Summit in September 2015. The anticipated adoption and subsequent implementation of the New Urban Agenda at the 2016 Habitat III conference represents a crucial opportunity to address this policy logjam (Chapter 10).

6.2
Urban Law and Governance Trends

Urban legislation

In the Habitat Agenda, the government is seen as an enabler, rather than a hands-on agent of urban development. It is for government to provide institutional and legal enabling frameworks for mobilizing financial resources for sustainable shelter and human settlements. When the Habitat Agenda was adopted in 1996, law was seen as a formalistic tool for development, i.e. economic growth to combat poverty, with strong emphasis on deregulation.

The "Strategies for Implementation" of the Habitat Agenda included commitments to:

1. Review restrictive, exclusionary and costly legal and regulatory processes, planning systems, standards and development regulations;
2. Adopt an enabling legal and regulatory framework based on enhanced knowledge, understanding and acceptance of existing practices and land delivery mechanisms, to stimulate partnerships with the private and community sectors;
3. Deploy institutional and legal frameworks for inclusive participation in decision-making regarding human settlement strategies, policies and programmes.

However, various international assessments suggest that the reviewing imperative has largely remained ineffectual, and where not, marginal reform has followed. Most legal frameworks remain very similar to what they

were at the time of Habitat II and even earlier periods.[12] In Mozambique, current building codes are derived from the Portuguese rulebook. After the cataclyzmic 1755 Lisbon earthquake, Portugal adopted very restrictive rules and extended them to her African colonies. Today, more than 250 years later, Mozambique, with little history of tremors, retains one of the more stringent building codes in Africa (brick or cement block walls, reinforced concrete beams), which excludes all but the wealthiest households.[13] In London, UK, inadequate housing and sprawl result from building regulations dating back to the Great Fire of 1666.

Apart from lack of follow-through on the recommendations, legal reform remains intractable because entrenched legal "…systems tend to be complex, as they accommodate different, contradictory, and even conflicting provisions adopted over time as a result of evolving socio-political processes. *The maintenance of a legal system that does not fundamentally express the realities of the socioeconomic and political-institutional processes that it proposes to regulate generates distortions of all sorts*."[14] Urban legislation must be enforced, not just enacted; solve problems instead of creating some more; set out clear, unambiguous, comprehensive, reliable and well-circumscribed rules, for the sake of easy, inexpensive implementation and access, and do so for the longer term. Outdated, complex, rigid and ineffective legislation that does not reflect reality, and does not recognize and preserve the inventiveness of the informal (licit) sector,[15] will woefully fail to address today's and tomorrow's challenges, discouraging development and forcing citizens and officials into informality and corruption for access to basic services (see Box 6.2).

Urban law remains a highly segmented and complex field driven by a dynamic where technical objectives in specific fields are considered in isolation from each other as well as from the institutional, financial and social factors that will determine effectiveness. For example, planning laws often seek to achieve ambitious and radical reforms but fail to consider the resources and infrastructure required for implementation. Lawmakers may assume that resources will automatically follow and that is how they enact useless, impractical statutes.[16] In Uganda, a draft planning law was designed in such a way that enforcement and implementation would require no fewer than 20,000 civil servants.[17] In Egypt, the law calls on local planning offices to devise detailed plans for cities and villages, but for lack of funding and staff only 10 out of 228 cities have so far managed to do so.[18]

The number of innovative, locally relevant urban law frameworks in fields such as physical planning and development control, remains remarkably low, particularly by comparison with the needs of cities where institutional and financial resources are scarce.[19] Even in Latin America, path-breaking reforms in Brazil's (Statute of the City (2001), Colombia and Peru have met with uneven and, as some would argue, disappointing results to date.[20]

One of the most comprehensive legal reforms in favour of democratic and participatory decentralization was adopted by the Peruvian parliament in 2002. This comprehensive decentralization mandates transfer of new powers to subnational governments on the one hand, and provides a legal basis for civil society participation in regional and local governments, on the other. As part of this legal agenda, an expansive battery of participatory institutions was introduced: regional and local coordination councils, participatory budgets, and health and education councils.[21] Peruvian regions, provinces, and districts undertake mandatory annual participatory budgeting.[22] However, 12 years on, the efficiency and responsiveness of local authorities

> **Urban legislation must be enforced, not just enacted; solve problems instead of creating some more; set out clear, unambiguous, comprehensive, reliable and well-circumscribed rules, for the sake of easy, inexpensive implementation and access**

Box 6.2: Concomitance of different planning provisions: Kenya

Law is spelt out across various statutes that have been amended over and over again, leading to a chaotic result, not to mention regulations, circulars, and guidelines that make the picture even more complex. In Kenya, different planning provisions coexist without a clear connection between them: the Physical Planning Act 1996 authorizes the director for physical planning to devise local physical development plans. The Constitution of Kenya 2010 rests the function of land planning with the national government, and the coordination of planning to counties. Under the Urban Areas and Cities Act of 2011, every municipality must have an integrated development plan, prepared by the municipal board and approved by the county assembly. These provisions introduce parallel procedures: the relationship or connection between local physical and integrated development plans is not clear, coordination mechanisms are lacking, statutes are inconsistent with the Constitution and planning comes under two distinct ministries with overlapping functions. As a result, determining with reasonable certainty, which provisions apply, where to find them, and what they mean, is a challenge. Lack of legislative transparency and clarity stands in the way of both enforcement and accountability.

Source: Mousmouti and Crispi, 2015.

> **Box 6.3: Complex planning regulations: Mozambique**
>
> Planning regulations in developing and transition countries are often too detailed, and inflexible, making compliance such a challenge that people tend to bypass them altogether. An apt example is Mozambique's procedure to register land use rights: it is lengthy and complicated, and involves an overlapping double registration with the national-level Deeds Registry (under the Ministry of Justice) and the Land Registry (at provincial and national levels, under the Ministry of Agriculture). As a result, most land transactions take place informally, making identification of the ownership status of a property difficult. Simplified registration and greater transparency would improve the land market, eliminating the current parallel, extralegal segment.
>
> *Source: Mousmouti and Crispi, 2015.*

The Brazilian Constitution enshrines participatory local government and connects it to the right to the city

have not necessarily improved. On the contrary, a majority of citizens regard most politicians as corrupt and accept they have to "play" the system to make headway.[23]

Brazil has had more promising results from its legal reforms. The Brazilian Constitution enshrines participatory local government and connects it to the right to the city. Thus, the legal system is defined as a means to activate participatory governance institutions to address the imbalance of power and resources in society.[24]

Governance

Governance consists of the traditions and institutions by which authority in a country is exercised. This includes: a) the process whereby governments are selected, monitored and replaced; b) the capacity of the government effectively to frame and implement sound policies; and c) citizen and government compliance with the institutions that govern economic and social interactions among them.[25] Governance is the double process of making and implementing decisions (or not). Urban governance delivers sustainable development when it is environment-friendly, participatory, accountable, transparent, effective and efficient, equitable and inclusive, and abides by the rule of law.

The cornerstone of the Habitat Agenda is member States, clarifying the minimum norms that they are willing voluntarily to hold themselves accountable to.

Urban governance delivers sustainable development when it is environment-friendly, participatory, accountable, transparent, effective and efficient, equitable and inclusive, and abides by the rule of law

The discourse of Habitat Agenda is rooted in principles and precepts of people-centred sustainable development that was in currency during the mid-1990s (Amartya Sen,[26] the Brundtland Commission).

As one might expect, the Habitat Agenda is imbued with a hierarchical understanding of policymaking and implementation: national governments establish the parameters and empower local authorities as primary agents of implementation. National governments establish enabling frameworks for partnerships and civil society engagement through appropriate legislation and various support measures such as capacity building and training. Deeply embedded in the "democratic procedural approach" of the Habitat Agenda is a belief in a rational-comprehensive view of politics and policy processes: all stakeholders are assumed to be open to rational dialogue to determine how best to solve a given problem. Thus, "The strategy of the global plan of action is based on enablement, transparency and participation. Under this strategy, government efforts are based on establishing legislative, institutional and financial frameworks that will enable the private sector, nongovernmental organizations and community groups fully to contribute to the achievement of adequate shelter for all and sustainable human settlements development." (Habitat Agenda 1996: par. 59)

National governments establish enabling frameworks for partnerships and civil society engagement through appropriate legislation and various support measures such as capacity building and training.

The governance and legislative reform vision of the Habitat Agenda are cogently reflected in the following paragraph: "*Sustainable human settlements development requires the active engagement of civil society organizations, as well as the broad-based participation of all people. It equally requires responsive, transparent and accountable government at the local level. Civic engagement and responsible government both necessitate the establishment and strengthening of participatory mechanisms, including access to justice and community-based action planning, which will ensure that all voices are heard in identifying problems and priorities, setting goals, exercising legal rights, determining service standards, mobilizing resources and implementing policies, programmes and projects*" (Habitat Agenda 1996: par. 181).

This vision rests on a belief that the real action for advancing the agenda resides at the local community level "in the public, private and non-profit sectors. It is they, local authorities and other interested parties, who are at the front line in achieving the goals of Habitat II" (Habitat Agenda 1996: par. 56). Through effective and

properly supported *partnerships*, progress will be made. This necessitates enabling legal frameworks, an active civil society and broad-based participation by ordinary citizens in the affairs of their communities and local authorities. In this perspective, it is for central government to establish "legislative and regulatory frameworks, institutional arrangements and consultative mechanisms for involving organizations in the design, implementation and evaluation of human settlements strategies and programmes" (Habitat Agenda 1996: par. 237).

At the heart of this national imperative is a determined policy reform agenda, to change the inter-governmental distribution of powers and resources, in a bid to give effect to the principle of subsidiarity as confirmed in the *International guidelines on decentralization and strengthening of local authorities*.[27] However, in practice, approaches to decentralization vary across countries. Box 6.4 provides the broadly accepted typology of decentralization modalities.

Beyond the formal technical distinctions set out in Box 6.4, there is a growing recognition that local authorities are pivotal to the realization of the broader goals as reflected in the 2030 Agenda for Sustainable Development. This points to the underlying purpose of decentralization, namely, empowering autonomous local governments to meet a general developmental mandate to provide for the welfare of the citizens, natural systems and economic stakeholders within their territories.[30]

6.3
Uneven Progress in Decentralization Reform

The Habitat Agenda implies a number of practical steps for decentralization (see Figure 6.1) which can be summarized as a sequence that flows from: 1) developing decentralized systems, to 2) intermediate policy outcomes, to 3) primary outcomes (on the ground). In practice, these steps are shaped by the political economy of development, combined with critical demographic, economic, social, cultural and educational variables, from which the dynamics and prospects of reform cannot be isolated. In other words, the pursuit of a generic set

Through effective and properly supported partnerships, progress will be made. This necessitates enabling legal frameworks, an active civil society and broad-based participation by ordinary citizens

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Box 6.4: **Dimensions of decentralization**[28]

Decentralization is the assignment of specific public functions to subnational governments linked through supporting structures, systems, resources, and procedures. The international representative of local government, United Cities and Local Government (UCLG), actively promotes democratic decentralization and regards it as an on-going institutional revolution whereby competencies and resources exclusively held by central government are transferred to other spheres of government, e.g. federal states, regional or provincial governments or municipalities. UCLG provides a useful working definition of types and forms of decentralization:

Administrative Decentralization: the transfer, through delegations, from central government to its local extensions or local authorities, of specific planning and managing capacities, for which central government retains full accountability.

Political Decentralization: the delegation of political power, authority and resources to subnational government tiers acting as representative of, and accountable to, the local population that empowered them.

Fiscal Decentralization: the redistribution of resources from central to subnational government tiers, complete with the decision-making capacities required to use these resources, in a way that enhances local discretion and establishes effective and transparent financial management.

Devolution: the most robust form of decentralization, incorporating the *full* political and fiscal dimensions. It involves full transfer of responsibility, decision-making, resources and revenue generation to a local public authority that is autonomous and fully independent of the devolving authority and has clear and legally recognized geographical boundaries within which to exercise its authority and perform its public functions.

Deconcentration: instead of decentralization, this is only a territorial redistribution of central power, as specific administrative responsibilities of the central government are transferred to local public structures that are accountable to the sole central government. This format undermines the principle of subsidiarity, yet it remains stubbornly widespread.[29]

Since 1996, very few developing countries have, in fact, seen decentralization through to the full extent...policy prescripts are expected to work without fully engaging with requirements in terms of legal reform, institution-building, financial restructuring, and capacity development, for a series of ambitious processes to click into place

of decentralization measures will always have a uniquely national and local character. On the other hand, the prospects and momentum of reform are highly dependent on the nature of institutional and other resources and related support mechanisms. Short of explicit national programmes to establish and systematically build institutional (especially legal and fiscal) and human capacities, the reform agenda will run aground or, at best, stall.

Since 1996, very few developing countries have, in fact, seen decentralization through to the full extent.[31] Consequently, "although decentralization has been widespread and conspicuous, its performance has been uneven and our systematic practical knowledge of how it works is relatively modest."[32] One of the major problems is that policy prescripts are expected to work without fully engaging with requirements in terms of legal reform, institution-building, financial restructuring, and capacity development, for a series of ambitious processes to click into place. Moreover, too little attention is paid to the political economy factors that underpin and drive decentralization reform.[33] Finally, short of legal reforms that respond to local constraints, decentralization is unlikely to achieve assigned

ambitions such as improved service delivery and reduction of both poverty and conflicts.

Some countries pursue decentralization without a strong democratic component and instead focus on improved public services and economic infrastructure to sustain growth and inward investment. Two features are essential if decentralization is to contribute to economic development irrespective of the substantive democratic dimension: (1) genuine accountability and (2) administrative capacity to implement public policies based on accurate information about local conditions. Institutional readiness and capability cannot be divorced from financial resources. In both developed and developing countries, the bulk of tax revenues and public expenditure accrue to, and emanate from, central government. Subnational governments collect less revenue and expend substantially less than national governments, especially in developing countries (Table 6.1). For example in Egypt, 80 to 90 per cent of local budgets originate from central government; only two governorates – Alexandria and Qena – collect user fees to finance their own development priorities. Only in the Occupied Palestinian Territories is the financial system truly decentralized (probably reflecting an exceptionally fragmented territorial configuration), with every city raising its own revenues.[34] By contrast, small towns in Central Asia are completely dependent on transfers from higher tiers of government and have no budgets

Figure 6.1: How decentralization works

Source: Smoke, 2015.

CONTEXTUAL FACTORS:
Level of development, demographic and social characteristics, urbanization, political economy, social capital, etc.

1. SYSTEM DEVELOPMENT OUTPUTS/PROCESSES
- Administrative: local control over personnel, budget, financial management
- Fiscal: Revenue, expenditure & borrowing
- Political-legal: Citizen participation / enhanced social contract conditions

2. INTERMEDIATE OUTCOMES
- Improved technical or managerial capacity
- Improved legal and fiscal framework
- Improved accountability (downward & upward)
- Improved citizen capacity to engage

3. PRIMARY OUTCOMES
- Improved service delivery
- Improved governance
- Poverty reduction / improved livelihoods
- Improved stability / conflict reduction

INPUTS & SUPPORT MECHANISMS:
Financial & human resources, programmes and projects, technical assistance, capacity building, partnerships, etc.

Table 6.1: Fiscal decentralization – International comparisons – early 2000s

Source: Bahl et al, 2013.

Region	Subnational government expenditures		Subnational government taxes	
	% of total govt expenditure	% of GDP	% of total taxes	% of GDP
Developing Countries	18.8 (n = 16)	5.1 (n = 20)	11.4 (n = 16)	2.3 (n = 20)
Industrial Countries	27.8 (n = 26)	13.9 (n = 26)	22.7 (n = 24)	6.4 (n = 27)

1. n = number of countries in sample

of their own, resulting in weak autonomy and capacity.[35]

A related, just as essential issue has to do with the division of powers and intergovernmental relations, which must be consistent with the division of revenue and expenditure if it is to be efficient. Before focusing on the legal dimensions of decentralization, a discussion of the sticky question of power relations is in order.

6.4
Local Governance and Power

As suggested earlier, at the core of the Habitat Agenda is a belief in inclusive deliberative democracy and special-purpose partnerships to ensure effective service delivery and enhance political legitimacy. In practice, though, policy reform is more complex than expected, and a major challenge is none other than altering a well-entrenched status quo, with the administrative arrangements that come with it. When reviewing and redefining urban governance prior to legal reform, it is essential to focus on the power dynamics of decentralization and local governance.

A useful guide is the distinction between three kinds of power: visible, invisible and hidden.[36] *Visible power* is the manifest capacity of participants in formal decision-making bodies and public spaces to present and advance their respective interests, (ideological) perspectives and priorities. In democratic institutions, these power contests are regulated by legally enshrined principles, which tend to have the public's attention because they embody what is deemed "proper" politics worthy of media attention. Significant amounts of government,

donor, and civil society energies are invested in participatory governance in formal decision-making arenas, such as participatory budgeting (Box 6.5). However, evidence from Brazil and other parts of the world suggests that participatory budgeting (PB) can be extremely time-consuming, prone to bureaucratization, easily hijacked by technocratic readings of local development, and often only applicable to small proportions of public operational budgets. In this sense, PB can easily detract attention from real power and decision-making in a city or neighbourhood, and fail to make any difference on the main factors of urban inequality and social exclusion. This is when invisible powers are in a position to control major decision-making.

> Visible power is the manifest capacity of participants in formal decision-making bodies and public spaces to present and advance their respective interests, (ideological) perspectives and priorities

Box 6.5: Participatory budgeting around the world

In addition to Porto Alegre, Brazil, many other cities in Latin America and elsewhere in the world have adopted participatory budgeting (PB), some even earlier. A particularly notable example of policy transfer was the adoption of PB by Saint-Denis, a predominantly poor suburb outside Paris (population: 130,000, largely immigrants) at a time (1999) when the mayor was very close to his counterpart in Porto Alegre. By 2009, it was estimated that PB was practiced in 200 locations around the world, involving over eight million people in active discussion. By 2014 "some form" of PB was being practiced by at least 1,700 local governments in over 40 countries.

Now, does PB make any difference? Part of the popularity seems to derive from citizens' better understanding of, and stronger involvement in, local public budgeting, in the process removing misconceptions about paying local taxes. As a result, some cities report dramatic increases in tax receipts. In 1999, the mayor of Porto Alegre claimed that after 10 years' experience, "we have practically tripled the municipal revenue…It is not because we have adopted a tough taxation policy -- we have not increased taxation, and there has been no increase in fees and charges. But because of the credibility we have gained over the budget, we have been much better able to enforce the collection of the revenues owing"

Sources: Oliveira and Allegretti, 2010; Sintomer et al, 2010; Cabannes 2014; Pont 2001.

Hidden power refers to whatever prevents the formal political and policy deliberative processes and forums from acting as civic "playing fields," systematically excluding certain voices and interests from public debate. Hidden power explains how formal political and policy arenas are constructed and hemmed in by specific discourses.[37] These include assumptions about the way issues must be framed, what can be said and what is politically or culturally considered taboo.[38] In highly hierarchical societies, lower castes, lesbian, gay, bisexual, transgender, intersex, indigenous, non-white people, immigrants, women, youth and any combination of these markers are rendered invisible — because the elites form the competing sides of a (staged) debate that tends to predominate in formal deliberative forums, even when these are part of participatory mechanisms such as PB or citizen supervisory committees. Hidden power is effective when the media or citizens fail to question the very assumptions behind a public policy issue.

> Hidden power refers to whatever prevents the formal political and policy deliberative processes and forums from acting as civic "playing fields," systematically excluding certain voices and interests

Hidden power works because it is culturally underpinned by *invisible power*, which stems from subjectivity, i.e. the way someone understands and enacts a sense of self as an expression of self-esteem, confidence, self-worth, dignity and physicality— i.e. individual ability to project oneself onto shared, civic urban space, and become an active part of it. Invisible power "involves the ways in which awareness of one's rights and interests are hidden through adoption of dominating ideologies, values and forms of behaviour by relatively powerless groups themselves."[39]

The lesson to draw from this reading of local governance dynamics is that normative ideals must result in partnerships, stakeholder engagement and participatory mechanisms, with a clear-eyed realism as to the way culturally coded vested interests can operate within the parameters of formal ideals, but still reproduce the status quo.

> Normative ideals must result in partnerships, stakeholder engagement and participatory mechanisms

6.5
The Legal Imperatives of Urban Development

Legal frameworks are a reflection of politics – and power dynamics are an integral part of political life. Unequal power relations across most societies and settlements are often seen as a fundamental reason for poor results and performance.[40] It is, therefore, understood and broadly accepted that clear legal frameworks are essential to mediate the contests that arise from competing powers – and to keep a check on those who wield disproportionate power over vulnerable constituencies and the natural environment, too. Public law effectively formalizes allocation of powers, responsibilities, functions and funding in any society, and therefore responds to power relationships in order to reach agreed policy objectives.[41]

It is impossible to overstate the importance of legal reform as a basis for appropriate design of government structures, particularly decentralization and multi-level governance that can advance sustainable human settlements and citizen empowerment. Ultimately, upholding fundamental human rights through effective legal protections, standards and effective public institutions as structured on the principle of subsidiarity (i.e. issues are dealt with at the most immediate (or local) level consistent with their solution), is the most robust political remedy to systemic power imbalances. This is reflected in the emergence of the Right to the City Movement and other rights-based interpretations of urban law, which highlight that the latter is not simply the formalistic deployment of universal principles for provision of services.[42] Fortunately, the power of legal reform was clearly recognized in the 1996 Habitat Agenda.

> Clear legal frameworks are essential to mediate the contests that arise from competing powers

Despite pointed calls in the Habitat Agenda for legal framework review around the world, legislative reforms are yet to come and in most countries the dispensation of public power remains very similar to what it was at the time of Habitat II and even earlier.[43] This

suggests that, in many respects, decision-makers remain unable fundamentally to influence the size, shape and morphology of their cities. This failing has direct consequences on the effectiveness of individual and community rights (particularly in the areas of security of tenure, shelter and basic services) but also means that public authorities are unable to harness the national economic benefits of agglomeration (i.e. the interactive concentration of resources and abilities that is a characteristic of cities). Apart from lack of follow-through on Agenda recommendations, legislative reform remains intractable because entrenched legal "…systems tend to be complex, as they accommodate different, contradictory, and even conflicting provisions adopted over time as a result of evolving socio-political processes. The maintenance of a legal system that does not fundamentally express the realities of the socioeconomic and political-institutional processes that it proposes to regulate, i.e. the realities of its context, generates distortions of all sorts."[44] This phenomenon is frequently reflected in the laws governing physical planning and land development: these include procedures for important elements (such as identification and maintenance of public space, plot design and allocation, the control and economic role of built space and building codes) that consistently fail to produce the physical outcomes that were expected to match economic and social policies.[45]

Clearly, reform of urban law and legislation comes as a challenge, even though in many ways it is a precondition for success in the other domains of urban development. In order to lay the groundwork for more effective legal reform under the New Urban Agenda, it is important to sift through the core challenges. If one considers the three imperatives identified in the Habitat Agenda mentioned earlier (development of decentralized systems, intermediate policy outcomes, primary outcomes (i.e. on the ground)), it is clear that they are not sharp enough and fail to focus the mind. Instead, reform of urban law must address four central imperatives if the policy logjam is to be broken:

1. Streamline, balance and systematize inter-governmental divisions of powers and financial assignments;
2. Strengthen the role and functioning of metropolitan authorities in the overall government system, in order to buttress the territorial dynamics of development and address climate change impacts;
3. Reform intergovernmental public finance systems to expand overall public resources, ensuring subnational authorities have the autonomy and resources they require to implement locally-defined development pathways;
4. Bolster the human and institutional capacities of subnational authorities whilst improving national government ability to work in an enabling manner with empowered partners.

While carrying out these reforming steps, renewed emphasis is called for on two fundamental legislative principles:

1. The quality of law, i.e. its ability to perform the functions determined by policy; and,
2. Policies, i.e. the "prescriptions" for law and governance, are primarily based on realistic assessments of what a country's urban development needs are, and what resources and capacities are available to fulfil them.

Intergovernmental frameworks

As mentioned earlier, there is no uniform or even predominant approach to the way relations between different tiers of government are structured or regulated. In some cases, formal agreements define the terms and forms of engagement. For example, in Europe all three Scandinavian countries rely on formal agreements rather than statutory law. In other cases, a combination of legal provisions and negotiated agreements prevails.

In light of intensified pressures on city-regions and towns (Chapter 2) and the ambitious scope of the global development agenda as reflected in the SDGs, it is vital that governments recognize anew the potential of strong local government to act with determination, relative autonomy, capability, resources and in alignment with national, supranational and global agendas. It is essential that governments rely on city-regions to take the lead in figuring out the best way of engaging multiple and complex pressures and opportunities (Chapter 9 and 10).

Decentralization puts central government in a better, overarching position to ensure inter-regional equity with appropriate specializations based on local natural advantage, in the process securing the position of the country as a whole in existing regional and other strategic blocs. On top of decentralization, sustainable urban development implies three fundamental imperatives: met-

Public law effectively formalizes allocation of powers, responsibilities, functions and funding in any society, and therefore responds to power relationships in order to reach agreed policy objectives

Decentralization puts central government in a better, overarching position to ensure inter-regional equity with appropriate specializations based on local natural advantage

ropolitan government, public finance reform and legislating amidst multiple regulatory systems.

Metropolitan government

As intimated before, a reformed intergovernmental system does not necessarily impose absolute uniformity at every tier. On the contrary, it is advisable to pursue a differentiated pattern of assignments among various categories of local authority. It does not make sense for local authorities in large metropolitan regions to hold the same powers and responsibilities as their counterparts in smaller cities and towns. In fact, where strong and financially autonomous metropolitan governments are endowed with a full range of competencies and powers to ensure service delivery and optimization of the built environment, it gives the national government, along with States or provinces, more room to play a more active role in support of smaller authorities governing complex rural-urban areas as well as cross-over zones where rural and urban blend together due to migration and logistical constraints. With this degree of focus, national governments can in theory be more effective, have greater impact and reduce inter-regional inequity. Yet, historically inconsistent territorial boundaries and numerous local governments with limited coordination, let alone integration, remain the norm in most parts of the world.[46]

As a consequence, even though most observers would concede the obvious value of integrated transport and logistics systems for metropolitan regions, in most cases fragmentation and institutional antagonisms will stand in the way. In 1988-1992 France's third largest city, Lyon, together with no fewer than 59 municipalities devised a shared regional master plan known as *Lyon2010*. Not only does this landmark document set out how local plans and priorities work together within a regional system, but it also provides an evaluative framework for what the municipalities should prioritize based not just on local needs but also informed by shared regional imperatives.[47] By contrast, in the metropolitan area of Mexico City, public services are provided by the city authority, the governments of adjacent States and more than 50 local authorities with minimal coordination.[48] In South Africa, the country's eight metropolitan governments represent the clearest example of one single authority per metropolitan area, endowed with wide-ranging powers and functions as entrenched in the Constitution, and largely dependent on own revenues. This would go to show that many of the policy prescripts of the Habitat Agenda have inspired local authority dispensation in South Africa, even if curtailed by institutional constraints and sluggish economic growth.

Public finance reform

Well-devised, effective intergovernmental relations and strong metropolitan authorities fundamentally require effective financing of subnational government. At the core, the intergovernmental imperative hinges on the financing requirements and taxation powers of subnational authorities. Devolution as defined in Box 6.4 is infrequent because national governments are reluctant to promote financial decentralization, since they regard the financial and political risks of failure as too high. In highly contentious and competitive polities, these concerns are of course understandable. However, national authorities must focus on the bigger picture: inclusive, sustainable development requires intergovernmental approaches which in turn must be firmly entrenched in sensible and effective public finance mechanisms. This requires clarity on a number of inter-related issues: the functional and financing assignments to be devolved; strengthening tax collection capacities of subnational governments to ensure that respective assignments are optimized and can be further enhanced as institutions mature; efficient expenditure; and effective accountability thereof.

Once the vision for development-oriented local authorities in a given country is clear, it is possible to design the differentiated intergovernmental system, which in turn will inform how best to structure the financing capacity of those authorities. In theory, local development finance comes from four sources: (1) intergovernmental transfers that are either conditional (for specific purposes) or unconditional; (2) own revenues through, mainly, property taxes and service charges; (3) borrowing from capital markets where this is legally possible; and (4) to a limited extent, public-private or public-civic partnerships.[49] All of these options require careful institutional design, matched with capacity and political openness so that the systems can evolve and mature over time. Cities with well-performing local authorities and sound tax bases usually can manage with less support from central government transfers. In India, the bulk of Mumbai's own financial revenue, for example, comes from octroi – levies on commercial goods brought into the city.

Legislating amidst plural regulatory systems

Statutory law is not the only form of regulation at play in most cities, especially in the developing world. Most urban residents are subject to multiple regimes of regulation, especially where many households rely on informal networks and resources to access land, build shelter, secure livelihoods, avail themselves of basic services such as health (especially traditional medicines), water and transport.[50] These informal regimes of regulation and control can have a variety of sources: quasi-traditional, religious or ethnic-traditional authority, or a local strong-man or network with control over land-use or trading permits, some of which can be linked to the threat of violence or the power to prevent it.

To make matters even more complex, these parallel regulatory systems can overlap with formal systems of rule and authority. It is not only the poor who operate within multiple regimes of regulation. Elites in most cities rely on public authorities' inability to enforce regulations to build up assets and extract rents. Many property subdivisions and extensions are carried out without formal permission in efforts to secure maximum, particularly short-term, profits and avoid taxation.[51] Likewise, many formal businesses impose informal contracts to secure labour and optimize profits. In other words, informal practices around socially or culturally specific regulatory systems are evident in most cities. It is imperative that "good" urban laws acknowledge this fact and devise well-adapted provisions that can systematically entrench a rights-based dispensation focussed on public interest.

For legal reform to facilitate urban transformation, it must be based on a broader-based dynamic which brings in civil society, whose relevance public authorities must formally recognize when it comes to advancing and consolidating the public interest and entrenchment of human rights. In other words, government must act upon opportunities for legal reform. Now, if it is to be effective, public action must operate through a multiplicity of levers, ranging from education to advocacy, to engagement, to well-targeted advocacy, among others. This process, which in no way can be static, calls for public investment (without undue influence) in the capabilities of those organizations that represent and champion the interests of the urban poor.[52]

If associated with on-going mobilization to

> Elites in most cities rely on public authorities' inability to enforce regulations to build up assets and extract rents

entrench urban public policies, legal reform is in a better position to support systematic advancement of collective rights, sustainable urban planning, adequate housing, provision of public goods and a balanced, healthy environment. The critical ingredient for successful legal reform is none other than credibility. Credibility is enhanced when laws are culturally resonant and enforceable (with the population deriving a higher sense of "ownership"). Where legal provisions hold no sway, and government cannot enforce compliance, enacting such laws can only be counterproductive.

Gradual fulfilment of rights creates room for the necessary societal negotiations about the multiplicity of regulatory systems—formal and informal—that can coexist and potentially complement one another in an iterative process of ensuring equality before the law. These multiple and overlapping systems must be readily intelligible, resulting in a sound basis for public debate about what serves the public interest best. The critical objective should be gradual strengthening of public authority capacity to make decisions in a transparent and predictable manner for the sake of enhanced accountability. And where decision-making on some urban matter is not the prerogative of the sole public authority, then it is also necessary clearly to agree where decisions are to be made and who can be held accountable. A political commitment to this institutional reform will go a long way toward establishing a democratic framework for co-development, of any locally appropriate and effective system of urban law. It is crucial that coalitions working towards transformative urban legal reform focus on the way regulatory and fiscal instruments can be brought into harmony and mutual reinforcement.

A good example of this is the potential for mobilizing public assets through value capture mechanisms – at the same time recognizing that these are only effective where there is a strong social and legal case for claims of unfair private gain through government spending on infrastructure and public works. Local authorities can stand to benefit in terms of increased revenue if they opt for progressive legal frameworks that give them the powers to recoup publicly created gain from developers that can then be used for critical public investments. In Western Europe, public authorities will frequently grant urban land and re-development rights to private investors on the condition that the projects make some room for public (health, educational, cultural, etc.) services and low-cost housing alongside com-

> For legal reform to facilitate urban transformation, it must be based on a broader-based dynamic which brings in civil society, whose relevance public authorities must formally recognize

> The critical ingredient for successful legal reform is none other than credibility. Credibility is enhanced when laws are culturally resonant and enforceable

Coalitions working towards transformative urban legal reform focus on the way regulatory and fiscal instruments can be brought into harmony and mutual reinforcement

mercial and middle-class residential spaces. However, these projects actually deliver to contract as long as they are not detracted from their public welfare purposes by patronage, influence or corruption.

It is self-evident that it will take capacity-building programmes if the outlooks, values and competencies of judges, lawyers, lawmakers, economists, administrators, planners, and others are to be changed. Programmes of this nature must underpin every step of national and local legal reform processes. They must be based on realistic expectations of the potential to expand and maintain capacity in the light of political and financial constraints.

6.6
Governance and Law for a New Urban Agenda

The Habitat Agenda, along with most policy agreements emanating from the UN system, rests on a consensual model of modern democratic politics. This approach operates on the assumption that it is possible to differentiate societal institutions along distinct categories: public (government), private (business) and community (civil society organizations). These institutions come, in turn, under the influence of distinct interests that must be brought into harmony for the larger societal good. This conceptual and political model is rooted in sustainable development precepts whereby social, economic and envi-

ronmental imperatives must be "coordinated" and "balanced."[53] The idea is that if a legally determined "level playing field" can be deployed for those three spheres of political life (through effective deliberation premised on access to the best possible information), then this will be the optimal political solution. Fair deliberative consensus produces the most democratic and effective outcomes.

However, this model of planning and politics is running against some criticism.[54] This includes claims that elite interests can adopt formal resolutions that embrace the precepts of democratic, transparent and inclusive local governance – but still manage to perpetuate elite-driven processes of decision-making and control. It is, therefore, imperative to recast governance systems in order more explicitly to acknowledge the necessity of agonistic (i.e. friendly, rule-based competition) debate as a necessary fuel for effective local governance. This calls for both legal and cultural acceptance of pluralistic civil society engagement with the local authority, which can range from close collaboration and cooperation around service delivery to an adverse relationship expressed through non-violent action and protest. The governance system and culture must be tolerant of both aspects of democratic citizenship if the local polity is to thrive and nurture the capacity to address the myriad development challenges that confront cities and towns. Figure 6.2 provides a diagrammatic illustration of the spectrum of civil society identities and actions that characterize (local) polities.

The recognition that good quality law makes for efficiency for public authorities at all levels and for the citizenry – together with realistic implementation pathways inherent to the instrument itself – has the potential significantly to enhance the effectiveness of urban law as well as local governance. The effectiveness of urban law depends

Figure 6.2: **The spectrum of civil society action in relation to government**

Source: Pieterse, 2015.

Cooperation & partnerships				Constructive critical opposition				
Sub-contracting	Partnerships	Cooperation in service delivery	Membership: participatory bodies	Public audit bodies	Lobbying & public interest litigation	Advocacy & public exposure	Alternative experiments	Direct action & creative protest

Violence & sabotage
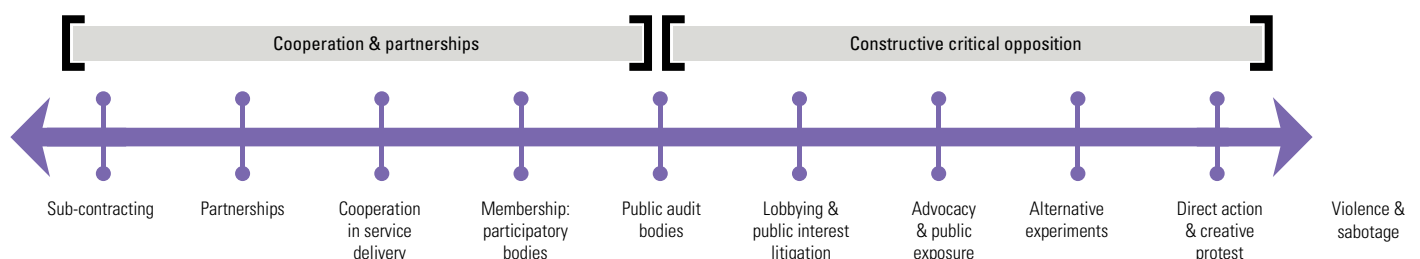
upon a series of elements, chief among which are clear and coherent policy and legislative instructions, selection of appropriate legal instruments, the efficiency of the mechanisms proposed and the proper formulation of the legal instrument, but, above all local relevance and practicality.

Institutional and procedural structures are central to the delivery of technical standards and are mostly determined by law. When adequately considered and tested at the design stage, the effectiveness of institutional and procedural structures can be significantly enhanced.

Admittedly, democratic local governance would not be able to function effectively short of formal deliberative institutions that provide opportunities for well-organized interests to debate the challenges facing their territory and how best to respond. Such spaces are essential to shape the content and nature of formal decision-making by local authorities at the levels of the council and the executive. Rules – both formal and informal – deal with the interaction between the executive and the council and the various political committees; they govern the relations between the local authority and major stakeholders, and they also define the participatory mechanisms available to organized civil society organization and citizens. In an era of e-governance it is self-evident that these inter-locked local rules determining governance interactions should be publicly accessible with an explicit commitment to monitor efficacy and appropriateness (Chapter 10).[55]

When considering the New Urban Agenda, it is crucial to recognize that a focus on basic, essential statutory and derived legislation will provide the most effective support to sustainable urban development. Governments should identify the minimum set of instruments and tools to build the major elements of a legal framework (Chapter 10).[3]

Local governance systems should be characterized by a capacity for continuous learning and adaptation. This can be enabled through explicit investment in a range of complementary instruments to ensure effective strategic planning, priority-setting, implementation, continuous monitoring and learning to improve performance, and a deep belief in the rule of law, transparency, openness and working collaborative across levels of government and across State and society lines (refer to the principles for a New Urban Agenda, Chapter 9). Given the enduring power of system inertia and the tendency of

> It is crucial to recognize that a focus on basic, essential statutory and derived legislation will provide the most effective support to sustainable urban development

complex systems to reproduce the status quo, it is essential to appreciate that this dynamic governance is simply not possible in the absence of *distributed leadership* committed to what the Habitat Agenda refers to as "public spiritedness." The capacity of leaders and their constituencies to engage robustly and collaborate is a further requirement for effective governance to take root.

When thinking about what needs to be done to bring this kind of local governance system into being and to sustain it, it is useful to differentiate between five institutional building blocks that together consolidate participatory development: 1) strategy and long-term planning; 2) service delivery innovations; 3) advocacy and activism; 4) social learning mechanisms; and 5) "smart" monitoring and continuous improvements. This agenda assumes that all reasonable policy reforms agree that elected local councils have a mandate to mediate competing social interests and demands, holding the executive authority to account. Further, strong local government leadership can take the form of executive mayors (whether directly elected or not), working closely with the council and representative bodies of civil society and the private sector. In an era where every urban management decision can have far-reaching long-term consequences, it is essential that political leaders can offer vision and direction on how the tough trade-offs and imperatives will be addressed during their terms of office but within a shared long-term perspective.[56] This is consistent with the role of mediators between global and local imperatives, which well-placed individuals can play and which are seen as critical for the success of public policies today.[57]

Strategy and long-term planning

Local governance often falls short because the preoccupations of elected leaders, administrators and civil society organizations are confined to the term-of-office and even more immediate horizons. Given the long-term effects of sustainable investment decisions (e.g. infrastructure) and various regulatory standards, it is crucial that robust "macro" long-term strategic plans are developed. The experimentation with City Development Strategies (CDS) under the aegis of Cities Alliance among others, are instructive.[58] CDS helps municipalities to harness the potential of urbanization and to develop coordinated institutional frameworks to make the most of opportunities. And, perhaps most importantly, CDS gives

residents a chance to have a voice in the future of the place where they live.[59]

In low- and middle-income countries experiencing rapid urbanization, UN-Habitat promotes its own National Urban Policy (NUP) tool. Its outcome is a coherent set of decisions derived through a deliberate government-led process of coordinating and rallying various stakeholders for a common vision and goal that will promote more transformative, productive, inclusive and resilient urban development for the long term (which can be from to 20 to 30 or even 100 years' horizon). The NUP aims at maximizing the benefits of urbanization, while mitigating inequalities and potential adverse externalities, and is proposed as an important component of the New Urban Agenda (Chapter 10). While the new NUP is context-specific, three main areas are worthy of note (1) urban legislation, with the focus on development rights, building code, plot regulations and preservation of public space; (2) urban planning and design with emphasis on planned city extensions, infills, public spaces and adequate ratios for street–open/built-up space;[60] and (3) the urban economy, particularly job creation, land value sharing and municipal finance.

It goes without saying that, if local governments lack adequate financial resources, it is not possible to implement any strategic agenda. Therefore, it is fundamental to recognize a range of locally empowering municipal finance tools, and to link these with institutional structures and policy objectives. The Republic of Korea stands out for making public-private partnerships work with appropriate legislation, third-party regulatory bodies, and capacity building for public institutions. Finally, community-driven local and neighbourhood plans, as promoted in the Habitat Agenda, can work alongside "macro" plans, in the process improving citizens' and political leaders' understanding of the way local and regional spaces can inter-connect optimally.

The NUP aims at maximizing the benefits of urbanization, while mitigating inequalities and potential adverse externalities

Figure 6.3: The institutional components of effective urban governance

Source: UN-Habitat, 2015.
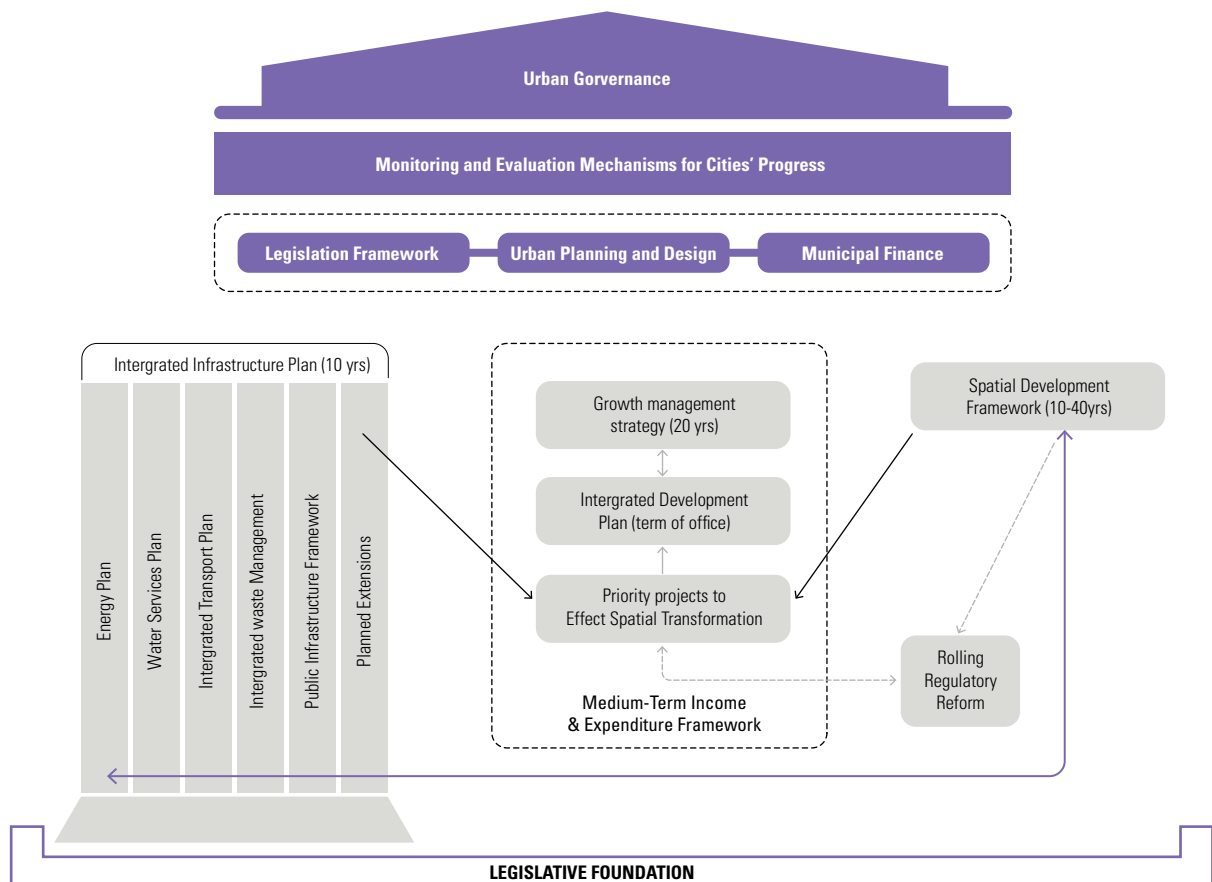
Service delivery innovations

The most important aspect of any effective local governance system is the capacity to deliver basic services and deploy the infrastructures that will enable the economy and culture to flourish (Chapter 10). The credibility of local governance hinges on its capacity to implement plans and priorities. However, in most developing countries, local authorities lack the resources, access to legal expertise or powers to do all this on their own. With the aftermath of the financial crisis, including low growth rates and high youth unemployment, more developed countries experience this type of pressure, too. Partnerships and co-production are indispensible. Therefore, effective local governance rests on participatory service delivery planning, budgeting, management and monitoring. This is especially the case in poor communities where affordability, access and quality issues involve trade-offs that require explicit balancing. Joint delivery systems at the local level enable those who cannot afford services to contribute in other ways, with the aim of achieving access over time. However, it is vital that such arrangements are complemented with supervisory mechanisms such as (public) audit panels or committees that bring together ordinary residents and professionals in order to ensure contract compliance and recourse for disgruntled citizens.

As mentioned in Chapter 2, ICTs are opportunities to accelerate improved service delivery and responsiveness, for instance through use of cell phone photographs and bespoke applications enabling citizen monitoring of the responsiveness of public bodies.[61] This kind of digital crowdsourcing of information can be applied to virtually every aspect of local governance, and a step-change in the effectiveness of these tools can be expected over the next decade. Local authorities can invest in much more sophisticated sensor-based systems for real-time tracking of the performance of various infrastructure systems, establishing a capacity for auto-correction and adaptation. The potential of e-governance and "smart city" innovations is dependent on the investment towards training officials, politicians, community members; particularly technologies that bring stakeholders together, enabling them to shape systems that serve local needs and priorities. Figure 6.4 provides a summary of the institutional background and political culture that are best able to nurture local approaches to e-governance and "smart city" investments.

Effective local governance rests on participatory service delivery planning, budgeting, management and monitoring

Figure 6.4: **An ICT-based enabling environment for cities**

Source: United Nation, 2015h.
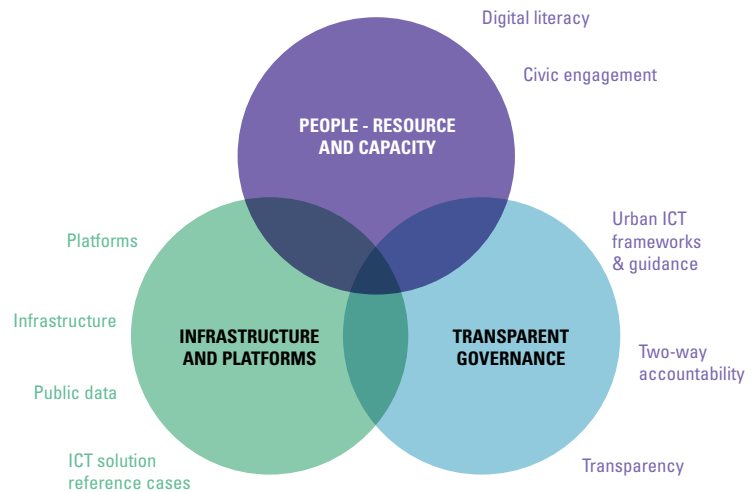
Advocacy and activism

One of the biggest obstacles to effective local governance is complacency. Once local authorities have established a variety of mechanisms in the domains of planning and service delivery to enrol citizens and stakeholders in urban affairs, they focus on sustaining these forums. However, evidence from all regions demonstrates that officially sanctioned spaces of participation can quickly grow stale and turn into stage acts. Dynamic, democratic local governance demands a public (policy) commitment to keep spaces for public consultation and planning open to the widest array of interests and opinion. If the full diversity of interests in a given polity is not allowed to contribute to public policies, it is unlikely that planning or service delivery choices will be effective or just. However, the requirements for adaptive governance are even more demanding. It is for local authorities to ensure legal protection (and incentives) of civic actors to establish their own independent political and practice spaces that may criticize or oppose official deliberative spaces. This contributes to a broader culture of debate and innovation that can benefit public and private interests.

Digital crowdsourcing of information can be applied to virtually every aspect of local governance

Social learning mechanisms for innovation

The only certainty about the next few decades is that… uncertainty and risk will become permanent features of society and governance, and this Report argues in favour of "a city that plans," as opposed to a planned city (Chapter 7). Consequently, institutions must also be endowed with the capacity to learn and adapt on a continuous basis.[62] This requires pro-active investment in dynamic regional innovation systems, ideally buttressed by effective metropolitan authorities. If they are, as required, to promote resource-efficient built environments and underlying infrastructures, local governments must support regional innovation systems that connect "green" businesses, universities, think-tanks, social movements, social entrepreneurs and State-owned enterprises. Where these are in short supply locally, agreements can be made with larger urban centres in the country or in other parts of the world.

One of the most effective ways of ensuring a dynamic flow of information between regional innovation systems and public policy is "innovation laboratories."[63] Typically, these problem-solving labs focus on critical systemic obstacles to the medium- and long-term sustainability of a city or town. One instance is Pakistan's Civic Innovation Labs, where groups of volunteers meet regularly to collaborate with government, non-profit and media organizations on technology, data, policy, and design projects to strengthen their communities.[64] Ideally, these labs can act as the first building blocks of innovation, maintaining a culture of public debate that can take the form of displays and learning fairs, drawing in all age groups and nurturing dialogue about best practice. A related though distinct initiative takes the form of "festivals of democratic achievement," through which non-government organizations highlight and celebrate major milestones along the urban transformation journey. These events can latch on to established cultural rituals and festivals, especially those with popular appeal across large segments of the population.

Monitoring and evaluation

As stated before, at the core of the governance imperative for the new urban agenda is accountability. All governments require accountability to achieve effective urban management. Local and regional law-making and legislative powers significantly influence policy implementation on the ground. Since such powers are often highly discretionary and are lodged within relatively weak governance frameworks, appropriate balances between accountability and discretion must be achieved. It is important that local authorities pay close attention to institutional performance-monitoring mechanisms across the urban governance system.

It is much more effective, in terms of costs and otherwise, to lodge monitoring systems within the public domain through open information policies and guaranteed public access modalities, combined with media training so that reporting and analysis about continuous urban governance processes can be improved.[65] Even service delivery processes are better secured through public contract monitoring than relying only on managerial supervision, as demonstrated by social auditing experiences in India, South Africa and a growing number of other countries.[66] National and international standards, particularly for the rule of law, human rights, and the implementation of the SDGs and the New Urban Agenda should be integrated into local monitoring instruments, as suggested in Chapter 10 ("Levers of change"). Such integration should also be regularly reviewed for effectiveness.

As the governments of subscribing countries will know, SDGs take in the whole of humankind ("inclusive") and the environment ("sustainable"). Being at the intersection of both, SDGs augment the domains of law and policy across the whole humanized space and existing constraints: "informal" is to turn formal, and "nature" into an extensive, vital ecosystem. As they pursue SDGs, national law- and policy-makers are to extend their reach to hundreds of millions of slum-dwellers and informal workers, for instance, to bring them fully into the system of rights and obligations that characterizes any democratic State of law, and into the nests of opportunities which cities afford. This fresh dispensation of rights in the physical, civic, socioeconomic, cultural and environmental spaces naturally calls for a fresh dispensation of the various spaces of public authority (from central to local) – and one that makes room for participatory, inclusive, sustainable governance at the (micro) local level. If globally-approved SDGs are to be embedded in every country in accordance with local constraints, it is for national governments, who sit in between the global and the

> Uncertainty and risk will become permanent features of society and governance… institutions must also be endowed with the capacity to learn and adapt on a continuous basis

> SDGs augment the domains of law and policy across the whole humanized space and existing constraints: "informal" is to turn formal, and "nature" into an extensive, vital ecosystem

> All governments require accountability to achieve effective urban management

local policy spaces, to engineer proper legal-financial continuums in order to deliver the policies that will respond to global and local requirements.

The development of a New Urban Agenda provides an ideal moment to re-commit the global community to substantive decentralization /devolution through democratic local authorities. The review of the evolution of urban legislation and governance over the past two decades can enrich international and local deliberations of cities and towns as they figure out their unique pathways to becoming prosperous "spaces of justice"[67] – in other words, "good cities."[68]

It is for national governments... to engineer proper legal-financial continuums in order to deliver the policies that will respond to global and local requirements

Notes

1. UCLG, 2013.
2. Local Development International LLC, 2013.
3. United Nations, 2015j.
4. UN-Habitat, 2010a.
5. For a definition, see: Standing, 2014. The precariat denotes the majority populations within the working class that will not work in traditional manufacturing sectors receiving a stable wage with some social benefits. On the contrary, the precariat are trapped in a series of vulnerable employment opportunities that are characterized by low wages, no social benefits or social protection. The rise of knowledge-based economic sectors, continual mechanization of manufacturing and casualization of labor whilst the labor market is expanding in the global South drive the persistence of the precariat. The usage of the term here is derived from: Harvey, 2012.
6. Stable employment includes wage and salaried employees and business owners. Vulnerable employment includes subsistence farming, informal self-employment and work for family members. McKinsey, 2010.
7. IeJSD, 2016.
8. A useful series of case studies are provided in: McDonald, 2014.
9. Fernandes & Maldonado Copello, 2009.
10. SDSN Thematic Group on Sustainable Cities, 2013.
11. One of the important and contested issues in the future is the role of technology in accelerating or frustrating just sustainable development, especially over the course of the next two decades. The various sides of this debate, especially as it pertains to the ideas of "smart cities" can be explored here: Greenfield, 2013 contrasted by: Khanna and Khanna, 2012.

12. Bahl et al, 2013; Berrisford, 2014.
13. UN-Habitat, 2014c.
14. Fernandes and Maldonado Copello, 2009.
15. Hannerz, 1980.
16. Mousmouti and Crispi, 2015.
17. McAuslan, 2013.
18. Nada, 2014.
19. United Nations, 2015j.
20. Fernandes and Maldonado Copello, 2009.
21. Wampler and McNulty, 2011.
22. For a useful summary of these legal provisions to enable participatory local governance, see: Morel, 2012.
23. The Economist, 2016.
24. Fernandez, 2010.
25. World Bank, 2015b.
26. Sen,1999. The UNDP Human Development Reports published since 1990 is based on the capabilities framework of Sen and represented an important counterpoint the virulent neoliberalism of the 1980s.
27. According to the Guideline (p. 10), "The principle of subsidiarity constitutes the rationale underlying to the process of decentralization. According to that principle, public responsibilities should be exercised by those elected authorities, which are closest to the citizens. It is recognized that, in many countries, local authorities are dependent on other spheres of government, such as regional or national governments, to carry out important tasks related to social, political and economic development. In many areas powers should be shared or exercised concurrently among different spheres of government. These should not lead to a diminution of local autonomy or prevent the development of local authorities as full partners. Local autonomy aims to allow local authorities to develop to a point where they can be effective partners with other spheres of government and

thus contribute fully in development processes."
28. Adapted from: Local Development International, 2013.
29. Bahl et al, 2013.
30. The decision of the Commonwealth Local Government Forum to adopt the principle of developmental local government captures this policy approach powerfully (CLGF, 2013).
31. A comprehensive treatment of these challenges in developing countries can be accessed in: Bahl et al,2013.
32. Smoke, 2015.
33. Local Development International, 2013.
34. UN-Habitat, 2012e.
35. CER, 2013.
36. Pettit, 2013.
37. Some of the most systematic analysis of this is found in the expansive work of Bent Flyvbjerg (Flyvbjerg, 2001).
38. Healey, 2004.
39. Gaventa, 2013.
40. Mansuri and Rao,2014; Goetz and Gaventa, 2001; Manor, 2004; Miraftab, 2004; Rakodi, 2002.
41. Tamanaha, 2001.
42. The Right to the City Platform seeks to contribute to the adoption of commitments, public policies, plans and actions in order to build fair, democratic, sustainable and inclusive cities.
43. Bahl et al,2013; Berrisford, 2014.
44. Fernandes and Maldonado Copello, 2009.
45. United Nations, 2015j.
46. OECD, 2006b.
47. These examples, along with a number of others can be reviewed inInternational Guidelines on Urban and Territorial Planning. Towards a Compendium of Inspiring Practices (UN-Habitat 2015f).
48. Bahl et al, 2013.
49. For guidance on these technical options

and institutional implications, Bird & Slack, 2013; UN-Habitat 2015g.
50. Berrisford, 2014; Jaglin, 2014.
51. Neuwirth, 2011; Tonkiss, 2014.
52. Hickey and Mohan, 2004; Narayan and Kapoor, 2008
53. Pieterse, 2011.
54. Appadurai, 2004; Mouffe, 2009.
55. Issue Papers and Policy Units of the Habitat III Conference, Nairobi, April, 2015.
56. It is precisely this quality that has allowed Colombian cities such as Medellin and Bogota to implement key urban strategies despite frequent changes in Mayor and political parties.
57. Muller, 2015.
58. UCLG, 2010.
59. Cities Alliance, 2016.
60. UN-Habitat, 2015h, New Generation of National Urban Policies.
61. An instructive example has been implemented in Tel Aviv. See: Fox, 2015.
62. Hajer, 2014.
63. Hassan, 2014; Tiesinga and Berkhout, 2014.
64. Code for Pakistan, 2016.
65. More and more cutting-edge local authorities are adopting open data policies in order to reap the service delivery improvement benefits that come from greater transparency. A recent adopter is the City of Cape Town metropolitan government. See: City of Cape Town, 2014.
66. Arya and Sharma, 2014.
67. Muller, 2015.
68. Clos, 2014.

07

A City that Plans: Reinventing Urban Planning

QUICK FACTS

1 Today, many cities in the world still rely on outdated modes of planning notwithstanding that planning is central to achieving sustainable urban development.

2 Cities across the world are sprawling, and as such, densities are dramatically declining. In developing countries, a one per cent decline in densities per year between 2000 and 2050 would quadruple the urban land area.

3 Planning frameworks in most cities are not gender-sensitive; consequently, women are often left outside of the planning process and decisions.

4 Planning capacity is grossly inadequate in much of the developing world. In the UK, there are 38 planners per 100,000 population, while in Nigeria and India the figure is 1.44 and 0.23 respectively.

POLICY POINTS

1 Integrated, multi-sectoral planning approaches have a strong success record and should be used in many more cities and regions.

2 Local circumstances, needs and requirements must remain pre-eminent in urban planning, so are gender considerations and involvement of—and responsiveness to—the diverse populations.

3 Plans should be prepared at various geographic scales and integrated to support sustainable and coordinated road, transit, housing, economic development and land use across geographic and political boundaries.

4 In developing countries, education and training for professional planners should be increased and capacity for planning education be enhanced, concomitantly.

A City that Plans versus The Planned City

A City that Plans embraces views;

Residents

Employers & employment

Elected leaders

Investors

A City that Plans intergrates;

Infrastructure
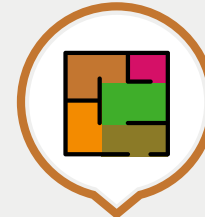
Land use

Culture
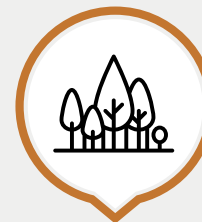
Natural resources

Education

The Planned City

> reflects only the views of national leadership

> no local input

> favoritism and nepotism

> distorted priorities

Urban **Sprawl**

Loss of agricultural land

Increase in greenhouse gas emissions

Higher commuting time and costs

Socio-spatial segregation and segmentation

US$400
BILLION PER YEAR

Estimated costs in the US alone from higher infrastructure, public service and transport costs.

8,600
LATIN AMERICAN CITIES

Public service costs increase as density decreases in small and medium-sized cities.

Planning capacity varies greatly across the world.

UK
38
ACCREDITED PLANNERS
per 100,000 population

Nigeria
1.44
ACCREDITED PLANNERS
per 100,000 population

India
0.23
ACCREDITED PLANNERS
per 100,000 population

NEW COMPREHENSIVENESS

Newer planning approaches are;

> more **multisectoral**

> addresses **global concerns** e.g climate change & gender equality

> **critical examination** of new ideas before adoption

Within any given scale, congruency of plans among sectors is vital to successful planning outcomes.
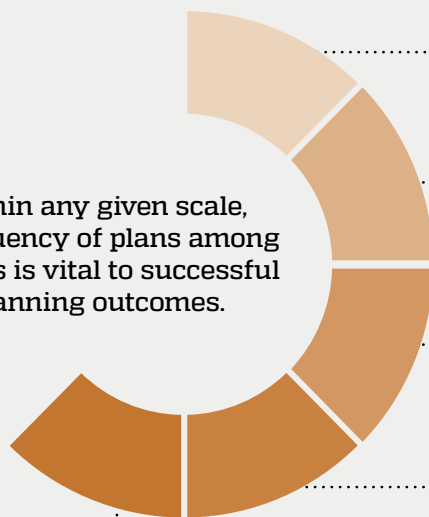
- Neighbourhood level
- City level
- Metropolitan level
- National level
- Supranational level

Cities drive economic productivity and prosperity. As urbanization has advanced so have global economic output, poverty reduction and social well-being. Yet, unplanned urbanization has also often led to pollution, congestion, segregation, sprawl and other unintended consequences. In 1996, the Habitat Agenda recognized as much with a set at of goals, principles, commitments and actions promoting the positive effects of urbanization while limiting those more negative impacts, emphasizing adequate shelter for all and sustainable human settlements.[1]

Since Habitat II, unprecedented population growth in many cities keeps challenging governments, business and civil society for adequate responses. Other cities have declined in population, with attendant economic and environmental challenges. At the turn of the millennium, UN-Habitat understood that advancing the Habitat Agenda would require changes in the way urban planning is practised around the globe. Working together with professional planners' organizations worldwide, UN-Habitat has promoted a reinvented urban planning with aims of ensuring environmental sustainability, promoting equal access to the benefits cities offer, building safety, health and inclusiveness, engaging public, private and third sectors, as well as facilitating good governance. The reinvention of urban planning in the post-Habitat II era has embraced principles[2] endorsed in 2006 at the third session of the World Urban Forum in Vancouver (Box 7.1).

Central to this reinvention is planning as an ongoing, inclusive process instead of as a one-off design of a master vision, what has been described as "*a city that plans*" in contrast to "*the planned city*."[3] *A city that plans* embraces the views of residents, employers, investors, and elected leaders, in contrast to the ubiquitous,

Central to this reinvention is planning as an ongoing, inclusive process instead of as a one-off design of a master vision

A city that plans not only projects the future from past trends, it also brings the public, private and third sectors together with communities to build a collectively preferred future

Box 7.1: The 10 Principles of New Urban Planning

1. Promote sustainable development
2. Achieve integrated planning
3. Integrate plans with budgets
4. Plan with partners and stakeholders
5. Meet the subsidiarity principle
6. Promote market responsiveness
7. Ensure access to land
8. Develop appropriate planning tools
9. Be pro-poor and inclusive
10. Recognize cultural diversity.

Source: Farmer et al, 2006.

age-old pattern of planning that reflected only the views of national leadership. *A city that plans* looks to integrate land use, employment, education, infrastructure, culture, and natural resources. This contrasts with the older planning pattern of attending to the physical design of public buildings, streets, parks etc., while allowing other dimensions of urban development to be determined solely by market forces. *A city that plans* not only projects the future from past trends, it also brings the public, private and third sectors together with communities to build a collectively preferred future.

The city that plans is part of a transition over the latter half of the 20th century when planning evolved from a *modernist* process in which planning is viewed as a scientific, universally valid instrument of progress, toward a *communicative* process, in which planning is viewed as politically engaged, inclusive and empowering, strategic and integrated. In modernist planning, progress was often elusive and the benefits were often concentrated among small groups of elites. Modernism, moreover, expressed belief in a universal march toward development that overlooked regional differences. In communicative planning, objectives reflect the aspirations of the population as expressed through advocacy and grassroots participation; greater attention is given to the national and cultural context; and planning activities are better integrated across spatial and sector-based divisions. Planning has become more multi-faceted rather than focused exclusively on physical design of places, more bottom-up than top-down, and more responsive to equity and environ-

Community planning for reconstruction in Yogyakarta, Indonesia.

Source: Nugroho Nurdikiawan Sunjoyo / World Bank, CC BY 2.0, https://creativecommons.org/licenses/by/2.0/legalcode

mental quality than to business concerns.

Implementation of the Habitat Agenda has occurred in the context of the Millennium Development Goals, which prescribed a sector-based perspective that did not readily lend itself to geographically-delineated planning. As the world transitions to the Sustainable Development Goals, which directly address urban sustainability, it is important to ask what is needed from urban and regional planning to better ensure progress toward accomplishing these goals. This chapter examines changes in urban and regional planning over the 20 years since Habitat II, aiming to understand how widespread planning's reinvention has been and whether urban and regional planning as practiced in communities, regions and nations globally has been effective in advancing the two goals of adequate shelter and sustainable urban settlements. Five lenses are used: (1) the transition from master planning to grassroots equity/advocacy community visioning; (3) rethinking land use and public space; (3) policy-sector integration and new tangible realities; (4) geographic (scalar) integration; and (5) planning capacity.

The world has not achieved adequate shelter for all and sustainable human settlements. While notable progress has been made on some dimensions in many places, including economic growth, and resilience, these overarching goals are further from realization today globally than they were in 1996 by many measures, including two to threefold higher rate of increase in urban land compared urban population and increases in the numbers of those without access to improved sanitation. The immediate task is not to ask whether cities are more sustain-

> **Planning has become more multi-faceted rather than focused exclusively on physical design of places, more bottom-up than top-down, and more responsive to equity and environmental quality**

able today than they were, but instead to ask whether the results of urban and regional planning over the last two decades have made cities more sustainable today than they would have been had planning not advanced as it has.

Two cautions are needed. First, recognizing that urban planning responds to and affects the full range of dimensions of urban life, complete treatment of the subject would include discussion of housing and slums, inclusion, equity, basic services, environment, economy, and governance, the subjects of Chapters 3 through to Chapter 8 of this report. This is impractical, so instead readers are cautioned that much of what they have already read in these chapters must be kept in mind for a full understanding of how urban and regional planning has changed in these years. Most notably, the Habitat Agenda goal of adequate shelter for all is the subject of Chapter 3.

Second, many of those reading this chapter prize ideas that can be transferred across borders. There is a quest for promoting best practices and for "scaling up," building successful local experiments into national and then global norms. Against this quest, there is need to recognize the built-in conflict between transferability and the ideals of participation, stakeholder engagement, and sensitivity to local culture and institutions that reinvented planning calls for. Indeed, it is good to learn from each other— from country to country, and town to town—but it is important to pick, adapt and amend foreign ideas so that they work in the local context. Planners and other public officials often want to know enough about what has happened in other places in order to have informed, intelligent debates about what to do in their jurisdictions, but approaches chosen must be achievable with the available resources. Planning is about making such choices, no guidebook can short circuit the need for planning.

> **...there is need to recognize the built-in conflict between transferability and the ideals of participation, stakeholder engagement, and sensitivity to local culture and institutions that reinvented planning calls for**

7.1

The Plan is Dead; Long Live the Planners! From Master Plan to Community Vision

Many planning regimes have been significantly altered in bids to open up to a much wider range of stakeholders, their needs and aspirations, and so have legal frameworks

While some historic master plans, also referred to as blueprint or layout plans, were influential in transforming cities in valuable directions and were wrapped in the mantle of the *public interest*, others reflected the needs and aspirations of the wealthy and powerful to the exclusion of the wider population.[4] With too few exceptions, master planning has failed to integrate the interests of the urban poor, women,[5] youth, the aged, and indigenous peoples in the physical and socioeconomic spaces of the city; to prevent environmental degradation or the formation of slums, or deploy effective transportation systems.

In the post-Habitat II era, many planning regimes have been significantly altered in bids to open up to a much wider range of stakeholders, their needs and aspirations, and so have legal frameworks. Often, the direct role of government has decreased— in favour of the private sector and civil society— and "Governance" has frequently replaced "government."[6]

The shift from government to governance is reflected in changes in thinking in the planning profession. In the past, master planners saw the plan as their central accomplishment. Implementation was often given insufficient attention. Today, the planning process is viewed to be more important, with significant consideration given to data collection, monitoring and evaluation, policy networks, decision-making procedures, as well as other procedural and interim products. The plan in turn,

Table 7.1: The 12 key principles of urban and territorial planning

Source: UN-Habitat, 2015e.

PILLAR	PRINCIPLES
Urban Policy and Governance	1. Urban and territorial planning is more than a technical tool, it is an integrative and participatory decision-making process that addresses competing interests and is linked to a shared vision, an overall development strategy and national, regional and local urban policies;
	2. Urban and territorial planning represents a core component of the renewed urban governance paradigm, which promotes local democracy, participation and inclusion, transparency and accountability, with a view to ensuring sustainable urbanization and spatial quality.
Urban and Territorial Planning for Sustainable Development	*Urban and Territorial Planning and Social Development*
	3. Urban and territorial planning primarily aims to realize adequate standards of living and working conditions for all segments of current and future societies, ensure equitable distribution of the costs, opportunities and benefits of urban development and particularly promote social inclusion and cohesion;
	4. Urban and territorial planning constitutes an essential investment in the future. It is a precondition for a better quality of life and successful globalization processes that respect cultural heritages and cultural diversity, and for the recognition of the distinct needs of various groups.
	Urban and Territorial Planning and Sustained Economic Growth
	5. Urban and territorial planning is a catalyst for sustained and inclusive economic growth, that provides an enabling framework for new economic opportunities, regulation of land and housing markets and the timely provision of adequate infrastructure and basic services;
	6. Urban and territorial planning constitutes a powerful decision-making mechanism to ensure that sustained economic growth, social development and environmental sustainability go hand in hand to promote better connectivity at all territorial levels
	Urban and Territorial Planning and the Environment
	7. Urban and territorial planning provides a spatial framework to protect and manage the natural and built environment of cities and territories, including their biodiversity, land and natural resources, and to ensure integrated and sustainable development;
	8. Urban and territorial planning contributes to increased human security by strengthening environmental and socioeconomic resilience, enhancing mitigation of, and adaptation to, climate change and improving the management of natural and environmental hazards and risks.
Urban and Territorial Planning Components	9. Urban and territorial planning combines several spatial, institutional and financial dimensions over a variety of time frames and geographical scales. It is a continuous and iterative process, grounded in enforceable regulations, that aims to promote more compact cities and synergies between territories;
	10. Urban and territorial planning includes spatial planning, which aims to facilitate and articulate political decisions based on different scenarios. It translates those decisions into actions that will transform the physical and social space and will support the development of integrated cities and territories.
Implementation of Urban and Territorial Planning	11. Adequate implementation of urban and territorial plans in all their dimensions requires political leadership, appropriate legal and institutional frameworks, efficient urban management, improved coordination, consensus-building approaches and reduced duplication of efforts to respond coherently and effectively to current and future challenges;
	12. Effective implementation and evaluation of urban and territorial planning requires, in particular, continuous monitoring, periodic adjustments and sufficient capacities at all levels, as well as sustainable financial mechanisms and technologies

Box 7.2: Brazil's "right to the city"

Brazil's 2001 Statute of the City established a "right to the city" as fundamental. Brazilian cities were required to guarantee land, housing, environmental sanitation, infrastructure, transportation and public services, work and leisure facilities. An important requirement is for municipalities with populations over 20,000 to develop urban plans.

In practice, this right to the city became closely tied to the right to participate in local government decisions, democratic management or municipal affairs. Article 45 of the statute mandates "significant participation of the population and of associations that represent various segments of the community, in order to guarantee the direct control of their activities and the complete exercise of citizenship."

Since the statute was enacted, Brazil has experienced gradual and continuous decline in inequality in urban areas and nationwide.[8] In Niterói the planning process has since involved broad-based participation (Figure 7.1). Critics have objected that the outcomes of the statute have not been as profound as intended. Nevertheless, the widespread recognition of the right to the city has fundamentally changed the nature of policy discourse in Brazil.[9]

Source: UN-Habitat and CAF, 2014; World Bank, 2013d; Friendly, 2013.

has become more strategic, integrated and varied, with plans developed across all scales, and plans focused on specific problems or functions, frequently taking the place of master or comprehensive plans. Planning organizations have also expanded their operations to include implementation, monitoring and enforcement.

Rights and responsibilities of citizens, to land, resources and otherwise, as well as systems for determining and acting on the public interest, are vital to such a conception of planning. UN-Habitat links planning directly to governance in the principles of *International Guidelines on Urban and Territorial Planning* which UN member states approved at the UN-Habitat Governing Council in 2015(see Table 7.1).

Moving to inclusive governance is a challenge. Colonial-style, top-down decision-making alienates significant constituencies from formal decision structures. Pressures of structural adjustment have opened many governments to joint ventures with private firms which, like international aid, do not sit well with democracy. Moreover, in many countries internal political, economic, tribal and military forces concentrate power in ways that do not serve broad development goals or equitable outcomes. Additionally, governance involves significant overlap among political, economic and civic institutions, resulting in highly centralized power. The governance and participation problems characterizing many master plans are illustrated in the following observation of planning in African cities: "*Plans are developed with little or no local input or consultation. Further, even if these models were in themselves adequate as planning exercises, their imple-*

Figure 7.1: Participation in the master planning process and the management of the master plan in Niterói, Brazil.

Source: Friendly, 2013.
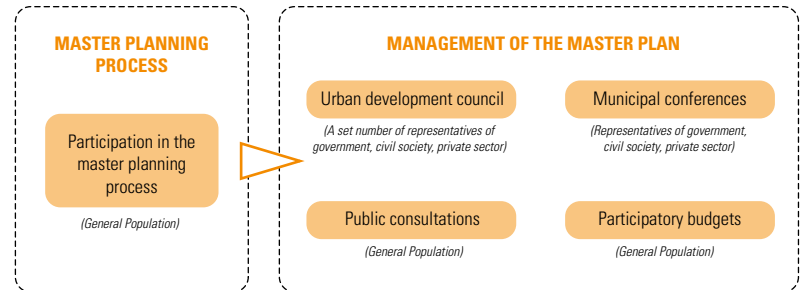
mentation is generally beyond the resources and delivery capacity of the existing planning structures....Much of the problem lies in the undemocratic nature of the state itself. This leads to favouritism, nepotism, biased allocation of resources, distorted priorities, and sifting of local initiative and innovation."[7]

Democratic, participatory, inclusive, transparent, and accountable planning systems are the opposite of centralized planning (which is associated with centralized decision making as well as strong command and control). No one political framework is required to meet these conditions; instead the conditions can be developed and preserved under a wide variety of governance paradigms. The boundary between governance and planning can be imprecise; changes in governance directly alter planning relationships whilst changes to the plan-

The boundary between governance and planning can be imprecise; changes in governance directly alter planning relationships whilst changes to the planning system lead to new patterns of governance

ning system lead to new patterns of governance. It is also important to recognize that inclusion will not always lead to easy consensus; participation may highlight conflict, rather than resolve it.

Women have often been left out of planning processes, both literally and in substantive terms. They are under-represented among urban decision-makers and more often active in the informal economy. While planning methods seek to model formal sector work-related mobility, those travelling for purposes of child and elderly care or community activities are predominantly women. While measures of economic success are most often based on earned income, women disproportionately engage in non-income-earning family and community work. Similar barriers affect youth, the aged, and indigenous peoples — leaving them out of the scope of master planning.

Thanks to the Habitat Agenda, these shortcomings have been increasingly recognized as demonstrated by steady progress toward more formally established systems of rights and responsibilities with complimentary governmental authorities at varying geographic scales and with specific scopes of authority. Some examples briefly described below and in Box 7.2 reflect the diversity of these recent approaches.

Over the last 10 years, Sri Lanka has developed a cross-jurisdictional, cross-agency system for collective urban policy-making. The Sri Lankan Urbanization Framework (SISLUF) has built partnerships among local authorities, provincial courts, national institutions and private stakeholder groups at local level, and among urban development agencies at provincial level. These networks

Women have often been left out of planning processes, both literally and in substantive terms

contributed immensely to responses to the 2004 tsunami and the aftermath of internal conflict.

At the beginning of the millennium, Kitale (Kenya) was struggling to cope with a population growing at 12 per cent annually—65 per cent of the total living in slums— when the NGO Intermediate Technology Development Group arranged a participatory process for planning and service delivery aimed at achieving more economically, socially and environmentally sustainable development.[10] In a City Development Strategy (CDS) formulated by the Cities Alliance, the cities of Ouagadougou (Burkina Faso) and Douala (Cameroon) sought to reduce poverty and provide more equitable economic development. The strategy emphasized participation, involving workshops with representatives of marginalized and vulnerable populations. The strategy has had notable impact on institutional behaviour, on top of attracting significant funding for improved basic infrastructure in the two cities. [11]

In Colombia, Medellín's governance transformation has been widely referred to as the "Medellín miracle." In the 1980s and early 1990s, the city suffered notoriously high levels of unemployment and crime (381 murders per 100,000 persons in 1991). In the mid-1990s, municipal officials reached out to corporate leadership and civil society, embarking on a landmark community conversation about problems, strategies and priorities. The resulting multi-sector approach targeted reforms in education, law enforcement, and infrastructure leading to significant investments, including a US$57 million loan from the Inter-American Development Bank, construction of an internationally renowned cable car system for linking slum dwellers to jobs, and ultimately an 80 per cent reduction in murders. The Multi-sector cooperation has led to great improvements and promises to continue to do so.[12]

The centrality of governance and participation to planning processes in these and other cities reinforces John Friedmann's observation, "planning without plans may not be such a bad idea."[13] While significant progress has been made in the involvement of historically under-represented stakeholders in the preparation of plan documents and the making of city decisions, implementation and monitoring is still often lacking. Plan provisions that reflect the input of those without wealth and power may be the provisions least likely to be implemented.

7.2

Urban Land: Transformation of Planning's Core to Address New Views of the Better City

Master planning was typically focused on land use and urban design. The architects, landscape architects and engineers who prepared early master plans imagined city planning as a grander scale version of the site and utility design problems that were the stock and trade of their professions. Moreover, the patrons of planning understood separation of land uses, regulation of height and bulk of development, and coordination of land use with road and utility infrastructure as the key components of ensuring an agreeable and efficient city. The legacy of physical master planning remains influential today, more common in some regions than others. East Asia, Latin America and the Caribbean, Eastern Europe and the former Soviet Union, and the Mediterranean continue to emphasis physical land planning and urban design more than other regions of the world.

Master plans are often intended to promote sanitation and circulation of people and goods, to raise the aesthetic quality of the urban landscape, to provide open space to counter congestion, and to promote social communities. These objectives are to be achieved through regulation of the private use of land and through the programming of public investments. Over time, the nature of the designs that have been favoured has changed, but there has been a consistency in the belief that physical design of cities is a tool to bring about social and economic results. There have also been changes in the geographic and political flow of ideas: colonial pressures gave way to various forms of market and political style or good currency, but the existence of widespread styles that are advocated for international transfer has never waned. Some master plans reflect ideas transferred from North to South, or from West to East, or within regions of the world, in harmony with concepts of the political revolutions, or of the neoliberal agenda. What has been con-

sistent is that ideas about the effects of environmental design on public objectives believed to be effective in some places have been imported to others. Along with the ideas have come designers and consultants familiar with the original settings who are asked to conduct or advice the replications.

Among the urban form and urban design fashions that were widespread 20 years ago were a belief in separation of land uses to promote harmonious living, requirements for minimum lot sizes, lot line setbacks and minimum parking, and maximum floor-area ratios. Often, culturally determined principles were copied without appreciation of changes in context, as can be seen in the growth of gated communities in China, and standards for US or European street widths in countries with low levels of automobile ownership. Resulting costs can be unaffordable in the new context, driving development to informal alternatives, leading to high levels of social segregation in cities that previously were more integrated across both demographic and economic lines. Large amounts of land are often converted to urban use. Environmental sustainability, economic, health and social justice outcomes have not been well served by these transfers. Often urban land conversions do not devote adequate land to public purposes, with the result that circulation, recreation, and environmental sustainability are not adequately served. There has also been a trend toward more private and less public land ownership. The regulatory processes that enforce these plans are often cumbersome and costly for land developers, requiring expertise that may not be readily available to those doing the developing.

Despite these problems, master planning has persisted in many countries due to: lack of professional awareness of alternatives, top-down, command and control patterns among national or municipal leadership; ruling class domination over land use; and widespread perceptions that the Western urban form is associated with prosperity and modernity.

Reactions against the unsustainable urban form patterns advocated in traditional master planning include compact cities, new urbanism/smart growth, rural growth models, strategic spatial planning, and public-space led urban development.

Urban sprawl causes major losses of agricultural land and wildlife habitat, higher commuting time and costs, an increase in greenhouse gas emissions, as well exacerbating socio-spa-

tial segregation and segmentation. Sprawl is estimated to cost US$400 billion per year in the US alone from higher infrastructure, public service and transport costs.[14] A study of 8,600 Latin American cities found that, unsurprisingly, public service costs increase as density decreases in small and medium-sized cities.[15]

On the whole, built-up area densities have been on a decline around the world (Figure 7.2 and Figure 7 3), especially in developing countries: from an average 170 persons per hectare in 1990 to 135 a decade later. A one per cent annual decline in average densities in developing countries is projected to quadruple the urban land area by the year 2050 from 2000 levels. This means that in Sub-Saharan Africa, South and Central Asia, and Latin America and the Caribbean, the urban land cover is to increase 7.5, 5.4 and 2.9 times, respectively, over the period.[16] The picture is, however, slightly different in East Asia where a recent study showed a slight increase in densities whilst urban land grew at a rate of 2.4 per cent per year between 2000 and 2010.[17]

Sprawl is estimated to cost
US$400 billion
per year in the US alone from higher infrastructure, public service and transport costs

There is growing consensus that urban planning can reduce sprawl and promote compact, contiguous development; unplanned city extensions lead to sprawling city-regions. Containment tools have proved quite successful in a variety of settings. Urban growth boundaries, greenbelts, urban service boundaries, and nodal location of economic activity centres are each approaches to promoting compact city form.[18] Compact city policies trace their origins to the UK in the early 20th century and been used widely in recent years, in Ottawa (Canada), Tokyo (Japan), Bangkok (Thailand), Berlin (Germany), London (UK), Vienna (Austria), Barcelona (Spain), Budapest (Hungary), and Portland, Oregon (US).[19]

Seoul (Republic of Korea) adopted a greenbelt policy in 1971 after a protracted spell of significant population growth (more than seven per cent per year) in a bid to preserve agricultural land, control urban sprawl, promote food security and enhance national security. The 10km-wide greenbelt, shown in Figure 7.4, has stemmed development within its boundaries, and promoted sustainability, but has also led to increased housing prices and significantly affected the wealth of some landowners.[20] In

Figure 7.2: Built-up area densities in 25 representative cities, 1800-2000

Source: Angel et al.. 2011.
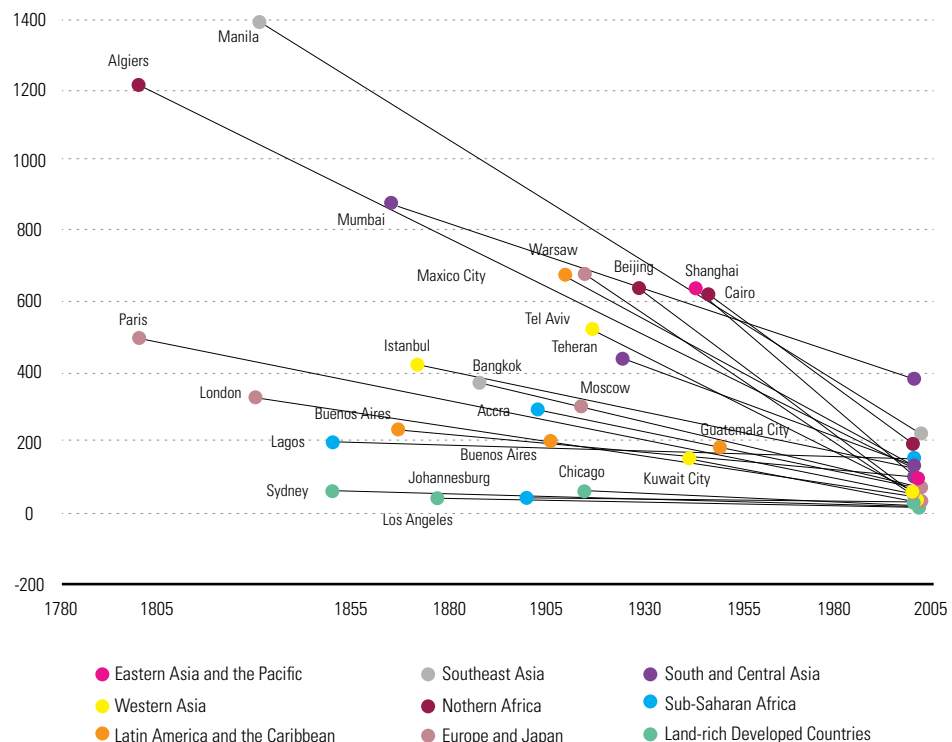
2002, Melbourne (Australia) adopted the *Melbourne 2030* plan intended to contain low density urban expansion through an urban growth boundary, promotion of activity centres, and a series of land use regulatory changes. A 2007 evaluation of the plan suggests that it is leading to 300 million fewer vehicle trips per year.[21]

Curitiba, Brazil, began its integrated development planning in 1965, setting a path toward transit orientation and mixed-use development in a compact pattern. Today, the city's land use pattern is explicitly mixed, with nine secondary, bus-linked centres of high-density commercial development with extensive parks, open air markets, recycling and social programmes aimed at street children and other underprivileged groups. As a result, Curitiba as a whole burns 25 per cent less fuel than the average same-sized city.[22] The connection of bus system to 3G mobile broadband makes for efficient operation, reducing fuel consumption and carbon emissions. [23]

In recent years, UN-Habitat has brought into the forefront of attention the need for orderly expansion and densification so as to achieve more compact, integrated and connected cities. UN-Habitat's support for planned city extensions programmes as well as promotion of tools such as land readjustment aims to increase densities (both residential and economic) with compact communities in addition to guiding new redevelopment to areas better suited for urbanization. These interventions are suggested to be an integral part of the New Urban Agenda as elaborated in Chapter 10.

New urbanism and **Smart Growth** are efforts to reclaim the walkability and community benefits of urban life, reducing land consumption and traffic congestion and promoting more accessible job location. New urbanism calls for smaller lot sizes, shopping and community facilities within easy walking distance of homes, transit access, and street corridors that facilitate safe and enjoyable walking. Smart growth tools include promotion of higher-density and mixed-use development, transit use, pedestrian and bicycle-friendly design. Segregation by housing cost is discouraged. New urbanist development, however, has its critics particularly around its universal applicability, and has had to battle market forces and regulatory resistance that favour more conventional approaches to development.[24] These approaches, however, have received wide attention in North America and lip service elsewhere, but are not widespread yet around the world.

In the US, early new urbanist developments

Figure 7 3: Average Built-Up Area Densities, 1990-2000

Source: Angel et al.. 2011.
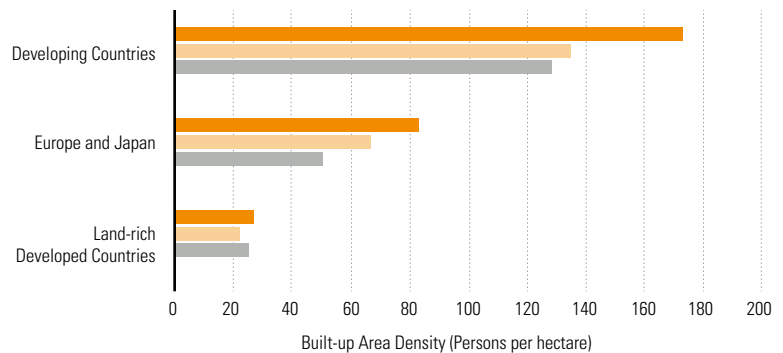
Figure 7.4: Seoul's greenbelt in the Korean Capital Region (Gyeongai Province)

Source: Bergston and Youn, 2006.
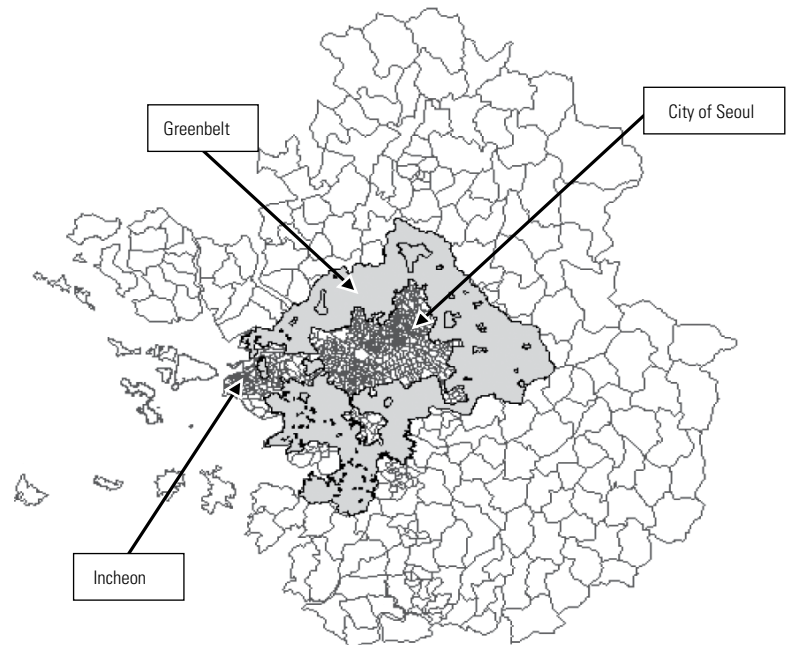
(such as Seaside, Celebration and the Kentlands) have garnered considerable attention.[25] In Canada, government and planners promoted new urbanist development beginning in the mid-1990s.[26] In Montreal, the Ville Saint-Laurent air strip was redeveloped as a new urbanist themed town that is reminiscent of the city's older neighbourhoods. In Calgary, McKenzie Towne opened in the year 2000 on 2,400 acres with a town centre featuring a railway stop, a wide range of housing types, and neighbourhood stores.[27]

Exurban growth has become the norm in many regions, leading to *ruralopolitan* or post-metropolitan development in large areas across Southern and Eastern Asia and Africa

Involvement of area residents is key, and plans have a distinct institutional component, as the intent is to foster a social process which will affect actions by private and civic institutions as well as governments.

In suburban Toronto, the Cornell new urbanist community design features densities twice those of conventional Canadian suburbs, with residents readily opting for smaller in exchange for improved lifestyles and job access.[28]

Dubai (UAE) embraced the "smart" concept in 2002 with the Dubai International Financial Centre master plan which incorporates an integrated transport system. The *Dubai Plan 2021* promotes smart growth through a multi-stakeholder process and six themes: people, society, experience, place, economy and government,[29] but has run against criticism for employing inequitable and unsustainable practices.[30]

While calls for compact, contiguous development dominate the theories of planning and aspirations of many government officials, realities on the ground often push in opposite directions. Exurban growth has become the norm in many regions, leading to *ruralopolitan* or post-metropolitan development in large areas across Southern and Eastern Asia and Africa. The peripheral locations seem attractive to poor households as they can avoid the costs associated with formal and regulated systems of urban land and service delivery.[31] Also another cause of exurban growth leading to *ruralopolitan* development is the blurred rural-urban distinction, manifested in high population density and improved transport conditions, which makes it increasingly possible for urban elements to be accumulated *in situ* in rural areas. This is widespread in China.[32]

Strategic Spatial Planning began in the 1980s as a European tool for long-range planning for territorial development. Influenced by corporate strategic planning, the goals are focused, but drawn from wide-ranging possibilities so that a strategic spatial plan, while spatially organized and driven, may or may not include urban form prescriptions.[33] Economic, social and infrastructure components are usually included. Involvement of area residents is key, and plans have a distinct institutional component, as the intent is to foster a social process which will affect actions by private and civic institutions as well as governments. The broader range of issues represented in strategic and other more recent planning forms ranges across housing, economic development, jobs, education, infrastructure, environment and natural resources as reviewed in the next section.

The widely influential Barcelona model of strategic spatial planning featured compact urban form and urban design set within an economic development context, while setting a framework for local projects driven by pragmatic and market needs.[34] Hong Kong's strategic plan (Box 7.3) and Egypt's *Strategic Urban Planning for Small Cities* also offer useful examples. Egypt, with the support of UN-Habitat, has been preparing strategic spatial plans for small cities whose population is less than 60,000. The project has two main components: first, a participatory process leading to a strategic vision and, second, the enhancement of land management through training local authorities in information management, strategic planning, land regularization, and urban administration. UN-Habitat has supported Egypt in defining new city limits as well as structuring expansion for these cities.[35]

Public space-led urban development seeks to reverse the trends toward inadequate amounts of land devoted to transport, open space, markets, health and infrastructure that are common in lower-income regions. Public lands are often "greener" than surrounding developed properties and adequate amounts of public spaces can play a vital role in climate change adaptation and mitigation, not to mention that low ratios of public land can be detrimental to resilience and exacerbate climate change and urban heat.[38] In recent times, public spaces as an urban commons are increasingly being recognized as "the vibrant, beating hearts of the world's towns and cities."[39] Indeed, accessible, well-designed and managed public spaces are essential for a city's liveability and economy. Its increasing importance is manifested in the adoption of a specific target in the 2030 Agenda for Sustainable Development—*by 2030, provide universal access to safe, inclusive and accessible, green and public spaces, particularly for women and children, older persons and persons*

Box 7.3: The "Hong Kong 2030" strategic plan

Hong Kong's strategic plan, *Hong Kong 2030: Planning and Vision Strategy,* [36] was undertaken in 1998, shortly following reunification with China with a view to providing a long-term framework for land-use, transportation and infrastructure across a relatively small territory. Considerable public consultation took place and the Hong Kong Planning Department conducted various scenario exercises and technical studies.

The plan was released in 2007. The nine-year lapse underscores the fact that this was not just a static analysis of initial conditions leading to stable favoured actions. Instead, the planning process should be seen as stimulating discussion and debate around alternative futures for the city, drawing new actors into the discussions and resulting in frameworks that are embodied in many decision documents and the behaviour protocols of many organizations.[37]

Source: Hong Kong Special Administrative Region Government, 2007; Friedmann. 2004.

with disabilities (Target 11.7, SDGs).

A UN-Habitat survey of selected city centres across the world shows that in developing countries, the amounts of land allocated to streets are far too small: under 20 per cent in Africa, Asia, Latin America against over 25 per cent in Europe, North America and Oceania. Unsurprisingly, the pattern is the same for street connectivity.[40]

Cities like Bogotá (Colombia), Hong Kong and Durban (South Africa) have prioritized public spaces in recent years. From 1998, the Colombian capital launched a conscious effort to increase public spaces, constructing 200 km of bicycle paths and 300 small parks in the first phase (with private sector participation). The San Victorino plaza retrofit is among the more notable conversions. Recent plan components include bus rapid transit system expansion and weekend conversions of streets to pedestrian malls. In Hong Kong, developers are permitted to increase floor area ratio as a *quid pro quo* for creating new pocket parks.

7.3
The New Comprehensiveness and the Challenges of 21st Century Urbanization

Master plans all too often overlooked important policy issues that were necessary to achieve successful outcomes. Newer planning approaches are more multi-sectoral, considering interrelationships among housing, transportation, economic development, education and other policy areas. Critical global concerns such as climate change and gender equality are increasingly among the issues considered in plan making. New ideas pioneered elsewhere are often considered, but these are more likely than in the past to be subject to critical examination before adoption. While these integrated plans are sometimes *comprehensive*—spanning land, transportation, housing, recreation, economic development, public facilities, and environmental considerations—planning

In recent times, public spaces as an urban commons are increasingly being recognized as "the vibrant, beating hearts of the world's towns and cities

responses to these wider issues may be selective or *strategic*. Among the key issues often considered are informal housing, economic development, infrastructure, environmental sustainability and the changing population dynamics. These are discussed below.

Informal housing

Informal housing forms, as discussed in Chapter 3, lie outside legal and regulatory frameworks, but they are a major way that housing is provided for much of the world's population. Beyond housing, the informal economy is an important source of employment, income, and business in many cities. The poor, the middle class and even some wealthy individuals benefit from construction and commerce that skirts formal legal requirements.[41]

Today, the wave of migrants from conflict-ridden countries highlighted in Chapter 1 poses challenges to receiving countries in terms of housing, even on a temporary basis. This has given rise to informal encampments like those outside Calais, France.

Urban planners' typical approach to informal settlements include: eviction, abandonment, regulatory enforcement, resettlement, integration and improvement, and regularization. These often engage issues such as legal rights to property, in the process, challenging our definitions of appropriate boundaries of public versus private interest. More broadly, urban plans affect informal settlements, either deliberately or not. The Philippines Homeless People's Federation, for instance, is keen to improve existing informal settlements through mapping and profiling informal settlements in Muninlupa (with World Bank funding) in an effort to establish a baseline that can inform the city's planning process as well as Manilla's metropolitan Flood Management Master Plan. Of the estimated 400,000 residents involved, 10,000 need relocation. The Socialized Housing Finance Corporation has committed to loan financing of these relocations.[42]

Economic development

Planning should be a major tool to promote full employment and equality, yet all too often, urban plans neglect economic considerations and the educational and social service foundations that make

The amounts of land allocated to streets are far too small: under

20%

in Africa, Asia, Latin America against over 25 per cent in Europe, North America and Oceania

Newer planning approaches are more multi-sectoral, considering interrelationships among housing, transportation, economic development, education and other policy areas

Repair of waste water networks in Sarajevo. Bosnia and Herzegovina.

Source: Almin Zrno / World Bank, CC BY 2.0, https:// creativecommons.org/ licenses/by/2.0/legalcode

economic advancement possible. Quality housing and infrastructure are important to employment and economic development, of course, but so is human capital fostered through education that builds skills and health care that keeps workers on the job. Recent urban plans that integrate such economic development considerations with more traditional planning objectives provide a range of promising models. Economic development planning considerations include: locational analyses that identify and seek to exploit economies of agglomeration and knowledge networks; land planning that identifies, lays infrastructure for, and reserves land suitable for certain industrial and commercial purposes; programs to build the educational readiness and job training of the work force; and *endogenous development* arrangements to support investment in and nurturing of locally-based firms.

Agglomeration economies, as discussed in Chapter 8, are of prime importance as labour pools, resource availability and training resources are matched with industrial recruitment and industrial development efforts. Examples include concentrations of surgical instrument firms in Sialkot (Pakistan), ceramic tiles in Santa Catarina (Brazil), metal working in Kumasi (Ghana), and wine in Cape Town (South Africa). In Mexico, Guadalajara is developing transport and communications infrastructure in an effort to attract more high-technology

Some cities have attempted to expand their economies from within (endogenous development), rather than competing with others for external investors

firms. In Turkey, Gaziantep has undertaken heritage restoration and rehabilitation to revitalize the tourism industry.

Workforce development supports economic development planning. Dubai is investing in higher education in engineering and information technology. Chongqing (China) runs an ambitious programme to train rural migrants for skilled labour.[43] Along the *creative class* line of thinking, cities such as Toronto (Canada) and Austin, Texas (US) have sought to attract highly-skilled migrant workers through improvements in quality of life.[44] In other communities, brain drain has reduced economic potential, sometimes as an unintended consequence of international travel for education.[45]

Some cities have attempted to expand their economies from within (endogenous development), rather than competing with others for external investors. In Tennessee, US, the city of Chattanooga incorporates endogenous development in its multi-faceted economic development-driven city plan prepared in response to loss of manufacturing jobs in the 1980s. The city's six-pronged strategy for revitalization included: integrating economic and community life, focussing on visible and doable projects, building institutional capacity, investing in human capital and employment opportunities, investing in social capital, and planning the infrastructure of the future.[46] In Catia, Venezuela, The Fabricio Ojeda Endogenous Development Nucleus is a government-backed incubator assisting families and small businesses to achieve self-sufficiency, located on a site formerly occupied by a state oil company. Facilities include a school and kindergarten, soup kitchen, cafeteria, cooperatives, drug stores, supermarket, and recreation and health facilities.[47]

Infrastructure

Infrastructure, (including transport networks, water supply, sewerage, electricity and telecommunications) is essential to both economic development and environmental sustainability. Scarce capital and efficiency considerations suggest that infrastructure investments should be tied closely to land planning requirements, but private investors often find it profitable to build outside the planned urban service districts. Such conversions of "green field" land often lead to inefficient extensions of infrastructure as well as informal developments. Strong regulatory systems can prevent such conversions, but are either lacking or poorly enforced in many countries.[48]

> Conversions of "green field" land often lead to inefficient extensions of infrastructure as well as informal developments. Strong regulatory systems can prevent such conversions, but are either lacking or poorly enforced in many countries

In Nigeria's rapidly growing mega city, Lagos, an inadequate and poorly maintained road network causes excessive commute times and severe congestion. Built under the government's 2006 *Strategic Transport Master Plan* with broad stakeholder engagement, a bus rapid transit "BRT-lite" system has cut waiting times from 45 to 10 minutes, reducing exposure to pollutants and improving quality of life. The system carries 10 per cent of all trips to Lagos Island.[49]

Singapore has no groundwater and limited potential for surface water retention, and is largely supplied by Malaysia at prices that are expected to escalate over time. The *Sustainable Singapore Blueprint* set the goal of reducing domestic water use from 154 litres per person in 2009 to 140 in 2030, while also developing increased domestic supplies through desalination and rainwater collection. Conservation efforts are encouraged from citizens, schools and businesses, with an annual award for best contribution to the cause.[50]

Environmental sustainability

A sustainable environment must provide necessary resources and a healthy basis for life to its inhabitants in perpetuity. These broad goals have been divided into green and brown agendas, and linking the two often presents a challenge for cities. Ensuring sufficient supplies of clean natural resources as well as managing the disposal of the various waste products of urban life has been an urban challenge throughout time. In the past two decades, for instance, urban residents without adequate sanitation rose from 215 million in 1990 to 756 million in 2012.[51]

Most studies point to an unsustainable environmental trends in recent decades— the Millennium Ecosystem Assessment, for instance, highlights an increase in species extinction rate, a dramatic upturn in atmospheric carbon dioxide since 1950, among other trends.[52] Environmental sustainability is further challenged by vulnerability to disasters, incidence of which has been increasing. Estimates show that the global material cost of disasters between 1996 and 2005 amounted to US$667 billion.[53] Coastal regions below 10m elevation— which are highly vulnerable to cyclones, floods, and tsunamis— are home to 10 per cent of the world's population.[54]

Urban planning is a powerful tool for improved environmental sustainability and disaster resilience (see Chapter 5). Preventing development of disaster-vulnerable and environmentally-sensitive lands reduces both risks and resource depletion. Urban form that facilitates shorter commutes significantly reduces carbon footprint. Programming of water and waste infrastructure increases access to potable water and reduces environmental as well as health impacts of human waste. Appropriate building codes and protection of critical infrastructure reduces morbidity, mortality and property damage in disasters.

In Norway, 13 cities are reducing emissions under the Cities of the Future Programme, enacted in 2008. Plans now favour compact urban forms, walking, and cycling. Vulnerability assessments have identified areas at risk of sea level rise. Additionally, action plans tie the cities' goals to sector-based projects as well as future land patterns.[55] In the Philippines, Sorsogon's Strategy for Climate Change Resilience informed key development plans and has spawned demonstration projects for community resilience to climate change, the projects include: improvement of housing and basic infrastructure; livelihoods; efficient energy use and reduction of emissions; and disaster risk reduction.

Changing population dynamics

As the product of participatory processes intended to build and reflect popular consensus, urban plans should reflect the populations they serve. This is more challenging when those populations are themselves changing or fragmented. Demographic shifts, including

> Urban planning is a powerful tool for improved environmental sustainability and disaster resilience

migration and changes to fertility and mortality rates (as discussed in Chapter 1) alter the planning landscape, as do political changes, including shifts in borders or legal systems of rights and responsibilities. Many such changes are underway around the world and more can be expected.

Rising migration has led to increased multicultural sharing of cities, a changing sense of place, and changing roles and expectations of women in societies represent another dimension of differing perspective. When different groups have different expectations for their shared communities, dissent and conflict can emerge. Conflicts concerning building types, religious buildings, burials, and ritual animal slaughter are examples of concerns that urban planners may confront. Where divisions reflect past open conflict, tensions may be greater still. In such situations, urban planners can be vital to healing through the joint problem-solving that is necessary to rebuild destroyed urban districts and infrastructure, but also to redefine patterns of peaceful co-existence.[56] Soweto Township in South Africa was repeatedly the scene of violence between police and civilians during the apartheid era and was characterized by relatively high levels of deprivation in the past decades. In 2001, the municipality of Johannesburg launched an Integrated Development Planning (IDP) process which included plans to improve infrastructure, access and safety in Soweto. Three plans focused on public spaces, streets, and transport, stimulate economic revitalization and reducing crime. US$108 million was spent on the water supply system. A new public transport facility now serves higher density residences, a theatre was built as well.[57]

As mentioned earlier, urban planning has often given insufficient attention to the needs of women, and the specific relationship to space deriving from family care and community roles.[58] Today, references to women's (and youth's) needs pervade most SDGs. In Germany, the cities of Berlin, Ulm and Hanover address the specific needs of women and girls in the planning guidelines— referring, among other issues, to different outdoor playground design and public transport policies.[59]

Urban planners can be vital to healing through the joint problem-solving that is necessary to rebuild destroyed urban districts and infrastructure, but also to redefine patterns of peaceful co-existence

Consistency among the different plans affecting the same territory is important

7.4
Jurisdictional Integration: Planning Across Geographic Scales, and Political Boundaries

Planning systems reflect and respond to the governance contexts within which they operate, whether highly centralized or broadly decentralized. The roles of specific plans at different geographic levels will therefore vary across nations, but consistency among the different plans affecting the same territory is important. Integration between sectoral plans is also important, so that highway, transit and land use plans, for example, reinforce rather than conflict with each other.

Within a city, neighbourhood, district or corridor, plans can address resident-driven concerns in ways not possible at higher planning tiers. Community engagement can occur at a high level, building democratic transparency and legitimacy, with better awareness amongst all, landowners included— enhancing readiness for change. At city and municipal levels, plans can be mainstreamed into the administrative, fiscal and operational functions of the local government. Land use plans can direct the land market. Sectoral plans in transport, housing, utilities, and other sectors can be tied to the goals and milestones of comprehensive or strategic spatial plans.

At the city-region and metropolitan level, subnational plans can coordinate economic development efforts and large infrastructure in order to encourage regional cooperation and complementarities. Metropolitan planning is vital to coordinated natural resource and infrastructure decision-making, but often run into power games; political resistance is strong in many countries municipal officials resist ceding authority to regional counterparts whilst national officials resist creating strong contenders so as to maintain political bases.

At the national level, plans can set regional guidelines as well as direct national expenditures with

respect to infrastructure, influencing urban corridors and river basins. At the supranational and transboundary level, plans can promote cooperation among neighbouring countries, manage large-scale environmental resources, and ensure sensible alignment of roads, rail lines and other shared facilities, such as in the Greater Mekong Subregion (GMS).[60] The subregion identified transport and economic corridors that are expected to improve trade connectivity within the Greater Mekong Area as well as with the rest of the world.[61]

Within any given scale, congruency of plans among sectors is vital to successful planning outcomes. Line service delivery agencies are not likely to follow national or urban plans that conflict with their own agency plans, or that are the product of decision processes with which they had no involvement.

7.5
Regional Variations

Demographic, economic, social and environmental circumstances vary widely from nation to nation, in part reflecting the development status of the economy. Plans will necessarily reflect these variations. In the past, there has been a tendency to transfer planning ideas from industrial countries to other countries without full consideration of context, resources and culture. The principle is now broadly understood that local circumstances do matter and that planning interventions should be critically assessed in light of national considerations.

Developed countries are becoming more multi-cultural as reduced fertility in their native populations is supplemented by international migration from other world regions. Although these countries comprise the most egalitarian in the world, socio-spatial inequality is on the rise in many countries, and labour-market changes are causing significant dislocation. High levels of resource consumption are unsustainable in the global context, with uneven responses across countries.[62] Planning systems in developed countries are generally mature and to some extent there is reluctance to

> The principle is now broadly understood that local circumstances do matter and that planning interventions should be critically assessed in light of national considerations

look abroad for new ideas. At the same time, new international alignments and pressures to find solutions are leading to importation of new approaches on many pressing issues such as climate change, sustainability, and sprawl. Often, these importations are driven by stakeholder groups who learn from their counterparts in other countries.

Transitional countries are experiencing slow or reduced population growth; many with shrinking cities and aging populations. Urban development is often due to international investment and is either suburban or upmarket. The environmental legacy of communism in these countries is compounded by expanding private car ownership. Recently decentralized governments often struggle to find resources necessary to fulfil their responsibilities.[63] Planning in transitional countries is diverse, reflecting the divergent paths of economy and politics chosen. In most cases, economic and physical planning are separated institutionally, making the kinds of integrated planning discussed in this chapter difficult to achieve.

Developing countries are experiencing problems of differing scales and nature.[64] Urbanization is advancing at very high levels, predominantly on the urban fringe. Levels of income inequality are staggering. Youth populations are greater than elsewhere in the world. Large portions of the populations live in informal settlements. Most economies are heavily resource dependent. Government structures often are poorly clarified, poorly resourced, often highly hierarchical and centralized, but with low ability to enforce directives and may be highly-dependent on individual personalities. Civil society can be fractious; tribal, ethnic or harbour other forms of divisions which may overshadow substantive policy debates.

Within the developing countries, there are substantial differences in planning legislation, planning capacity and planning use. Latin America is much further along the demographic transition with resultant much lower current rates of urbanization and has many world-leading planning innovations. East Asia has the fastest rates of urbanization, with wide variation in planning success. Much of Sub-Saharan Africa, with quite rapid urbanization, has relied heavily on outside planners and has a very poor history of plan implementation. Often, there are instances of international cooperation amongst countries in the developing region. Similarities in contexts make the so-called "South-South" cooperation more valuable than "North-South" collaboration.

> Many developing countries suffer from a conflict of rationalities between the techno-managerial and market orientations of national leadership and international aid agencies on one side and the informal and tribal cultures of much of the population on the other

Many developing countries suffer from a *conflict of rationalities* between the techno-managerial and market orientations of national leadership and international aid agencies on one side and the informal and tribal cultures of much of the population on the other.[65] In the Pacific countries, for instance, reforms on urban planning and management are defined by a recurring element of balancing between traditional and modern governance systems, and often there is a challenge of policing tensions emanating from implementing the components of formal urban planning and management systems versus indigenous traditions.[66] Also, a recent phenomenon in Sub-Saharan Africa is the numerous fanciful city plans that propose fiscally unaffordable and environmentally unsustainable futures, modelled after cities in richer parts of the world.[67]

Is the developing world experiencing the tail end of the era of master planning, reflecting ideologies and fashions imposed from abroad, or do the many participatory, inclusive, sustainability-oriented plans described in this chapter and other similar works reflect a sea change in the practice of planning? Has the reinvention of urban planning envisioned in Vancouver in 1996 come about? It appears that the answers to these questions are highly contextual. Some places and some planning exercises remain mired in the logic and the global power pressures of modernist planning. Other places and other plans have moved on and are now in the midst of the hard work of defining what the right planning is for specific contexts in specific nations. The discussions of the Habitat III conference ought to move urban planning many steps forward in that hard work.

More than half the world's planning schools did not exist 25 years ago. National and international networks of planning professionals and planning educators are in their formative stages and growing rapidly

7.6
Planning Capacity

Today, a number of challenges lie in the path of successful urban planning. The resources (human, institutional, data and financial) required for planning are substantial. Elected officials and administrative leaders responsible for planning need to be familiar with planning ideas and objectives in order to appropriately direct planning professionals. Administrative traditions may not support evidence-based or citizenry-engaged decision making. Information resources may not be available to provide the evidence necessary. Time pressures may demand answers more quickly than participatory, inclusive, fact-based planning can produce. Formal planning education is expensive. Some educational institutions may not be familiar with current best practices or may be ill-equipped to educate students who will work in world regions other than their own. Yet, there are many excellent examples of agencies, cities and institutions that overcome these challenges through intentional self-reflection, development as well as partnerships.

Planning capacity varies greatly across the world. While the UK is estimated to have 38 accredited planners per 100,000 population and the US, 13, the number in the developing countries is low; India, for instance, had 0.23 planners per 100,000 in 2011 whilst Burkina Faso had 0.08 (see Table 7.2). In some regions, professionalization of planning is making strides forward, including Africa where the continental African Planning Association was officially founded in 2006 and the Caribbean, where a regional professional planning association was formed in 2011.

Planning education is in the midst of transition itself. [68] More than half the world's planning schools

Table 7. 2: Ratio of registered planners to population

Source: African Planning Association and UN-Habitat, 2013.

	Population (million) 2011	No of accredited planners	No of planners per 100,000	Year of Estimate
African Countries				
Burkina Faso*	16.97	14	0.08	2011
Ghana	24.97	150	0.6	2011
Nigeria*	162.50	2,333	1.44	2011
Mali*	15.84	50	0.32	2011
Kenya*	41.61	194	0.47	2011
Uganda	34.51	90	0.26	2011
South Africa*	50.80	1,690	3.33	2011
Malawi	15.30	30	0.2	2011
Mauritius	1.28	27	2.1	2011
Tanzania*	46.20	158	0.34	2011
Zambia	13.40	60	0.45	2011
Zimbabwe	12.70	262	2.06	2011
Other countries				
United Kingdom	61.13	23,000	37.63	
United States	304.06	38,830	12.77	2010
Australia	18.97	4,452	23.47	2009/10
Pakistan	173.59	755	0.43	2010
India	1.210.19	2,800	0.23	2011

*Countries that regulate the registration of planning at a national level.

did not exist 25 years ago. National and international networks of planning professionals and planning educators are in their formative stages and growing rapidly. Still, many planning schools remain focused on land use and urban design, overlooking social equity, citizen engagement tools, and the specific interests of women, youth, and indigenous peoples. The open access movement and publisher supported programs now disseminate academic research to previously unreached areas. UN and other international agencies' training programmes are acquainting municipal and national officials with planning principles and methods in numbers never before achieved. UN-Habitat, for instance, has in recent years been conducting a series of workshops —Rapid Integrated Urban Planning Studios (RIUPS) and Urban Planning for City Leaders (UPCL). The former provides planning officials in cities with innovative tools and approaches for planning, whilst the latter trains city leaders to support urban planning good practice. In 2014, UN-Habitat also launched the Global Urban Lectures— a free resource of video lectures that are accessible online.

In many countries, information to support evidence-based decision making is in short supply. It may never have been collected, databases being maintained in ways that do not facilitate effective use, or access (and transparency) may be denied. For instance, of an estimated six billion land parcels in the world, perhaps only 1.5 billion are formally registered.[69] Moreover, data may not be coded to facilitate analysis by sex, age, race, and other demographic categories.

Too often, regulatory systems necessary to smooth, functioning plan implementation are not in place. The Habitat Agenda urged countries to "re-evaluate and, if necessary, periodically adjust planning and budgeting regulatory frameworks." While there has been considerable regulatory change in some regions, notably Latin America, the pace of change has been slow in Africa and South Asia. Land tenure policies, in particular, are often obstacles to achieving equitable, efficient and environmentally sustainable urban choices.

Just as reinvented urban planning is partially and unevenly developed, so is planning capacity far from optimal. To meet Target 11.3 of the SDGs,[70] the overall situation calls for professional planners, government administrators and planning academics to work more closely together — for cross-learning, better data and more research to identify the most effective planning strategies and the most effective urban solutions.

7.7
Urban Planning and the New Urban Agenda

The ability of urban planning as a tool to promote adequate shelter for all and sustainable human settlements that was envisioned 20 years ago in Istanbul has unfortunately worked in few places. It is true that some cities and countries are practising participatory, inclusive, sustainability-oriented urban planning. In these places, planning has become an on-going process that brings stakeholders together from government, industry and civil society to investigate, to debate and imagine futures that will advance the needs of the full range of residents in their communities. In these places, *the city that plans* has become a reality.

Elsewhere, modernist master planning refuses to die. There is no shortage of places where planning is practiced as a vanity for national or municipal leadership; where imported ideas of "what will lead to a good city" are recited by planners from their textbooks or in response to the directives of their political leaders; where visions of urban form and urban design are thought to be sufficient to charting the future; where implementation is an afterthought; and where the objective is *the planned city*.

There are no simple universal answers to *cities that plan,* as urbanization trajectories and urban challenges are not uniform across the world. Therefore, as the United Nations embarks on charting the New Urban Agenda, it is important that the discussions recognize the diverse contexts as well as issues and lessons emerging from them. Often, governance systems have not built the widespread understanding of how to analyse, debate and build consensus that will endure through uncertain futures. Often, the data to support good decisions has never been collected or assembled. Often, the stakeholders have not matured to the point where they can work with adversaries through to solutions. Often, rights and responsibilities under national law do not treat all residents fairly. Often, women, youth, the aged, and indig-

Too often, regulatory systems necessary to smooth, functioning plan implementation are not in place

Just as reinvented urban planning is partially and unevenly developed, so is planning capacity far from optimal

There are no simple universal answers to cities that plan, as urbanization trajectories and urban challenges are not uniform across the world

enous peoples are not given access to planning resources and do not fare well in the outcomes of planning decisions. Often, market pressures overwhelm public interest sentiment and lead to negative externalities such as sprawl, high levels of inequality, and traffic congestion. Often, ideas about physical design that worked in one culture are adopted in another without careful consideration of implications. Often, sectoral plans that make little sense when adopted in the absence of broader comprehensive vision are put in place anyway.

Still, in many communities —including examples cited in this chapter and in other UN-Habitat planning guidance documents— planning decisions are being made and plans implemented that direct the world effectively toward the New Urban Agenda. Urban plans are promoting compact cities, promoting smart growth, addressing resilience and fighting sprawl. Strategic spatial plans are drawing together functional agencies across the spectrum of government. Plans are charting ways to regularize and improve services in slums, create jobs and prepare workers to work in them, build affordable infrastructure to provide essential services to more of the population, ensure adequate and good quality public spaces, ensure resource sustainability, limit pollution, reduce carbon footprint, and build resilience against disasters. Planning processes are engaging with ethnic minorities, indigenous peoples, women and men, at neighbourhood, city, regional, national and international levels.

To advance the New Urban Agenda, cities and countries have to make progress a must in the following areas: planning capacity, resilience, regulatory regimes, social exclusion, informality as well as integration of economic development in planning

At the same time, to advance the New Urban Agenda, cities and countries have to make progress a must in the following areas: planning capacity, resilience, regulatory regimes, social exclusion, informality as well as integration of economic development in planning. *The city that plans* needs to design clear, strategic and operational interventions and define mechanisms of implementation, as indicated in Chapter 10.

The successful implementation of the New Urban Agenda requires adequate numbers of trained planners. As highlighted in the previous section, the current numbers are low and many planning educational institutions lack the resources to prepare the next generation of practitioners effectively. Schools that meaningfully draw together the broad interdisciplinary knowledge needed are rare. Professional networks lack sufficient resources to adequately network and share across borders. In instances where there is sharing, there is no clear understanding of which concepts and practices cross borders effectively and which should be left where they originate.

Regulatory regimes often constrain what is possible from planning besides posing obstacles to builders, developers and others. In the same vein, separation of planning from budgeting frequently stands in the way of effective plan implementation. The vagaries of politics (including political violence and resultant refugee migration) too may render planning forecasts irrelevant.

Disruptions in urban systems resulting from disasters, environmental hazards, epidemics, war, civic strife, and climate change are widespread causes of planning failure and are predicted to become more prevalent. To protect against such natural and human-caused stresses, plans will need to anticipate uncertainty and risk, test alternatives against variations, and seek to adopt strategies that respond well to departures from forecasts.

Forces of social exclusion and growing inequalities (see Chapter 4) undermine the adoption of current inclusionary planning processes in many nations. Political commitment to inclusion is vital for planning success, as is better understanding of the tools in participatory planning. The cultural diversity often found in cities is itself a tool toward building awareness of the need for inclusion, yet some of the starkest instances of exclusion are found in cities. Participatory governance is the starting point for inclusion, but open acknowledgement of inequities, reconsideration of legal and governance barriers to inclusion, and access to information and accountability of planning systems are all important.

Informality presents a challenge to planning the New Urban Agenda because of its inherently non-planned nature. Informal economic activity can constitute as much as more than half of the economy in some countries, sometimes as much as four-fifths of employment. Responses may involve strengthening the voices of informal workers, formalization of the informal sector, and a variety of as yet experimental practices to expand access to basic services.

Integration of economic development, especially job growth into urban plans is vital if urbanization is to be sustainable. Fundamentally, population growth, land use and job growth must be in harmony if future cities are to be viable. Realistic programs of economic development must consider the natural advantages and disadvantages of given urban locations, capital formation, public-private cooperation, as well as work-force readiness through education and job training, and availability of infrastructure

for business and of basic services for workers.

In conclusion, it has been suggested that planning ideas that ought to be aimed for are those that survive deliberation among those in the planning community and become *contingent universals.[71]* Alternatively, there is the call for a transnational framework in which ideas are the product of international discourse, but do not naturally fit in any one place.[72] Others are deeply distrustful of any kind of universals, preferring to place their faith in the crucible of informed debate among stakeholders in a given place, aided perhaps by examples that have worked elsewhere.[73] Whichever approach is preferred, the growing catalogue of examples of successful reinvented urban planning provides much ammunition for the way forward, determining some of the constitutive elements of what can be the New Urban Agenda.

Notes

1. United Nations, 1996.
2. Farmer et al, 2006.
3. Irazabal, 2004.
4. Taylor, 1998.
5. Raibaud, 2015; UN-Habitat, 2012g ; Spain, 2001; UN-Habitat, 2012h ; Falú, 2014.
6. UN-Habitat defines urban governance as follows: *'The sum of the many ways individuals and institutions, public and private, plan and manage the common affairs of the city. It is a continuing process through which conflicting or diverse interests may be accommodated and cooperative action can be taken. It includes formal institutions as well as informal arrangements and the social capital of citizens.'* (UN-Habitat, 2002b)
7. El-Shaks, 1997.
8. UN-Habitat and CAF,2014; World Bank, 2013d.
9. Friendly, 2013.
10. Majale, 2009.
11. Allou. 2015.
12. Brodzinsky, 2014; Velasquez and Aldon, 2015.
13. Friedmann. 2004.
14. Litman, 2015.
15. Libertun De Duren, and Compeán, 2015.
16. Angel et al.. 2011.
17. World Bank, 2015c.
18. Pendall, et al.,2002.
19. Kuhn, 2003.
20. Bengston, and Youn,2006.
21. McDougall, 2007; Gleeson and Spiller, 2012.
22. Santos, 2011.
23. Ericsson, 2012.
24. Brewer and Grant , 2015.
25. Grant, 2006.
26. The Ontario provincial government held a design contest to show its potential in 1995. The Federation of Canadian Municipalities and the Canadian Institute of Planners both argued for new urbanist ideas.
27. Grant, 2002.
28. Skaburskis. 2006.
29. Government of Dubai, (undated).
30. Bani-Hashim et al, 2010.
31. Watson, 2009.
32. Zhu,2014.
33. Albrechts, 2001: Salet and Faludi, 2000: Albrechts et al, 2003.
34. Marshall, 2000.
35. UN-Habitat, 2010e.
36. Hong Kong Special Administrative Region Government, 2007.
37. Friedmann. 2004.
38. Project for Public Spaces Inc. and UN-Habitat , 2012f.
39. United Nations, 2015e; United Nations, 2015k; United Nations, 2015i.
40. UN-Habitat, 2013d.
41. Roy, 2005.
42. Shack/Slum Dwellers International, 2014.
43. Liu and Wang, 2011.
44. Florida, 2002.
45. Widmer et al, 2015.
46. Elliott, 2015.
47. Sánchez and Núñez (trans.), 2005.
48. UN-Habitat. 2013b.
49. UN-Habitat. 2012f .
50. UN-Habitat. 2012f .
51. WHO and UNICEF. 2014.
52. Millennium Ecosystem Assessment. 2005.
53. IGE. 2007.
54. McGranahan et al, 2007.
55. Moe, 2015.
56. Augustinus and Barry, 2004.; Bollens. 2011.
57. UN-Habitat. 2013c.
58. UN-Habitat, 2012g ; Spain, 2001; UN-Habitat, 2012h ; Falú, 2014.
59. UN Habitat,2009
60. The Greater Mekong Subregion (GMS) is an economic area bound together by the Mekong River covers Cambodia, People's Republic of China, Lao People's Democratic Republic, Myanmar, Thailand, and Viet Nam.
61. ADB, 2015.
62. UN-Habitat. 2009.
63. UN-Habitat. 2009.
64. UN-Habitat. 2009.
65. Watson, 2009.
66. ADB. 2012.
67. Watson, 2013.
68. UN-Habitat. 2009.
69. McLaren, 2011.
70. *"By 2030 enhance inclusive and sustainable urbanization and capacities for participatory, integrated and sustainable human settlement planning and management in all countries ."* (Target 11.3, SDGs).
71. Healey, 2011.
72. Miraftab, 2011.
73. Roy, 2011.

08

The Changing Dynamics of Urban Economies

QUICK FACTS

1 Megacities and metropolitan regions have benefited more from globalization than secondary cities with more than 80 per cent of global GDP being generated in cities.

2 Inadequate urban infrastructure and services hamper economic growth and activities that depend on the optimal allocation of resources.

3 The benefits of agglomeration tend to outweigh the drawbacks, providing the resources needed for proper management of any diseconomies.

4 Formal employment has not grown in tandem with the rapid urbanization of cities thus exacerbating urban social and economic inequality.

POLICY POINTS

1 The link between planning and economic development policies for cities must be integrated across all levels of government.

2 Strengthening city finances through public-private partnerships, land taxes and user charges and the development of more equitable fiscal arrangements between national and city governments is essential for sustainable development.

3 Providing a legal framework for the decentralization of responsibilities is essential to improving city governance structures.

4 Linking urban policy to economic development is critical to improving the competitiveness and performance of local economies.
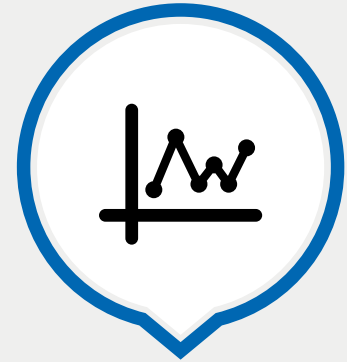
Rapid changes in cities' economies since Habitat II include:

> global economic conditions,

> ageing and (mainly in developing countries) rapidly growing populations,

> technological innovations particularly in transport,

> communications and data processing,

> sharper policy focus on environmental sustainability and climate change.

Various cities in developing countries, the **informal economy** is the main area of **production, employment** and **income generation.** It ranges from

25-40%

of GDP in developing economies in Asia and Africa, with the share in non-agricultural employment between

20-80%

Between

1990 •······· 2013

The United Nations Human Development Index increased globally by almost **18%**

37% **Reduction** in the global population of people living in extreme poverty from **1,959 million** in 1990 to around **900 million** in 2012.

10% **Estimated** decline to **702 million** expected in 2015, largely due to massive efforts by China and India.

Urban populations in **low-income** countries are projected almost to triple, increasing by over **500 million**

Property tax, as an efficient source of local revenues, represents less than **3-4%** of local revenues in most developing countries, compared with **40-50%** in cities in Australia, Canada, France, UK and US.

Lessons learned from technological change in cities, e.g Kenya;

1 > can **leapfrog** conventional barriers to deliver what vast majorities of consumers need and at affordable costs,

2 > **not confined** to higher-income, advanced economies,

3 > **not dependent** on foreign direct investment,

4 > it is for national and municipal authorities to **provide well-adapted** legal, regulatory and tax environments, together with skills training and proper infrastructure if innovation is to be nurtured locally, instead of moving to more favourable locations.

New forms of partnership, such as proposed by Asia-Pacific Economic Cooperation (APEC), are necessary to link the economic systems of cities, to encourage informal trading relationships, cross-industry and cross-cluster collaboration, innovation- and knowledge-sharing, as well as identification of new opportunities for linkages among cities. Mobilizing domestic capital has a crucial role to play.

Urban economies are primarily people-centred. Individual capital in all its forms — social, physical, technical, cultural, scientific, etc.— converges and combines in a variety of innovative ways and this productivity benefits all, spreading prosperity beyond city limits. This perennial dynamics is for cities to nurture through adequate healthcare, education, services, environments and institutions. Now, as governments and civil society prepare for the Habitat III conference, the "emerging futures" of many cities around the world seem elusive for their inhabitants due to persistent poverty and increased inequality and the emergence of new threats such as climate change and insecurity as highlighted in the preceding chapters.

Cities have been rapidly changing since Habitat II, so are their economies. These changes include: global economic conditions; ageing and (mainly in developing countries) rapidly growing populations; technological innovations particularly in transport, communications and data processing; as well as sharper policy focus on environmental sustainability and climate change.

Whereas one one of the Millenium Development Goals targeted the slums (MDG 7, Target 11), the innovative feature of their "Sustainable" successors is SDG 11, "Make cities and human settlements inclusive, safe, resilient and sustainable."[1] It will be for participants in the Habitat III conference to identify a number of specific indicators to measure progress toward this goal between now and 2030.

Focusing on the vital issue of cities' "emerging futures" does not mean that local specificities go overlooked. Every city has its own environment. The 2008 world financial crisis burst the speculative urban housing bubbles in Madrid and Dublin whilst the construction boom continued unabated in Mumbai, immune from external shocks and providing jobs to thousands of rural young people.[2] Today, massive multi-billion dollar urban re-development projects are transforming the economies and forms of inner cities from Singapore to London, from Buenos Aires to Vancouver to Guayaquil.

Cities have always had to face issues of change.[3] The dynamics of change are now increasingly determined by the interlinked nature of the global economy and markets, capital flows and information networks. Transitioning to new opportunities is creating problems and opportunities for urban governance, the business sector, individuals and communities. Inflexibility and inefficiency are ruthlessly exposed by poverty, slums and the predominance of the informal economy.

> **Focusing on the vital issue of cities' "emerging futures" does not mean that local specificities go overlooked**

> **The dynamics of change are now increasingly determined by the interlinked nature of the global economy and markets, capital flows and information networks**

8.1
Urban Economies, Prosperity and Competitiveness

Although urban areas around the world are becoming more and more interrelated, cities have their local dynamics and specificities—which include social structures, way of life, production, the environment and infrastructure.[4] As they interact, these dynamics transform one another and it is upon the socio-political institutions to make sure that they do so in a beneficial way for all involved. Even "way of life" can destroy urban and national prosperity; weak, corrupt autocracies have historically been seen to support themselves through "suppression of entrepreneurship" with "arbitrary taxation, confiscations and favouritism."[5] These basic realities are well recognized in the 2030 Agenda for Sustainable Development through calls for "people-centred economies," "wealth sharing," "strong economic foundations," "strengthening productive capacities" and "structural transformation." Productivity results from economies of agglomeration and scale in a concentrated area, which is increasingly interlinked to the regional, national and international economies. The efficiency, productivity and liveability of cities are a foundation of society.

As noted in previous chapters, cities produce a significant share of all goods and services in the world. Urban-based markets facilitate trade and reallocation of resources (labour, capital, land) from less to more productive sectors, industries, and occupations. Efficient resource allocation depends on complex linkages and information flows among consumers and producers involving inputs, intermediate and final products. These linkages and flows are dependent on the quality, reliability and costs of a city's infrastructure and services, the legal and regulatory environment, educational standards and entrepreneurial spirits.

Ideally, urban policies and infrastructures keep in step with, if not anticipate on, growing populations—although lead times in the planning, financing and con-

Traders at work along the tracks in Kibera, Nairobi, Kenya.
Source: John Wollwerth / Shutterstock.com

struction timeframes of infrastructure and service provision can be protracted, and the same holds with reforms in education and health services. The reality has more to do with "creative chaos" as a result of poor planning, mismanagement and inadequate municipal finances including tax collection.

Informality is an instance of the "creative chaos" which typically comes with spontaneous urbanization, as cities fail to provide for newcomers, leaving them to their own devices for shelter and livelihoods.[6] Most of these migrants only have their poverty and low skills to bring to town; this disqualifies them from access to the formal, tax-paying business sphere, whereas the industrial and public sectors are too poorly developed to provide regular employment. The alternatives are self-employment, casual work and petty trading along with small-scale, low-productivity, informal enterprises devoid of any legal, social or labour protection. The conditions are especially difficult for youth and women, and there is a high risk of child labour exploitation.

Estimates of the overall size of the informal economy range from 25 to 40 per cent of GDP in developing economies in Asia and Africa, with the share in non-agricultural employment between 20 and 80 per cent.[7] In many cities in developing countries, the informal economy is the main area of production, employment and

income generation. Moreover, informal settlements with thriving and diverse activities play vital roles, providing a wide range of labour, goods and services to cities. For instance, Kibera — one of the largest slums and informal economies in Africa— plays a vital role in the economy of Nairobi. The vibrant and dynamic economy Kibera is illustrated by the following observation: "*It is a thriving economic machine. Residents provide most of the goods and services. Tailors are hunched over pedal-powered sewing machines. Accountants and lawyers share trestle tables in open-air offices. Carpenters carve frames for double beds along a railway line.*"[8]

In addition to labour market and welfare issues, the informal economy poses a major policy challenge to urban governance in financing and providing urban infrastructure and services.

8.2
Urban Economic Growth and the New Economic Geography

The ongoing spatial concentration of people in urban areas has spawned a new economic geography— as illustrated by Figure 1.2 and Figure 1.3 in Chapter 1—which Habitat II could not fully anticipate. The dynamics of urban economics feeds on higher productivity and returns on investment, together with a

Informality is an instance of the "creative chaos" which typically comes with spontaneous urbanization, as cities fail to provide for newcomers, leaving them to their own devices for shelter and livelihoods

Box 8.1: The Delhi–Mumbai Industrial Corridor (DMIC)

Following the slowdown induced by the global financial crisis, the Indian economy responded strongly to domestic fiscal and monetary stimuli and achieved a growth rate of 9.3 per cent in 2010–2011; but due to both external and domestic factors, the economy decelerated, growing at an estimated 5 per cent in 2012–2013. To address this downturn, one of India's strategic initiatives was to transform the Delhi-Mumbai highway into an industrial corridor.

The Delhi-Mumbai Industrial Corridor (DMIC) involves industry and infrastructure in a 150-200 km band on either side of a 1,500 km dedicated railway freight line (DMIC, 2010). Approximately 180 million people, or 14 per cent of the population of India, will live there. The idea is to developian industrial zone, with eco-cities spanning across six States, together with industrial clusters and rail, road, sea and air connectivity. Plans include 24 "market-driven" cities comprising regions with special investment regimes and industrial zones. The scheme places a whole new meaning on the scope and scale of urban economic corridors.

Source: Delhi Mumbai Industrial Corridor (DMIC),2010.

rising middle class. On the whole, the benefits of agglomeration have tended to outweigh the drawbacks, providing the resources needed for proper management of any diseconomies (such as competitition for resources, including space, driving costs up).

Urban areas account for as much as 55 per cent of national GDP in low-income countries, 73 per cent in middle-income countries, and 85 per cent in high-income countries. Indeed, it is anticipated that 80 per cent of future economic growth will be in urban areas.[9] However, Specific urban GDP data is hard to come by and interpretation requires caution. This is because estimates can vary significantly across research organizations for lack of generally accepted international accounting standards; if anything, they provide broad directions rather than precise magnitudes.

The McKinsey Global Institute (MGI) has compiled a database of the world's top 600 cities by contribution to total GDP growth until 2025.[10] Like the World Bank, MGI estimates that more than 80 per cent of global GDP is generated in cities. Of the 600 cities, the 100 largest generated an estimated 38 per cent of global GDP in 2007, or around US$21 trillion. The remaining 500 s generated an estimated US$30 trillion.

Some general conclusions can be drawn from MGI and other data about urban economic dynamics since Habitat II:

◗ Mega- and larger cities are playing increasingly dominant roles as the drivers of economic wealth and employment. The world's economically strongest urban centres host 25 per cent of the global population and produce 60 per cent of global GDP.

◗ There is a clear trend of concentration in megacities, urban corridors and urban regions.

◗ Due to higher productivity and better infrastructure, rankings by GDP are dominated by developed country cities and will remain so for the foreseeable future.

◗ City GDPs and growth rates differ significantly across regions, and are highest in developing countries, mainly in the Asia-Pacific region.

◗ The fastest overall urban economic growth is found in mid-sized cities (with populations between two and five million).

◗ Economic growth continues in megacities although the pace is slowing down.

◗ In developing countries, seaports or other trade hubs are associated with relatively higher per capita GDP. In developed countries, extensive nationwide transport infrastructure significantly dilutes this effect.

◗ In some countries, the economy of a single city can account for a significant share of national wealth creation. For example, Seoul, Budapest and Brussels respectively account for more than 45 per cent of the GDPs of the Republic of Korea, Hungary and Belgium. In other countries, a group of cities contribute a significant share of GDP–For example, in South Africa, six major cities collectively account for 55 per cent of GDP.[11]

◗ As cities tend to concentrate more of productive resources, economic inequality with the rest of the country tends to become steeper. In MGI data, the most significant differences are found in Russia, China and Indonesia where urban GDP per capita is 2.5 times or more of the national equivalent.

8.3

Urban Development: An Economic Transformation

To date, the growth of cities and their economies has been positive in terms of aggregate income, though with different effects across locations, industries and people. Overall, productivity has improved and resulted in improved standards of living. Between 1990 and 2013, the United Nations Human Development Index increased globally by almost 18 per cent.[12] A significant, encouraging reduction in the number of people living in extreme poverty (i.e. on less than US$1.90 a day (2011 PPP)) has also been recorded: from 1,959 million (37 per cent of the global population) in 1990 to around 900 million in 2012, with a decline to 702 million (below 10 per cent of the global population) expected in 2015,[13] largely due to massive efforts by China and India.

The degrees of urbanization and economic development are closely interrelated. High-income countries and more developed regions have largely completed their urban transitions. Over the next 35 years to 2050, urbanization will centre on other countries. The urban population of lower middle-income countries is projected to more than double in size, increasing by around one billion. Urban populations in low-income countries are projected almost to triple, increasing by over 500 million. Management of this scale of urban transition will be particularly difficult as timeframes are short, and these countries have the least resources to accommodate change.

Since urban areas are where national economic dynamics take shape, the aggregate figures in Table 8.1 give a notion of what the "emerging futures" of cities might look like for various income brackets and regions. The strength of services and marginal contributions of manufacturing and agriculture will remain in high-income countries, where cities are faced with de-industrialization and its social consequences. At the other end of the spectrum, agriculture remains strong in middle- and low-income countries, compared with weak manufacturing and industry (the latter including the construction sector), with the relatively

Table 8.1: Structure of output :Income and regions, 2012

Source: Based on http://databank.worldbank.org/, last accessed 25 November 2014.

	GDP	Agriculture	Industry	Manufacturing	Services
	$ billion	% of GDP	% of GDP	% of GDP	% of GDP
Low income	527.0	27	23	12	49
Middle income	22,516.2	10	36	21	54
Lower middle income	5,031.4	17	31	16	52
Upper middle income	17,481.2	8	38	23	54
Low and Middle Income	23,057.2	10	36	21	54
East Asia and Pacific	10,331.0	11	44	30	45
Europe and Central Asia	1,867.7	9	31	17	60
Latin America and Caribbean	5,467.5	5	32	16	63
The Middle East and North Africa	1,595.2	..	..	..	..
South Asia	2,302.7	18	26	14	56
Sub-Saharan Africa	1,503.5	14	29	10	57
High income	49,886.8	1	25	15	74

strong share of services likely pointing to significant retail, import-export and transport more than higher-productivity services (banking and finance, insurance, consulting, etc.). This pattern suggests that cities in the countries within this income bracket need more private productive investment and public capital expenditure in areas such as manufacturing, utilities, and welfare.

Cities in the countries that are part of the income brackets that are in between show economic transformation at different stages, with the notable persistent weakness of manufacturing in Latin America regardless of huge actual and potential consumer markets. The challenge for Africa is to transform more of abundant commodity resources— often, over-reliance on exports holds the region hostage to the vagaries of world markets. On the whole, Table 8.1 points to the increased scale and complexity of the challenges cities have been facing since Habitat II. Ahead of the Habitat III conference, this reading of Table 8.1(combined with data on informal economies) also suggests how public policies, laws and regulations (including tax) can steer and support ongoing urban dynamic changes for smooth transitions to shared prosperity, along with public and private capital expenditure. Political will and appropriate policies are in order, with support from decentralized public finance, fostering social capital and socio-political stability.

> The challenge for Africa is to transform more of abundant commodity resources— often, over-reliance on exports holds the region hostage to the vagaries of world markets

Figure 8.1: Global trade and financial links increased dramatically in the past 50 years

Source: M. Ayhan Kose and Ezgi O. Ozturk, 'A World of Change - Taking stock of the past half century', in IMF, Finance and Development, September 2014 p 7.
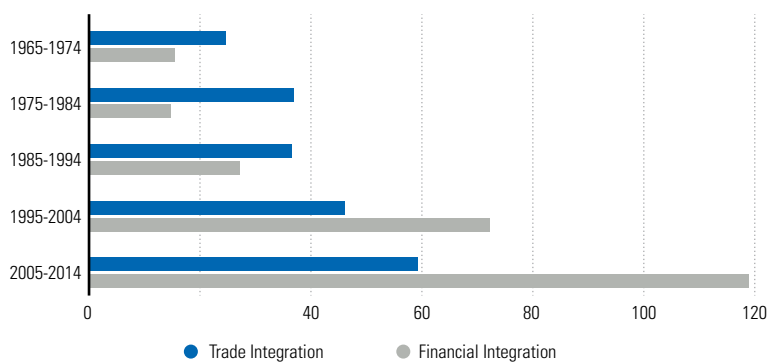
Note: Trade integration is measured by the ratio of total imports and exports to global GDP. Financial integration is the ratio of total financial inflows and outflows (including bank loans, direct investment, bonds, and equities) to global GDP. Financial integration data are through 2011. Trade integration data for 2014 are forecasts.

Looking ahead, a concern for some cities– in the light of continued urbanization—is slow global economic growth, smaller capital flows and limited local productive investment by domestic capital might exacerbate shortfalls in infrastructure and services, leaving large numbers of urban residents in inadequate housing and informal livelihoods for the long term.

8.4
The Dynamics of Urban Economies

The new economic geography is the outcome of a complex interplay of factors that have fundamentally changed the dynamics of urban economies. These factors are discussed below.

Global economic growth

A significant change since Habitat II is that cities are increasingly interconnected regionally, nationally and globally, and they operate in global markets for goods, services, finance and, increasingly, labour. In this new, more interconnected world, this is probably the most important factor determining the ability of cities to provide infrastructure and services, to ensure employment opportunities, and to improve standards of living is global ,economic growth and the capacity of cities to participate and compete in the global economy.

It is incumbent on national and municipal authorities to make sure that, at individual city level, any such linkages nurture "strong economic foundations," "wealth sharing," "people-centred economies," "strengthened productive capacities" and "structural transformation"[14] with due regard for transparent, participatory governance involving local communities, as mandated by SDGs, and for the sake of urban prosperity as envisioned by UN-Habitat.

Economic policy and globalization

Since the early 1990s, policy changes encouraging liberalization and globalization have strengthened the economic development of cities with tradeable goods and services. Tariffs and other protection measures have

declined, with global trade in goods and services, and capital flows, rising sharply (Figure 8.1).

The paradox with too many cities around the world today is that they seem more ready to cater to the needs and requirements of overseas investors than to those of the poor living in their midst or on the margins. Foreign direct investment in current conditions cannot adequately benefit the poor. Still, cities seem keener to provide land, infrastructure and well-adapted rules and regulations to the foreign denizens of central business districts than to local, poor, slum-dwelling informal entrepreneurs. Admittedly, this is a major factor behind ever-steeper urban inequality, in both statistical and anecdotal forms.[15] The problem is that serious doubts can be cast on the reality of the celebrated "trickle down" effect whereby riches naturally if gradually ends up benefiting the poor when the fact of the matter is that, especially in Africa, rent-seeking local elites make sure that most such benefits only accrue to them. As noted by a former World Bank chief economist,[16] liberalization is a factor behind inequality, creating new elites in developing countries; in advanced economies, de-industrialization leaves workers underpaid or jobless while the profits go to corporate managers and shareholders. Liberalization also deprives governments of the revenues they need to redress inequalities, as firms and capital evade taxation.

For many, particularly secondary cities, globalization has eroded the industrial base as businesses and jobs have moved to more attractive locations—leaving cities with low growth prospects, struggling to attract investment and create jobs in the formal economy. Many secondary cities in developing countries have failed to tie up global or even national linkages and are struggling to accommodate growing populations.

Agglomeration economies

Businesses tend to be more productive and profitable when located in cities because they benefit from agglomeration economies, knowledge spillovers (both within the same sector and across industries and sectors), a large labour market (including for specialist trades and scientific and commercial expertise), and sharing intermediate inputs (legal and accounting services). The impact in developed and developing countries is different but enhanced by "good urbanization policies."

With an increasingly global marketplace, the importance of agglomeration economies to the profitability and success of businesses has increased. A spatial outcome is that economic activity and industries increasingly tend to cluster together— research hubs, information processing or logistics clusters, etc. —both within cities and across multiple city regions, in the drive for profitability.

That is why some governments have encouraged agglomeration economies, employment and trade through incentives for businesses to locate in designated clusters or Special Economic Zones (SEZ). Incentives have usually included a combination of tax and tariff relief, land and infrastructure provision and a simplified regulatory environment for specifically designated areas (i.e. no need for sweeping nationwide reforms). As illustrated in Figure 8.2, the number of special economic zones has risen sharply over the past two decades. The Shenzhen SEZ in China is a remarkable success (built on location advantages and already incipient trends) but overall results have been very mixed especially when compared with the high costs (in terms of tax and infrastructure).

Technological change

Technological change affects how and where income and growth are generated. This flows through directly to the spatial structure and performance of cities and their economies. Most new businesses start in cities; most research and development is undertaken in cities. Over the last few decades, rapid technological change has been revolutionizing production processes, transport modes and costs, and ICT (Chapter 2). Where the profitability of commercial operations often benefitted from vertical integration –where inputs and production of the final

The paradox with too many cities around the world today is that they seem more ready to cater to the needs and requirements of overseas investors than to those of the poor living in their midst or on the margins

Technological change affects how and where income and growth are generated

Figure 8.2: Special economic zones: Number worldwide (000s)

Source: The Economist, 2015a.
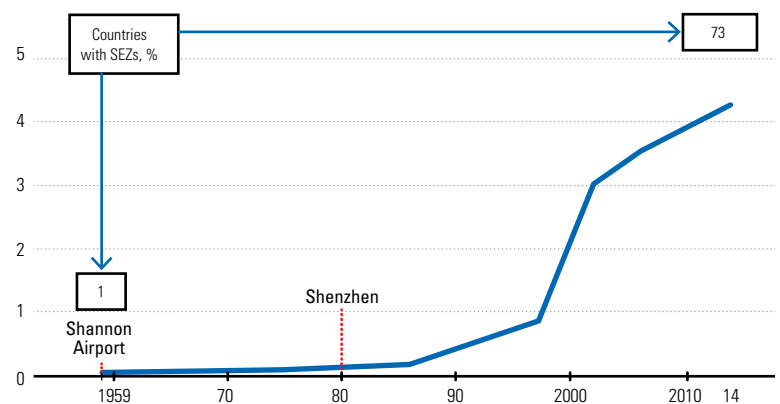
product centred on a single location— more distant locations can now exploit their comparative advantage as they become part of global supply chains. Today, the economic success of cities remains dependent on the efficiency of their transport, communication and information linkages and systems. Technologies also revolutionize consumer behaviour and conventional services. Online networks such as Uber and AirBnB offer services which pose a challenge to existing business regulations and practices. Kenyans can transfer money via mobile phones, and even (pending government authorization) invest in government bonds.

The Kenyan example holds four lessons for cities: (1) the irrepressible drive of technology can leapfrog conventional barriers to deliver what vast majorities of consumers need and at affordable costs; (2) technological innovation is not necessarily confined to higher-income, advanced economies; (3) it is not necessarily dependent on foreign direct investment, either; and; (4) it is for national and municipal authorities to provide well-adapted legal, regulatory and tax environments, together with skills training and proper infrastructure if innovation is to be nurtured locally, instead of moving to more favourable locations. Industrial clusters have a role to play and can attract foreign investment if needed.

Thanks to Internet, the range of service activities that can be digitized and globalized is expanding, from the processing of insurance claims and tax payments, to the transcription of medical records, to the provision of education via online courses. India and the Philippines are two countries that have rapidly expanded their export of services.

Mobile money transfer has created an efficient way of doing business in Kenya.
Source: Julius Mwelu / UN-Habitat

Technological change may well constrict the traditional development pathway of economies using cheap labour as an incentive to attract industries, moving over time into the production of more sophisticated products and onto services. As in China, the skills and experience gained in export-oriented production might be put at the service of national consumer markets which regional customs unions can only make larger.

Global supply chains

Since around the time of Habitat II, supply chain trade has accelerated export-oriented growth in much of Asia. However, it is not adapted to the geographical and other circumstances of many countries, especially in Africa, much of Latin America or the Middle East. This partially accounts for the slower rates of economic growth in these regions. The past few years' marked slowdown in world trade reflects the dismantling of many supply chains, together with the vagaries of foreign direct investment.

Today, the supply chain model is in decline on account of decreasing economic benefits[17] and rising logistics costs, on top of this, any country can only liberalize so much. Moreover, natural disasters (earthquakes, flooding, etc.) interfere with the "just in time" logic of the model and climate change is only portending some more. Manufacturers in advanced economies are also repatriating outsourced operations owing to poor workmanship standards in low-cost locations and the high costs of long-distance management and quality control, not to mention civil society campaigns over labour exploitation. The latter factor, coupled with apparently insurmountable cultural divides, has also prompted some large enterprises to close down overseas call centres.

Industry clusters

Globalization has brought about greater industry agglomeration and specialization as national and multinational companies move to locations that offer competitive advantages in the production of goods and services and access to markets. In many cases, large agglomerations of firms, such as ICT developers in Bangalore or chip manufacturers in Bangkok, have become spatially concentrated in highly specialized clusters.

Clusters are the sector-specific manifestations of agglomeration economies: firms compete for business but are brought together by common user infrastructure or available skilled labour, together with similar supply chains and synergies stimulating innovation, new product

> **Box 8.2: Building connectivity: The electronic cluster of Santa Rita Do Sapucaí, Minas Gerais – Brazil**
>
> Globalization is forcing companies and institutions to be creative and innovative, but city size is not decisive. This is the case in Santa Rita do Sapucaí, a small town (population: 34,000) in the south of the State of Minas Gerais, Brazil. It is now known as the country's own Electronic or Silicon Valley on account of its technological skills and innovation.
>
> In the 1970s, graduates set up the first companies in Santa Rita, and the success was promptly emulated. Today, the Electronic Valley is home to 141 technology-based companies, ranking among the main electronic clusters in Brazil and even Latin America.
>
> Santa Rita can show other clusters how better strategic positioning can enhance competitiveness. Rather than continue to work on general, non-sophisticated products, the companies and their institutional partners developed a strategy and solutions for more complex products and services. Entrepreneurs attended dedicated conferences, the university launched a research programme, and the government and institutions looked to improve policies and funding. It took familiarity with a new market, as well as trust and courage, to implement this long-term strategy, which strengthened Electronic Valley firms' hand in negotiations with clients and increased market share.
>
> *Source: SEBRAE.*

development, pooling of resources and sales to gain access to new markets. In the US, 18 sets of industry clusters generate more than 50 per cent of employment and contribute an even higher proportion of GDP.[18] In India, 49 metropolitan clusters are likely to account for 77 per cent of incremental GDP from 2012 to 2025.[19]

Many city governments recognize industry cluster support as an important way of stimulating investment, job creation and value-adding,[20] including research and development facilities, technology and innovation parks, streamlined import-export approval and clearance, co-investing with business in the development of high-quality training facilities, and provision of common user facilities (warehousing, infrastructure).

Infrastructure provision

Infrastructure is the backbone of any urban economy. One report estimates annual demand at approximately US$4 trillion annually, with a gap – or missed opportunity – of at least US$1 trillion every year.[21] The challenge of adequate infrastructure varies significantly across countries and cities as highlighted in earlier chapters. Advanced economies must maintain and upgrade extensive transport, power, water and telecommunication networks, as technology changes and demands shift. In developing economies, cities must build sufficient infrastructure to keep up with the demands of expanding populations and surface areas. Even in more advanced Latin American economies, cities such as Buenos Aires, São Paulo, Bogotá, Lima, Rio de Janeiro and Mexico City experience major deficits in basic infrastructure.

Still, overall, technological change has had an impact; cheaper mobile phone networks have overtaken conventional fixed telephones (see Chapter 2). Substantial backlogs remain in the provision of water and sewerage, though, as national and city governments in many developing countries lack financial resources for planning, financing and building capacities, with detrimental effects on living standards and productivity. Indeed, one of the top priorities of participatory planning in developing country cities should be provision of adequate infrastructure for informal businesses: sheds for open-air roadside artisans, substitution of proper covered markets for rags-and-sticks petty trading stalls, etc. This could be a first step toward gradual mainstreaming of the informal into the formal urban economy.

Property and land markets

The past two decades have witnessed volatility and change in urban property and land markets (Chapter 3). Liberalization nurtures inequality as it is clearly detrimental to local demand, with speculators dramatically raising values from the mid-1990s to 2007, followed by some dramatic falls. Since 2013, property prices have risen by an average five per cent in 19 OECD countries[22] —but by much more in most favoured destinations like megacities and large metropolitan regions. In London, on top of raising prices, foreign speculators (especially from the Middle East and Asia) leave myriad downtown properties uninhabited, even in the face of massive local demand from low- and middle-income households— consequently pushing these households ever farther out on the fringes with high commuting costs.

Infrastructure is the backbone of any urban economy. One report estimates annual demand at approximately **US$4 trillion** annually, with a gap – or missed opportunity – of at least US$1 trillion every year

Property investment abroad serves as protection against currency or political risk but deprives countries of origin from much-needed domestic capital of a more productive nature.[23] A five-year survey of 44 countries found a significant impact of ownership, property rights and investor protection on the functional efficiency of capital markets.[24]

Climate change

Since Habitat II, action over climate change has emanated mainly from local and urban authorities, in anticipation of long-term structural effects— as demand emerges for different or new goods and services (including land), and costs shift accordingly. International actions and agreements on climate may result in both constraints and opportunities ("green" growth) for urban economies: "clean" and renewable energy production, "green" building technologies and materials, as well as more energy-efficient modes of transport (Chapter 5).

In property and land markets, factors like slum upgrading/relocation, deployment of public/green spaces and exposure to the effects of climate change are sure to cause some changes. Urban governments are also likely to face new demands, such as assessing various risks and developing appropriate management policies, as well as for new infrastructure and services, including disaster mitigation.

India has the world's largest young population in the world, still nearly 10 per cent or around 100 million are elder. Catering for the special needs of this population will become an increasing challenge in the country that is expected to have 300 million by 2050. Special places to meet and socialize are needed, as this group of friends engages in a conversation in the sidewalk. New Delhi, October 2015.

Source: Eduardo L. Moreno

Ageing populations and urban economies

With increasing longevity and, more importantly, declining fertility, the world population is becoming older on the whole as highlighted in Chapter 1. The economic impacts of ageing populations on urban economies are wide-ranging. Invariably, there is a decrease in workforce participation rates and a reduction on potential output. Often, consumption patterns change with special needs; housing, elevators, wheelchair access, care facilities —hospital wards, nursing homes, support services— turning this into one of the fastest growing employment sectors (if only potentially). Governments also face new demands for strengthened safety nets (income support, pensions), healthcare and social services. There is also a gradual social change marked by the transfer of the responsibility of care for the elderly to private or public institutions, posing mounting challenges in both developed and developing countries for the foreseeable future.

Poverty, rising inequality and social safety nets

The twin phenomena known as "globalization" and "economic liberalization" keep nurturing "a disheartening trend"[25] whereby increased inequality *within* countries has offset the drop in inequality *among* countries (see Chapters 1 and Chapter 4). What slum-dwellers expect from urban economies are basic livelihoods to survive, minimal healthcare to maintain basic physical capital, and schools to develop the basic intellectual capital of the next generation. What they keep hoping for is fulfillment of basic spatial rights such as basic security of tenure, decent housing in healthier environments, basic services, and opportunities to make the most of their abilities. Indeed, they hope to develop the basic dynamics of economic activity, i.e. *productivity*, accumulation of capital that will give them the degree of security they need to project themselves, and the next generation, into the future in a most positive, constructive way (short of which outright disenfranchisment looms, and socio-political trouble with it).

Evidence shows there is much which national, local and municipal authorities to combat poverty. Brazil, for instance, formally launched the nationwide *Bolsa Família* (Family Grant) scheme in 2003. Under the programme, extremely and moderately poor families receive monthly handouts (US$65 to US$200) on a number of conditions, including medical checkups as well as off-

spring school attendance and immunization. The direct handouts effectively double beneficiaries' average households incomes. The scheme has since been emulated in about 40 countries, mostly South American, but also Bangladesh, Indonesia, Morocco, South Africa and Turkey[26], on account of a variety of direct and indirect benefits:

◗ Handouts paid through banks are more effective than distribution of goods, also cutting out bureaucracy and corruption.
◗ Handouts go to mothers, not fathers, generating both rational spending and women's empowerment.
◗ The scheme has significantly reduced poverty and inequality.
◗ *Bolsa* has broken the transmission of poverty across generations, reducing infant mortality, malnutrition and child labour, and improving school attendance.
◗ *Bolsa* has increased household consumption, cushioning the poor against external economic shocks (i.e. drops in world commodity prices).
◗ *Bolsa* has instilled a sense of dignity and civic enfranchisement among the 14 million formal beneficiaries (and 41 million dependents).

Two cities in the US (Memphis and New York) have emulated the scheme, an earlier version of which had been tested by 100 local authorities in Brazil since 1995. However, strictly urban "family grants" can succeed only if appropriate back-up is secured in terms of public finance and management (Chapter 6) as well as health facilities and proper schooling. Moreover, it is best to avoid a situation where, as in Brazil, up to 55 per cent of *Bolsa* monies is recouped through high indirect taxation.

8.5
The Functioning of Urban Economic Systems

National urban policies

It has become increasingly clear since Habitat II that a city perspective is integral to any country's eco- nomic policy-making. Habitat III is expected to set out a New Urban Agenda. While other perspectives are important, it is no longer tenable to adopt a sector-based or countrywide approach to development while ignoring the complex, "system within system" dynamics of urbanization at city, country and global levels. Even seemingly unrelated issues such as food security and rural water supplies are closely tied to the economic growth and prosperity of cities.

Most countries, at different times, have developed national urban policies. Most are shaped by a hierarchical system for the classification of cities based on population size or political jurisdiction. Some countries, such as Colombia, Vietnam and the Philippines, split cities and towns across different categories.

Most national urban policies are linked to national and sub-national physical development plans. Such plans are often used to define the scope and scale of national infrastructure programmes, such as India's Jawaharlal Nehru National Urban Renewal Mission.[27] They can also form the basis for the development of special industrial and economic areas as well as housing and environmental improvement programmes. Across the world, the links between physical planning and economic development policies for cities are found to be very poor. Planning systems rarely integrate financial and budgetary considerations effectivel— i.e. balancing the needs for investments and services with budgetary and financial considerations and realistic timeframes.

Resource flows— grants, loans and transfers from central to city governments— are often distorted on a per capita basis in favour of large cities. Central governments often fail to appreciate the important role, for national development, of secondary cities, and the different sets of policies and programmes they may need in support of local economic development, together with strategic infrastructure. If they are to mainstream the New Urban Agenda into nationwide policies (Chapter 10), governments must heed secondary cities, recognizing these as part of the overall urban system (if only because they are where most of urbanization has been taking place lately). Proper decentralization should be taken as an opportunity to boost the dynamism of fast-urbanizing secondary cities and the hinterlands, instilling the funding required for infrastructure, since efficient, two-way, mutually beneficial linkages with larger cities have a major role to play in national economic development.

Development and implementation of urban

Development and implementation of urban policies is a significant issue, as is beginning to be recognized in Sub-Saharan countries

Box 8.3: The streetwise economics of urban density

Densification has many advantages: more people on the street (which usually offers a safer environment), more shops, more amenities, more choice, more efficient mass transit, higher property values. Densification also produces a larger municipal tax base. Urban densification tends to occur in proximity to amenities such as downtowns, cultural districts, parks, and waterfronts. It is precisely density that allows these amenities to achieve their full potential. The success of a shopping street, a city park, or a waterfront esplanade depends on the presence of large numbers of people. Virtually every technological innovation of the past 50 years has facilitated, if not actually encouraged, urban dispersal. But concentration is making a comeback.

Concentration also takes new forms like power centres, office parks, theme parks and village-like planned communities. All such gathering places are evidence of the age-old desire for human contact, crowds, variety, and expanded individual choices. It is no good having a lot of people if they are spread out. Walkability is important since it is one of the competitive advantages that downtowns offer compared with suburbs. Increasing the density of housing will require paying more attention to public amenities such as well-designed streets, public spaces, and town centres.

Source: Rybczynski, 2010.

policies is a significant issue, as is beginning to be recognized in Sub-Saharan countries, and not only in South Africa where (whatever the reasons) they have traditionally been considered an inherent part of long-term nationwide planning. Although development policies do retain an anti-urban bias in developing countries, it is accepted that managed urbanization needs requires leadership by higher government tiers. This is essential since, short of a comprehensive approach to national urban policy, only the most competitive cities are likely to attract investment, create good jobs and raise the capital needed to fund the backlog of infrastructure and urban services they currently need. The rest will become lagging and laggard cities.

> Poor municipal finance, particularly in rapidly urbanizing developing countries, is one of the reasons that cities are not keeping pace with the demand for infrastructure and services

Financing and maintenance of urban infrastructure

All city governments are under pressure to do more, as municipal roles and responsibilities become more complex. Policies and programmes can range from job generation and economic development to activities for social inclusion and to anticipate the effects of climate change. However, most cities still depend on transfers from higher tiers of government. Analysis of endogenous revenues shows that property tax, while potentially an efficient source of local revenues, represents less than three to four per cent of local revenues in most devel-

oping countries, compared with 40-50 per cent in cities in Australia, Canada, France, the UK and the US.[28]

Poor municipal finance, particularly in rapidly urbanizing developing countries, is one of the reasons that cities are not keeping pace with the demand for infrastructure and services. Few cities in the developing world, because of informality, lack of land registration, and governance issues, have been able to capture, for the public purse, the rents accruing to property ownership resulting from land-use regulations.[29] This inability both increases inequality and reduces the local revenue base. Revenues from land taxes remain low in most countries.

In the push for efficiency and to meet service shortfalls, old models of direct public sector service provision are slowly being replaced by more market-based approaches, using competition to cut costs and provide new services. This is taking place not only in the construction phase, where competitive tendering has been common practice, but also in financing, operations and maintenance. Privatization or leasing of entire operations (or appropriate component packages) has shifted responsibility for financing, design, construction and operation of activities from the public to the private sector. Public-private partnerships (PPPs) can combine various modes of participation from both sectors.[30] New models of public sector financing of infrastructure and urban development are also being developed (Box 8.4). However, municipal authorities must be aware that PPPs, like borrowings on capital markets, require degrees of transparency, proper management, legal and financial expertise which make them unaffordable to most[31]— and that current (early 2016) very low interest rates are unlikely to stay.

City governments vary greatly in their capacity to leverage their assets. Such assets may include land and buildings, rivers, coastlines, parks and air space. Singapore has leveraged sub-surface development rights for underground shopping arcades linking parts of the central business district together. Many "value capture" opportunities can enable city governments to raise revenues for infrastructure and services, and the Lincoln Institute of Land has developed a wide range of dedicated policies.[32] However, an essential precondition for success is none other than strict enforcement of proper land management and administration laws and regulations, planning and development controls.[33]

New technologies and products have facilitated the transition from public to private sector infrastructure provision (Chapter 2). In sectors such as tel-

Box 8.4: Special funds for municipal infrastructure

Various countries have managed to deploy fund allocation programmes to municipalities in accordance with specific needs.

The example of Germany's Stuttgart Region Metro demonstrates how interconnected issues affecting the municipalities of a metropolitan region can be addressed. A public institution for cooperation among urban and rural municipalities coordinates projects and allocates funding to achieve common objectives in land-use planning, public transport and economic development.

In the Philippines, a performance-based incentive policy attaches performance criteria to public funding of local authorities for the purposes of planning, fiscal management, transparency and accountability. In India, too, the Jawaharlal Nehru National Urban Renewal Mission (JnNURM) attaches specific criteria to funding. The cities meeting these criteria are eligible to apply for the city-modernization scheme sponsored by the central government. Before they can access any funds, the municipalities must implement specific mandatory reforms.

Unlike in the first two cases described above, the Indian development scheme does not cover a whole region, but a pool of selected cities. As in the Philippine case, though, it aims at encouraging necessary reforms and rationalizing governmental transfers, rather than at integrating and coordinating common objectives of neighbouring municipalities, as in the case of Stuttgart.

Source: UN-Habitat, 2016e.

ecommunications, the shift in demand from fixed line to mobile phone communications has encouraged new market entrants and intense competition. In other sectors such as electric power, some countries have privatized various aspects (generation, distribution) of supply, which are also if slowly being transformed by new technologies (e.g. domestic solar power), often encouraged by government concerns over global warming. Importantly, communications and information processing have changed production functions and opened up opportunities for contestable markets for what were once seen as public goods. The extent to which cities and countries have used markets to drive down the cost of infrastructure and services varies considerably.

As the infrastructure gap increases, particularly in some developing countries, further innovative approaches to provision and financing of urban infrastructure will be essential. There is no single, ideal financing model. Rather, it is for city governments to evaluate revenue bases, capital requirements and ability to accommodate risk. They will also need to assess the appetite and requirements of domestic and international capital markets for different types of investment opportunities and securities, and appropriately package projects for financing. National governments will inevitably play a role in setting financing guidelines and in the planning for, and financing of, larger projects.

City systems

The dynamics of urban economies are becoming much more sophisticated and linked into global systems. Alignment of economic and other strategic infra-structure across cities, within countries, and between nations is becoming increasingly important for improved productivity, investment flows and employment creation. New forms of partnership, such as proposed by Asia-Pacific Economic Cooperation (APEC),[34] are necessary to link the economic systems of cities, to encourage informal trading relationships, cross-industry and cross-cluster collaboration, innovation- and knowledge-sharing, as well as identification of new opportunities for linkages among cities. Mobilizing domestic capital has a crucial role to play.

Economic development corridors also give cities significant opportunities to work together. Trading corridors are emerging in South America, Asia and Africa.[35] The Pearl River Delta corridor between Guangdong and Hong Kong is a network of interdependent cities which mutually support each other in a very wide range of manufacturing activities. Figure 8.3 depicts a conceptual pattern for value-added activities in secondary cities, as developed under a new initiative by the Cities Alliance.[36] Participation in city networks requires coordinated involvement of government and industry, often at national, region and city levels. This can be a problem in developing countries where governance is weak.

The dynamics and governance of systems of cities, intermediate cities, metropolitan and regional areas, is a new macroeconomic trend that requires specific financial, legal and planning instruments, as well as in the political realm since a broad range of stakeholders are involved. In the next decades, expanding corridors and secondary cities will create more metropolitan areas, more and more turning into hubs of economic activity and growth within countries.

Figure 8.3: An economic trade corridor incorporating a network of secondary cities

Source: Roberts, 2014.
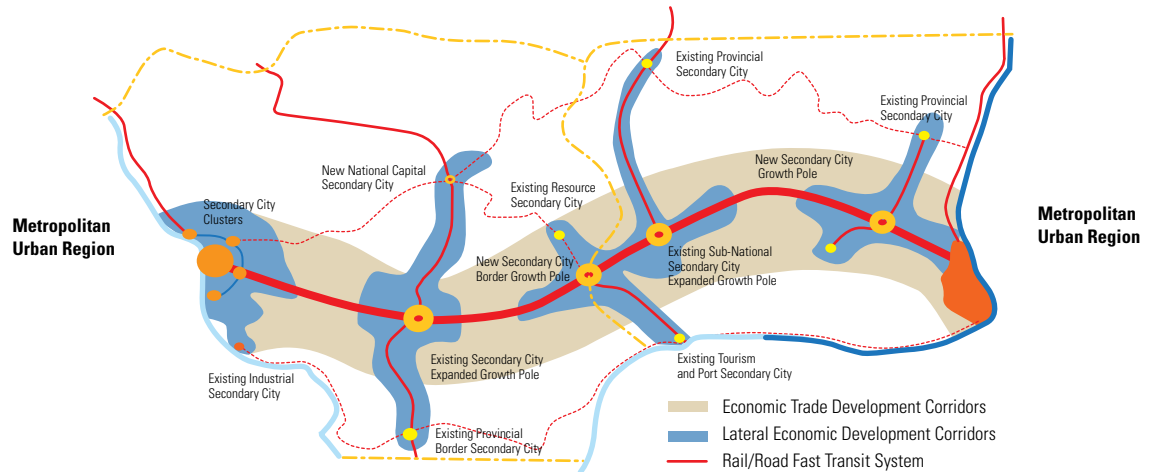
8.6
City Governance

Paradoxically, while the urban economy is increasingly private-sector driven,[37] the quality of urban governance has never been more important. The modalities of urban governance are changing, but efficient and equitable provision of infrastructure and services remains a key responsibility of urban government (Chapter 6) and is critical to encouraging investment and growing a successful urban economy.

City governments as facilitators

Urban government and administration are moving from direct providers of services, to facilitators of such provision. This involves new skills and modes of operation with a focus on community consultation and needs, project design and monitoring, legal and contracting issues, financing options as well as economical pricing and efficiency concerns. It is now for urban governments to act both as regulators (ensuring acceptable standards of service provision and avoiding predatory monopoly pricing), and as customers, too (such as underwriting build-operate-transfer (BOT) projects by guaranteeing to purchase a pre-determined amount of project outputs).

Better managed and resourced cities— with an eye to developments in international practice and well-developed links and coordination arrangements between the private and public sectors, as well as recognition of the informal economy— have generally moved ahead of more poorly resourced cities which are slipping further behind. This is particularly a problem for secondary cities in some developing countries, where populations are fast-expanding.

For all the talk about mobilizing foreign investment, developing countries ought to take good notice of the more basic capital sitting on urban fringes, and focus on leveraging informal economies. As previously underlined by UN-Habitat, "…genuine economic inclusion leading to equitable allocation of opportunities and income is, to a very large extent, determined by the political, cultural and social equality parameters that are specific to any given city."[38] Based on SDGs, it is for civil society and Habitat III to shape these parameters and to highlight the urgent need "to democratize the business sector in order to open it up and provide opportunities for all, instead of systematically denying these to most citizens due to weak institutions, inadequate regulatory frameworks, and poor government management of the economic sphere."[39] Procurement modalities could help, in sectors such as waste collection and recycling, but corruption may stand in the way.

City governance structures

While cities are facing long-term structural change, governance arrangements often have hardly changed and mostly remain a complex web of national, State, regional and local government responsibilities, only compounded by the roles of parastatal companies (electricity, water supply) and ill-suited national policies. Complexity and economic efficiency are uncomfortable bedfellows (Chapter 6), leaving many, even large, cities bedevilled in politics, with major infrastructure shortfalls and the diseconomies of small scale, together with inefficient, costly services and infrastructure.

Collaborative urban governance

Economic development calls for clear, effective vertical and horizontal integration of policy, planning, regulation, finances, and operations (Chapters 5 and 6), including consultation with business and the broader community. For most cities, economic governance arrangements and policies are weak, with a lack of clarity around functions and responsibilities, undermining the environment for private sector development and business innovation, not to mention the informal economy.

For collaborative governance to work, all parties to decision-making must appreciate how supply chains and logistics systems function in cities and how the inputs, outputs and throughputs of these systems are not just linked to the physical systems supporting the operations of local economies, but also to the services, human capital and information systems.

→

8.7
An Urban Economic Agenda for Cities in the 21st Century

The focus of many industrializing economies over the last few decades on export-oriented growth based on agglomeration economies, new transport and communications technologies, value chains and skilled labour carries an important lesson. The extent and speed of these changes were not envisaged fifty years ago. The future is always uncertain. All that is certain is that macroeconomic conditions will continue to change, new technologies will transform production processes and cities will economically rise and fall as they have in the past.

The global economy appears to be entering a period of sustained slow growth, with a weakening of economic growth prospects and a slowdown in trade growth and capital flows particularly for developing countries. It is uncertain if, or when, these trends will be reversed. Moreover, the speed of technological change is only increasing, and new models of production will inevitably develop to take advantage of these new technologies. Such changes will affect the products produced, inputs used in production, the prices of these inputs and the productivity of different locations, flowing through into the form and location of economic activity within cities and between cities.

Looking at developments since HABITAT II, the lesson for city governance is to focus on getting the basics right. Plan for the known, assess and manage risks and be flexible and open to change. Consult and engage with all sections of the community. The best opportunity for jobs growth and the economic development of cities comes from a focus on the quality and efficiency of

While cities are facing long-term structural change, governance arrangements often have hardly changed and mostly remain a complex web of national, State, regional and local government responsibilities

infrastructure and services, strengthening education and health services, improving the quality and adaptability of human capital, and on reducing where possible the costs of doing business, such as through cutting unnecessary "red tape" and non-tariff barriers. Social inclusion, including a focus on poverty reduction and equity, is also critical, not only for ethical reasons but for all of a city's resources to be utilized and for social stability.

Importantly, in late 2015, governments committed to "transform our world" by 2030 through an "agenda for sustainable development" which takes the shape of "a plan of action for people, planet and prosperity." [40] Governments are agreed that "people-centred economies" and "wealth sharing" are in order for the next 15 years, along with "structural transformation," "strong economic foundations" and "strengthening productive capacities." Of the 17 Sustainable Development Goals, one (SDG 11) focuses on cities, half a dozen directly focus on economic policies (the "end of poverty in all its forms" ranking as SDG 1) and the balance have major roles to play in the shared, sustainable prosperity of cities.

Together, the Sustainable Development Goals provide the Habitat III conference with the basic guidelines national and urban governments need if they are to make a success of their "emerging futures." Indeed, an urban economic agenda for cities underpinning the New Urban Agenda would focus on:

◗ Reducing inequality and stimulating economic growth through regulation of financial and labour markets, progressive taxation and welfare policies.[41]
◗ Recognition of the informal economy and more efforts to harness its significant economic and social capital.
◗ Social inclusion with a focus on job creation, social safety nets, housing provision, and spreading the benefits of economic development between and within cities.
◗ Efficiency, facilitating more productive use of resources to create more wealth and jobs.
◗ Strengthening infrastructure and logistics networks and reducing barriers to trade and business development within and between cities.

◗ Public investment in knowledge and strengthening the domestic private sector —with this caveat: "provide what the private sector needs, not what it asks for."[42]
◗ Partnerships with foreign firms are welcome but local governments must make sure that these abide by their corporate social responsibilities (investment, infrastructure), terms are equitable and value is added in the recipient country.[43]
◗ Developing urban policies to link cities into networks, which are better able to face increasing global competition for resources, trade, investment, skills and knowledge.
◗ Efficient urban governance with a focus on creating and regulating markets for service provision, reducing costs of doing business, consulting and engaging with all segments of the community.
◗ Strengthen municipal financial capacities through better use of public-private partnerships, local land taxes and user charges, and development of more effective and equitable fiscal equalization arrangements between national and city governments.
◗ Improving environmental sustainability and taking opportunities for creative and innovative adaptation to climate change.
◗ Improving data collection to identify winners, losers and redress imbalances

Achieving this economic agenda will be a challenge for all cities and respective national governments. The world is becoming an intricately networked and increasingly inter-dependent system of cities. Cities must learn how to collaborate, cooperate, partner, become more competitive and efficient, improve logistics systems and linkages, and differentiate themselves and the products and services they produce. Managing the changing dynamics of cities calls for new ideas, changes in the way we manage urban development and economies, together with new forms of governance that maximize a city's physical, social, cultural, and economic potential.

Managing the changing dynamics of cities calls for new ideas, changes in the way we manage urban development and economies

Notes

1. United Nations, 2015a.
2. Banerjee and Duflo, 2012.
3. Power, 2008.
4. UN-Habitat, 2013.
5. Kotkin, 2005.
6. By its nature, the informal economy is difficult to define and measure. While most people in the informal economy are in small scale, marginal work, on low incomes, others operate successful businesses and seek to avoid tax authorities, as well as employment and social security regulations.
7. World Bank, 2013e.
8. The Economist, 2012.
9. UN-Habitat, 2011f.
10. McKinsey Global Institute, 2011.
11. UN-Habitat, 2010a.
12. UNDP, 2015
13. World Bank and International Monetary Fund, 2015
14. United Nations op. cit.
15. Ravallion et al, 2007
16. Bourguignon, 2016.
17. Sylvestre, 2015.
18. Muro, 2013; HUD, 1996.
19. Bakshi, 2014.
20. World Bank, 2009a.
21. World Economic Forum and Boston Consulting Group, 2013.
22. The Economist, 2015b.
23. Piketty, 2014
24. Eklund and Desai, 2014
25. Bourguignon, op. cit.
26. Tepperman, 2016.
27. Government of India, 2011a.
28. United Nations, 2015f.
29. United Nations, 2015g.
30. Activities and projects are often referred to by their acronyms BOT (build, operate, transfer); BOOT (build, own, operate, transfer); BLT (build, lease, transfer); DBOT (design build, operate, transfer) and so on.
31. Tribillon, 1996.
32. Land value capture depends heavily on context and legal framework (UN-Habitat 2015 Expert Group Meeting on Land Value Sharing, Barcelona, Spain. May 2015.)
33. Smolka, 2013.
34. Roberts, 2014
35. Mulenga, 2013; CAF, 2009; ADB and ADBI, 2009.
36. Roberts, 2014; Markillie, 2012; Rifkin, 2014; The Economist, 2013c; Rifkin, 2011.
37. OECD, 2007.
38. UN-Habitat, 2010a.
39. Ibid.
40. Ibid.
41. Bourguignon, op. cit.
42. World Bank ,2015d.
43. Ibid.

Principles For a New Urban Agenda

QUICK FACTS

1 The emergence of new urban areas and urban extensions in anticipation of demographic growth will by itself cause more emissions that than the world has generated in the last century.

2 The loss of density in urban areas over the last two decades demonstrates that demographic and spatial expansion go hand in hand. Less dense cities bring higher infrastructure costs, worsen mobility, and destroy agricultural land.

3 The dynamics of cities' emerging futures will result in new urban forms and new patterns of well-being for people, new patterns of behaviour and resource use, and new opportunities and risks.

4 Despite their increasing economic and demographic significance in both rich and poor countries, the role of cities is neither widely understood nor fully recognized in global official and public debates.

POLICY POINTS

1 The public interest must be considered as a fundamental principle by which policies and actions affecting urban areas should be judged.

2 Unless a new urban agenda is given prominence in national policies, the future of cities will become more unequal, less productive, more associated with poor living standards, at high-risk from the impacts of climate change.

3 It is for Habitat III to map out a path for inclusive emerging futures under the guidance of the Sustainable Development Goals.

4 A set of principles that guide major shifts in strategic and policy thinking are presented to ensure that human rights, the rule of law, equitable development and democratic participation are the bastions of the New Urban Agenda.

5 The new urban agenda must be based on a set of implementation strategies that move beyond a sector-based approach. Regional specificity must be considered in the formulation of a credible New Urban Agenda which must be problem-oriented, programmatic and practicable.

GLOBALIZATION + **URBANIZATION**

Facilitated new itineraries of **HOPE** and **ASPIRATIONS**

PEOPLE + **MONEY** + **INNOVATION**

IMAGES + **IDEAS**

Changed people's **expectations**

5 GUIDING PRINCIPLES FOR THE **NEW URBAN AGENDA**

1 > Urbanization protects and promotes **HUMAN RIGHTS** & **RULE OF LAW**

2 > Ensure equitable urban development

3 > Empower civil society, expand democracy

4 > Promote environmental sustainability

5 > Promote innovation & learning
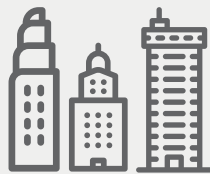
⊖ **RISKS**   ⊕ **OPPORTUNITIES**

MENACES ●··· ● **HOPE**

> Role of cites poorly understood and not recognized

> Cities do not feature in global economic discussions (debate/agenda)

> Urban areas are not identified as part of the solution

NEED TO
REFRAME THE GLOBAL DEBATE and place urbanization at the center of global/national agenda

STOCKS ●············· ·············● **FLOWS**

+/- STOCKS

Economic activities
Infrastructure
Environmental resource
Built environment
Cultural heritage
Institutions & policies

Population growth
Economic activity
Natural resource
Money

BALANCE
HARMONIOUS DEVELOPMENT

▼

SUSTAINABILITY

STOCKS ◁   **BALANCE**   ▷ **FLOWS**

Geography
Ecology
Economies
Culture
Institutions
Technologies

▼

SUSTAINABILITY

Cities are the platforms for global and local change in the 21st century. Urban landscapes are the spaces of convergence of economies, cultures, political, and ecological systems. Demographic concentration is both an outcome and incentive for growth, migration, trade, and cultural production. Built environments and natural ecologies have become the infrastructure of 21st century society, shaping encounters, assimilation, resistance, and innovation. With more than 80 per cent of the world's goods and services now produced in urban areas—and 80 per cent of future growth to 2030[1] expected to occur in cities— it is not an exaggeration to assert that the economic and social futures of whole countries, regions, and the world will be made in cities, today's nests of "emerging futures." "Place is the most important correlate of a person's welfare," as noted by the World Bank.[2]

The economic and social futures of whole countries, regions, and the world will be made in cities

Individual urban areas fit into what has been called a broader planetary process by which the Earth itself has become urbanized, what is now called "*planetary urbanism*."[3] The process of urbanization has reached all countries and, within countries, has transformed the relationships between countryside and settlements, between rural and urban landscapes, and has created new patterns of interdependency between settlements at all scales.

This dynamic transformation of nations through the growth of cities is occurring in *a world of accelerated mobility*: of people, knowledge, goods and services, and culture. Improved infrastructure, the availability of information about distant locations, and the turmoil of local conflicts and natural disasters have contributed to growing international flows of migrants: from Mali to Bordeaux, from Ecuador to Barcelona, from the Philippines to Dubai, from Poland to London, and from Guatemala to Los Angeles.[4] "Geographies of poverty" are no longer contained within national boundaries, even within the dynamics of rural-urban migration, as households are able to multiply sometimes tenfold their incomes through international migration. Globalization and urbanization have together facilitated new and longer itineraries of hope and aspiration. Growing flows of remittances, approaching billions of US dollars from the Middle East to Asia, from Europe to Africa, and from the US to Latin America alone every year, have transformed relationships between residence, employment, and citizenship. Earnings from employment in New York and Abu Dhabi are transformed into roofs in Puebla and toasters in Dhaka.

Cross-border migratory flows have added to urban population growth and created a new urban

This dynamic transformation of nations through the growth of cities is occurring in a world of accelerated mobility: of people, knowledge, goods and services, and culture

Global flows of people, money, innovation, images, and ideas have changed people's expectations about the qualities of their lives and the way they anticipate the future

diversity within many cities around the world going far beyond the multi-ethnic character of urban areas only a generation ago. Chinese in Dublin, Sri Lankans in Naples, Mexicans in Charlotte or Tajiks in Omaha, US, and many more examples suggest that cities keep attracting wider ranges of diverse peoples, identities, cultures, and networks. Whether they like it, or are ready for it, or not, cities are becoming "fractals," with parts taking on the characteristics of the whole.[5] Many of the Western cities now are more reluctant, or less able, to take in all these newcomers.

If the 1990s was a decade of globalization, the early 15 years of the 21st century already demonstrate that as part of that change, *cities have become sites of structural transformation*. The convergence of economic, cultural, demographic, technological, and increasingly political changes have connected urban areas at all scales while also profoundly changing their features. Global flows of people, money, innovation, images, and ideas have changed people's expectations about the qualities of their lives and the way they anticipate the future.[6] Whether expressed through the Arab Spring, new political movements in Spain or Greece, or the Occupy movement, the 21st century has ushered in a debate about systemic inequalities and the way they affect the distribution of present and future opportunities: What are the opportunities? Where and how can they be seized? What will be the consequences?

Considering the world as a whole, welfare has improved enormously over the last two generations. Life expectancy, incomes, literacy, and access of girls to education have changed remarkably. However, beneath this global perspective lie significant and compelling regional differences, with tremendous economic growth in East Asia while Africa features dangerously low incomes and poor health conditions. The outbreak of Ebola fever and the need for a broad-based response has highlighted the great risks that deprivation can bring on local, national and worldwide scales. This suggests the need for a detailed assessment of progress and for improved data systems if no one is to be left behind.[7] Against this background, some *cities appear as sites of opportunity, but others of growing risk.*

Not surprisingly, these worldwide phenomena have also resulted in new local pressures, eliciting new ways of thinking and renewed efforts to find solutions

A girl with a sign stating the "social wealth inequality" during the Jobs, Justice and Climate rally on July, 2015 in Toronto, Canada.
Source: Arindambanerjee / Shutterstock.com

modified, and mainstreamed within local cultural and social systems.

The convergence of these processes has transformed global urban dynamics. We now face new challenges of recognition, understanding, and management. These challenges are all part of structural transformation and of the "emerging futures" that give its central theme to this Report. What are acceptable principles for sustainable urbanization? What objectives should be considered for the New Urban Agenda that will help shape those emerging futures? What types of experience and analysis are most helpful when framing sound principles for policy and action?

If these challenges are taken beyond simply understanding, to the arena of problem solving, a critical issue becomes one of *design*, meaning identifying parameters, modes, instruments, agency, and style as integral components of identifying solutions to problems. The notion of design here is far broader than aesthetic design, being meant as "intention," not simply an outcome of diverse forces, but rather a reflection of well-articulated political, economic, cultural, and social principles, a spatial and social fix.[9] Processes of transformation themselves must be "designed," reflecting a forward-looking diagnosis of trends and practise. Whether these designs are sufficiently robust and sustainable in the process of local assimilation and implementation will depend on many factors. But it is arguable that making the effort— to produce desired outcomes— is essential. The processes of transformation cannot be left to the unmanaged interests of economic or cultural forces. *We are, in a word, doomed to choose.* Waiting for the results of spontaneous processes is a luxury, which the world and its population can ill afford. Here the issue of *public interest* must be considered as a fundamental principle against which policies and actions affecting urban areas should be judged.

The urgency of this agenda is reflected in a series of seven global paradoxes:

i. Despite their growing economic and demographic importance in both rich and poor countries, the role of cities is neither widely understood nor fully recognized in official and public debates (the latter for political reasons).

ii. 600 cities now account for about 60 per cent of the world's production of goods and services,[10] yet cities do not feature in the global economic discussions of the G20.[11] Nor did they feature specifically in most of

to urgent problems, while sometimes generating a broad range of unwanted side effects and consequences. For both migrants and long-time urban residents, cities offer potential for social improvement, yet every day residents see the contrasts of slums alongside the walls of gated communities and the construction of shopping malls where most local residents cannot afford the goods on display, when at all admitted onto the premises, Taking the city and global levels together, the unanswered question is whether changes in climate, the economy, demography, and culture provide a horizon of hope or instead one of menace?[8]

It is not surprising that these forces generate major challenges to the political order and the prospects for democracy. Occupying the same geographical space does not imply equal access to opportunity or equal rights, even in democracies. Political controversies are becoming increasingly strident in many regions as countries face multi-national societies with the strong probability of increased immigration in the future. Similarly, debates over membership in regional blocs mask a much wider and profound discussion of the degree of "acceptable difference" for which a country is ready.

These debates stand in stark contrast to the assumedly universal principles of equality and social justice. In reality, such principles take on specific political and cultural meanings, in particular places, where local socio-political and cultural institutions will re-interpret and adapt them to reflect local interests, power patterns, and traditions. Such local institutions, with attendant behaviours and attitudes, are themselves the legacies of historical processes, often inflicting high costs on society while also affecting the way external forces are co-opted,

Cities offer potential for social improvement, yet every day residents see the contrasts of slums alongside the walls of gated communities

The processes of transformation cannot be left to the unmanaged interests of economic or cultural forces. We are, in a word, doomed to choose. Waiting for the results of spontaneous processes is a luxury, which the world and its population can ill afford

Construction of new urban areas and urban extensions for anticipated demographic growth will by itself cause more emissions that than the world has generated in the last century

the national stimulus packages and economic recovery plans following the global economic crisis of 2008.[12] China was a notable exception, building high-speed railways to link up all of its cities with populations over one million and undertaking national policies that explicitly rely on urban areas as engines of economic growth and development. Discussions of employment usually focus on the macro-economic level, but outside of China, they have not recognized that jobs and mobility must be created in cities where the potential for multiplying effects are highest due to their demographic and spatial advantages.[13] In debates about the 2014-2015 economic downturns in Europe and Latin America, urban areas are not identified as part of the solution for reinvigorating economic growth.

iii. Only in 2014 did the Inter-Governmental Panel on Climate Change (IPCC) clearly link the emissions from cities as being the primary cause of climate change.[14] Moreover, IPCC projections suggest that construction of new urban areas and urban extensions for anticipated demographic growth will by itself cause more emissions that than the world has generated in the last century.[15]

iv. Despite these enormous planetary urban shifts, the Millennium Development Goals adopted in the year 2000 ignored these societal trends and focused on improving the lives of 100 million slum dwellers between the years 2000 and 2020, or less than five per cent of expected urban demographic growth in that period.[16]

v. For all the centrality of cities to global and national futures, it is remarkable how rarely, in many countries; the media focus on the shortcomings of urban life. These include infrastructure failures, accidents, citizen protests, financial collapse, and increasingly, the interaction between weather patterns and cities, whether in Bangkok, Jakarta, or New York. The urban narrative (agenda) has often eluded the mass media in any consistent sort of way, even though more than half of the world's population now lives in cities.

vi. In the face of today's and tomorrow's challenges, why are the long-established planning practises in cities unable to take into account new approaches to learning, training, innovation and forms of participation that will facilitate the realization of a "city that plans" (see Chapter 7)?

vii. These issues being shared across cities, how can

There is urgent need to reframe the global debate and place urbanization and cities on global and national agendas for policy and action

these shift from competition to effective collaboration among themselves as they pursue solutions to compelling problems, and do so in a more integrated and regional perspective?

These paradoxes suggest an urgent need to reframe the global debate and place urbanization and cities on global and national agendas for policy and action. In this context, fresh political attention and emphasis on climate change and, increasingly, on urban inequality is very timely, for example as the theme of the April 2014 UN-Habitat World Urban Forum in Medellín, Colombia and the recently approved stand-alone goals on cities, inequality and climate change as part of the 2030 Agenda for Sustainable Development. In early 2015, New York Mayor Bill de Blasio, warned in his State of the City Address that with the on-going housing affordability crisis the metropolis was in danger of becoming a gated community, if on a grander scale.[17] In May 2015, the *New York Times* referred to "housing apartheid in New York." In 2014, the Prime Minister of France stated that French cities were "apartheid cities." These dramatic assertions—while a wake-up call to citizens and the political class— demonstrate the need for a well-rooted foundation for a global urban narrative, as well as a robust analytic framework within which the changing urban dynamics can be understood and appropriate responses can be devised.

Against this broader global background, this chapter presents a set of principles and objectives, which should form the foundation for a New Urban Agenda. These principles and objectives emerge from a diagnosis of current trends, future dynamics, and growing awareness of challenges and opportunities, which these changes present for the emerging futures of cities. They also arise from the main principles behind the SDGs and served for the definition of goals and targets.[18] Analytically, these principles and objectives reflect the relationships between *what exists*, i.e. stocks, and *what is changing*, i.e. flows, at many levels (Box 9.1).[19]

These principles must have as their overriding purpose to motivate governments, civil society, communities, and individuals of all ages and genders to join efforts and gradually usher in sustainable urban communities where inevitable imbalances must be addressed with the objectives of peace, sustainable prosperity and social justice. These principles must serve as guideposts for urgent structural transformation.[20]

Box 9.1: Stocks, flows and the sustainable urban development agenda

The concept of **stocks** and **flows** provides a prism to help think about urban "balances," which is the basis of sustainability.

Stocks include those of a physical nature — existing economic activities, infrastructure, environmental resources, the built environment, cultural heritage, as well as population scale and settlement patterns — together with those of an institutional nature, namely existing policies and regulations that are in place at local, national, and global levels.

Flows represent new additions to; and subtractions from, these stocks, partly fuelled by absolute growth in population, economic activity, or availability of natural resources. Flows can also be negative in the sense that stocks depreciate and decline over time, when finite quantities of resources are consumed, or when significant technological or climatic change reduces the value of the stock of resources. These processes are at the core of sustainability.

In many cases, these changing balances are threatening to disrupt the continued productivity and welfare of urban populations in rich and poor countries. Yet at the same time, it is precisely these imbalances, which provide the impetus for change. While there is a longstanding debate about whether globalization has led to a convergence between rich and poor countries, or even between their respective cities[21] where incomes and opportunities grow more unequal, and infrastructure deteriorates. This goes to show that for all the differences in incomes and living standards, cities today face broadly similar challenges. These in turn suggest that **there is a universal, urgent, and shared need for a New Urban Agenda**, which can be understood at the global level and be implemented by nations and cities.

9.1

An Analytic Framework for Urban Transformation and the Diversity of Outcomes

The central policy problem of cities is defining the frames for action across their territories, which typically also involve national and subnational institutions (Chapter 6). These *frames of urban action* must aim at maximizing the benefits of urbanization, not just to respond to problems and challenges at city/global level. This is important because any frame of action worthy of that name should address this double function.

Since multiple factors and processes are at play in any city, interactions between them will tell us whether the present is in balance or not. One of the imbalances which has received increased attention around the world is the issue of inequality, and even more so since the 2013 publication of Thomas Piketty's *Capital in the 21st Century*.[22] The book triggered widespread discussion about the relation between the rates of growth in private wealth and national economies. When the first is faster than the second, wealth accumulates[23] and inequality grows – as anyone would figure intuitively but which the author demonstrates with an array of statistics. This means that supply of urban infrastructure only matters in relation to the existence of demand, just as rents only matter in relation to income. Piketty implicitly recognizes the serious imbalances and strains already affecting many aspects of urban life in all countries. The housing afford-ability crisis in so many of the world's largest cities is in part linked to the mismatch between the existing stock and foreign property investors who price local demand out.[24] In effect, continued private wealth accumulation is now accompanied by a slowdown in global economic growth.[25] This is because inequality prevents low earners from realizing their human capital potential, which is bad for the economy as a whole.[26]

As discussed in the next section, urban areas can be analytically understood as consisting of six dynamic components: geographies, ecologies, economies, cultures, institutions, and technologies, all of which affect the sustainability of urban development. Each of these components is dynamic, not static. They are changing in themselves and most importantly in relation to one another. The dynamics of cities' emerging futures will result in new urban forms and new patterns of wellbeing and prosperity for people, new patterns of

Cities' emerging futures will result in new urban forms and new patterns of wellbeing and prosperity for people, new patterns of behaviour and resource use, and new opportunities and risks

behaviour and resource use, and new opportunities and risks. For example, recent changes in urban densities are occurring with the concomitant densification of downtown areas.[27] Less dense urban areas raise infrastructure costs and energy consumption, impair mobility and destroy agricultural land, as most evident already in many expanding secondary cities.[28] Calls for "spatial justice" opposing "unjust geographies" and environments are also becoming more vocal (Chapter 5), on account of harmful effects on specific segments of the population, such as pushing the poor out to dangerous areas and ever farther away from employment or basic services,[29] or dumping toxic wastes in residential areas.[30]

> Less dense urban areas raise infrastructure costs and energy consumption, impair mobility and destroy agricultural land...Calls for "spatial justice" opposing "unjust geographies" and environments are also becoming more vocal

9.2
Urban Dynamics and Imbalances

With the analytical components discussed in the previous section in mind, it is possible to identify a set of dynamic urban trends, which are already suggesting a path for the future.[31]

Geographies

Urban geographies are in the process of large-scale transformation. These changes are as follows:

◗ Continued urban demographic growth, particularly in developing countries.
◗ Rapid increases in the number and sizes of megacities and urban corridors, mostly in developing countries.
◗ Sustained population growth of secondary cities, in new patterns and configurations, with various relationships to primate cities and metropolitan regions. Between 2010 and 2025, secondary cities will be hosts to an additional 460 million residents compared with 270 million for megacities.[32]
◗ Stronger and more diverse demographic rural-urban linkages.[33]
◗ Expanded spatial scale of cities and towns, particularly in peri-urban areas, raising the costs of fixed infrastructure such as roads, water supply, sewerage, and drainage,[34] on top of higher costs of mobility and reduced access to employment and services.[35]

> Unregulated expansion of cities and the wasteful use of land that affects protected environments, with adverse effects on biodiversity and ecological systems

◗ Persistent loss of density in urban areas over the last several decades demonstrates that demographic and particularly spatial expansions go together. Less dense cities bring higher infrastructure costs, worsen mobility, and destroy scarce agricultural land.[36]
◗ Changing spatial patterns and location of adverse side effects, including on the environment, will rouse more calls for "spatial justice."
◗ The persistence of concentrated disadvantages[37] in some urban areas will also rouse calls for mainstreaming equality in development policies.

Ecologies

◗ Deteriorated quality of public goods (air and groundwater pollution, solid waste management).
◗ Drastic reduction of the "commons," privatization of public goods and the predominance of the "private" versus the public domain.
◗ Unregulated expansion of cities and the wasteful use of land that affects protected environments, with adverse effects on biodiversity and ecological systems (Chapter 5).
◗ Over 70 per cent of global greenhouse gas emissions originate in cities where both national wealth and vulnerable populations are exposed to climate change.[38]

Illegal landfill near city sewer.
Source: Strahil Dimitrov / Shutterstock.com

◗ More unpredictable weather patterns are putting infrastructure under higher stress, not to mention effects on agriculture and food security.[39]

◗ Slums should be understood as ecological environments lacking the infrastructure that would channel and manage natural resources.

Economies

The configuration of global, national, local, and household economies is undergoing rapid changes, with major consequences for intra-urban inequality and the formulation of the New Urban Agenda. These consequences include the following:

◗ A slowdown in macro-economic growth in most countries since 2008, which implies slower growth of the 70 per cent share of GDP produced in urban areas. The productivity and contribution of cities to national economic welfare cannot be taken for granted. As economic growth slows down in relation to the rate of return on private wealth, inequality increases.[40]

◗ An increase of some six percentage points in the share of income that goes to capital instead of labour, implying that more income will go to stock-owning urbanites and less to workers.[41]

◗ The changing configuration of urban economic activity in some regions, as lower labour costs and proximity to cheap energy and national resources will continue to encourage the mobility of firms and location of production in value chains[42] (although a significant shortening and regionalization of world value chains has been at work for the past year or two[43]).

◗ The emergence or acceleration of a new "geography of jobs," with shifts of employment in manufacturing and services from city to city, based on local attributes and potential.[44]

◗ The flexibility and dynamism of the economy can produce unpredictable effects on local conditions, particularly with regard to tax bases, which can affect government capacity to provide public goods.

◗ Ever more informal urban economies (Chapter 8), with faster rates of job creation than in the formal sector in most developing countries, but also in many developed nations.[45]

◗ Sharper polarization between increased private wealth and struggling public finance, leading to higher preference for private urban patterns and services in both rich and poor countries such as gated communities, private education, private security, and private transport.[46]

◗ Deterioration of housing conditions and slum expansion, as ineffective housing policies remain unable to keep up with demand for low-cost housing.[47]

◗ Current discussions on city competitiveness and branding have led to considerable investments in, for instance, Seoul or Bogotá, in bids to enhance international attractiveness.

Cultures

Cultures are the systems of values, which guide individual and social behaviour while also serving individual and collective lenses of interpretation. Both tangible and non-tangible cultures can also be identified by location, religious and other beliefs, and by other characteristics such as common historical roots or experience. The most significant cultural trends affecting cities and influencing the New Urban Agenda include the following:

◗ Mounting evidence of racial, ethnic, and class disparities in income, wealth, and opportunities, leading to competition and conflict among groups seeking upward mobility within cities.[48]

◗ Stronger presence of non-local groups in urban areas, resulting from immigration and differential access to employment opportunities.

◗ The multiplying effects of information technology on changing perceptions and rising expectations across cultural groups.

◗ More racial and religious confrontations, resulting in violence and fear of "the other," with emergence of ethnic enclaves within cities.

As economic growth slows down in relation to the rate of return on private wealth, inequality increases

Mounting evidence of racial, ethnic, and class disparities in income, wealth, and opportunities, leading to competition and conflict among group

◗ Ever-changing lifestyles and urban preferences affecting production and consumption patterns.

◗ Standardization or homogenization of urban cultures through spread of multi-national companies, architectural styles, and fashionable planning norms.

Institutions

Institutions are patterns and structures of organized behaviour, which persist through time, and are indispensable to the management and governance of any city. The most relevant institutional changes affecting urban areas and influencing the New Urban Agenda include:

◗ Adoption of activities and responsibilities beyond traditional local government mandates such as provision of health, education, or housing.

◗ Gradual mainstreaming of the equity agenda by local authorities in close collaboration with national governments.

◗ New urban configurations will bring changes to the size and form of institutions at urban, metropolitan and regional scales.

◗ Weaker local authority finances (especially in secondary cities) owing to undependable transfers from financially strapped central governments.

◗ Slow expansion in effective municipal tax bases, which fail to keep up with demographic growth.

◗ Lack of adequate coordination among national, provincial and local authorities, hampering both planning and implementation of urban policies.

◗ Inadequate or poorly enforced rules and regulations governing urban management due to weak, inefficient institutions and poor civil society participation.

Technologies

Urban uses of communication technologies can bring innovative enhancements to conventional utilities such as water supply, electric power, or transport, health, education, or communications. The most important technological trends affecting cities and influencing the New Urban Agenda include the following:

◗ More widespread application of ICT to urban management and governance, as well as for collection and dissemination of data and information in various areas such as land registration, municipal finance, urban planning and security.

◗ Continued financial depreciation and physical

deterioration of public infrastructure including roads, bridges, water supply, sewerage, drainage, lighting, and others in the absence of adequate expenditures for operation and maintenance.[49]

◗ More public-private partnerships for technology development.

◗ Increased access and expansion of technological development into new areas of urban life and management.

◗ Stronger connections between technology and other areas of development such as transport, energy or waste management.

◗ Use of technology to stimulate creativity and develop new forms of innovation.

Together, these dynamic trends suggest that the defining "stocks" and "flows" of cities are dangerously out of balance — with their changing geographies, ecologies, and economies — undermining the likelihood of sustainable patterns of urban growth. Resources are squandered, temperatures and sea levels are rising, and the numbers of people at risk of being left behind are staggering. These imbalances pose important risks for countries, whose economies increasingly depend on production of goods and services in urban areas, and underline the need for transformative change.

As urban cultures are undergoing accelerated changes, in part owing to worldwide mobility and new forms of diversity, it is also apparent that urban institutions are not robust enough to cope with these new social and cultural challenges. They lack political support and both the human and financial resources. And while available technologies can improve management, they are not robust enough, either, to make the difference in the rebalancing of these dynamics. Stocks are being stretched and flows are growing, in terms both of pace and magnitude.

All of the above raises the question of the sustainability of current imbalances in cities, i.e. whether increased pressures or intensity of occupation of land, demand for services, inadequacy of income, or the sheer low densities shaping the city that reduce the possibility to generate economies of agglomeration. How long can these unresolved problems be allowed to persist? How do we assess the risks of failing infrastructure or other calamities? How do cities and populations recover from uncontrolled urbanization and poor planning that have lasting, adverse consequences on sustainable development? Should we expect more and more frequent failures?

Gradual mainstreaming of the equity agenda by local authorities in close collaboration with national governments

New urban configurations will bring changes to the size and form of institutions at urban, metropolitan and regional scales

Cities function in an efficient, equitable, and sustainable manner only when private and public spaces work in a symbiotic relationship to enhance each other. Public spaces like this park in Paris are needed to sustain the productivity of cities, their social cohesion and inclusion, their civic identity, and their quality of life. Paris, France July 2015.

Source: Eduardo L. Moreno

What are the critical thresholds beyond which these problems become too complicated to manage? Infrastructure networks may be considered "too big to fail," but they will fail if remedial measures are not taken to assure stem depreciation which threatens continued operation. Similarly, those systems may be considered "too connected to fail," yet history has shown that single links can shut down vast networks.[50] Given the diversity of conditions across cities, we should also be asking whether the same critical thresholds appear in all cities or whether the vulnerability of different economics, ecologies, and institutions varies from place to place. Finally, all decision-makers must be keenly aware of the fact that if urbanization is not harnessed in a productive, equitable manner, cities stand to miss out on various opportunities for further socioeconomic development. For all their problems, urban areas also are the sites for potentially sustainable solutions and societal transformations.

This diagnosis suggests that unless a New Urban Agenda is given prominence in national policies, the future of many cities will become:

- More unequal;
- More spread out in terms of urban spatial form;
- Less productive due to lack of adequate infrastructure and weaker potential for of the generation of economies of agglomeration;
- Detrimental for the living standards of increasing numbers among the population, as, unfulfilled demand for essential services and access to public goods continues to grow;
- Challenging for adequate infrastructure provision, in terms of cost and access;
- More highly exposed to the effects of climate change and, more generally, to environmental risk, as carbon dioxide reductions fail to keep pace with ever-rising energy demand; and
- Challenging in terms of government, as existing institutions become overstretched in the face of persistent, diverse demands (businesses, elites and the poor). In short, this type of urbanization will be unsustainable on four critical grounds:[51]
  i. *Environmentally,* with its combination of cheap fossil fuel, heavy dependence on the motor car, ever-higher consumption of land and other resources, destruction of agricultural land and preserved natural areas;
  ii. *Socially,* with exclusive and segregated forms of urban development, with integration of the poor and migrants and sharing the benefits of urban life an ever-taller challenge as time goes by;
  iii. *Politically,* with the continuing domination of traditional modes of representation and leadership, which tend to concentrate power in the hands of the economic and social elites, disenfranchising large sections of the urban population;
  iv. *Economically,* with endless rises in the cost of living that is becoming prohibitive for many, pushing them ever farther into urban peripheries with poor access to decent employment.

At this point, it might be worth remembering that back in the early 1950s, "urbanization" referred to an active, not passive process whereby the city and its benefits, first and foremost housing and basic services, were understood as extending to all, including newcomers: *"urbanization, namely, planning for collective life,"*[52] as one eminent French urban geographer defined it at the time. In other words, "the city that plans" as opposed to "the planned city," (Chapter 7) — a locus for emerging, as opposed to closed-out, futures. With the Habitat III conference, the governments of this world face a unique opportunity to commit to turning "urbanization" into the active, deliberate, controlled, inclusive process[53] it was only two generations ago — instead of today's city-centred mass drift that sees hundreds of millions shuffling from rural to urban destitution. A sprawling city is divisive and unjust— the opposite of an inclusive, sustainable city. A city builds society through spatial and socioeconomic density, not divide. Cities can only do so over time but, again, it is for Habitat III to map out a path for emerging futures under the guidance of the Sustainable Development Goals (SDGs).

The governments of this world face a unique opportunity to commit to turning "urbanization" into the active, deliberate, controlled, inclusive process

A city builds society through spatial and socioeconomic density.... it is for Habitat III to map out a path for emerging futures under the guidance of the Sustainable Development Goals (SDGs)

9.3
Defining the Guiding Principles for a New Urban Agenda

Urban areas are the sites where most challenging development problems have been concentrating for decades, such as poverty, inequality and climate change effects. That is why policy and action at the urban level are part of the solution to global problems. Moreover, the linkage to global development goals strengthens the priority of urban issues within a set of competing development objectives, further legitimizing a focus on urban problems. Both of these reasons might be described as "thinking inside out," in the sense that the justification for attention to the urban level is not just for its own sake, but also for the resolution of broader global problems. Cities cannot grow on and on at the expense of supporting biosystems. In this sense, urban areas represent both the sites and the forces for transformative change as suggested in the principles outlined below.

This agenda itself rests on five principles that reflect a broad shift in strategic and policy thinking:[54]

i. *"Ensuring that the new urbanization model contains mechanisms and procedures that protect and promote human rights and the rule of law:* i.e. both the desirable outcome (sustainable cities) and the process to achieve it are consistent with the substance and purpose of international human rights instruments. Well-planned and managed urbanization, as supported by efficient legal and institutional frameworks, together with an equitable model for urban development, is an essential prerequisite for gradual fulfilment of human rights in cities, such as decent work, health care, adequate housing, access to basic services, a voice in public decision-making, transparent institutions and judiciary systems, among others. All of these contribute to the expansion of opportunities, prosperity and social justice for all.

ii. *Ensuring equitable urban development and inclusive growth:* the New Urban Agenda can bring transformative change when equity is brought to the core of development and guides informed decision-making to enhance the lives of all city dwellers. This can happen when all levels of government and development partners adopt equity-based approaches; not only for ethical reasons, but also because they realize these approaches are cost-effective. It also happens when information, institutions, infrastructure and economic development are part of an equation of inclusive urban growth.

iii. *Empowering civil society, expanding democratic participation and reinforcing collaboration:* the New Urban Agenda can promote transformative change through equal and balanced participation by men and women, young and old, as well as marginalized groups including the poor, the disabled, indigenous people, migrants and historically excluded groups. Such empowerment must be entrenched in law and proper enforcement thereof. Transformative change requires new avenues for political organization, social participation and the expression of cultural and sexual diversity to influence decision-making and change policy outcomes for the benefit of the majority. It also requires an effective local platform that allows for genuine and efficient collaboration between different levels of government and interested groups to steer urban growth towards more sustainable path.

iv. *Promoting environmental sustainability:* the New Urban Agenda can lead to transformative change when a critical connection is established between environment, urban planning and governance with regard to issues such as land and resource use, energy consumption, rural-urban linkages, material flows, land fragmentation and climate change. The need to integrate "green" growth considerations, "decoupling" of urban growth from resource use and its environmental impacts, and environmental strategies in long-term urban planning and management of cities[55] is a fundamental aspect of this guiding principle.

v. *Promoting innovations that facilitate learning and the sharing of knowledge:* the New Urban Agenda can result in transformative change if social and institutional innovations facilitate participatory learning. This can happen when a supportive learning environment is created, people's and institutions' capacities

Ensuring that the new urbanization model contains mechanisms and procedures that protect and promote human rights and the rule of law

Empowering civil society, expanding democratic participation and reinforcing collaboration

are developed and appropriate tools are employed; when long-term collective, collaborative and cumulative learning is connected to knowledge in support of the achievement of desirable outcomes and the monitoring of goals and targets."[56]

These shifts cut across long-established functional, professional, and institutional boundaries and suggest a set of integrating considerations, which can be formulated as principles for policy and action, which can address the imbalances, identified above.

9.4
Regional Urban Challenges and the New Urban Agenda

Urban areas themselves can be distinguished by demographic size, rate of demographic or spatial growth, by their historical origins, by their economic composition or structures, by their linkages to the global economy, or by their degree of informality, to mention a few defining characteristics. Urban challenges can be separated into two broad categories: developed versus developing countries, and within those categories, primate versus secondary cities. This simplified typology is not intended to be exhaustive but rather illustrative of some of the differences in urban conditions and challenges which exist and would influence policy recommendations and specific solutions of the New Urban Agenda.

The concepts of stocks and flows earlier described is still used to suggest that the balances and imbalances which exist in these regions and cities depend heavily on the historical processes, institutions and legacies of urbanization in different countries (stocks) and the rates of demographic and spatial growth as well as new policies, actions and investments (flows). The levels of GDP per capita of countries are used as proxies for level of development.

Developed countries: Urban opportunities and challenges

The longer historical path of urbanization of developed countries implies ten various major characteristics that the policy outcome of Habitat III needs to consider:

◗ Older stock of urban infrastructure and building, with associated decline and depreciation, with financial and environmental consequences. New York City for example has more than 1,000 miles of water pipe which is more than 100 years old, while the Underground in London has similarly passed its centennial anniversary.

◗ More developed public and political institutions and local capacities, with higher levels of trained staff and municipal revenues, reflected in the share of local revenue as a portion of total public revenue.

◗ More defined urban spatial structure including residential segregation by income, spatial sprawl with higher demand for transport and mobility, such as in suburban Paris.

◗ Greater installed economic interests and productive capacities, reflecting historical legacy of industrial revolution, with higher levels of accumulation and capital formation. The downside of this legacy is associated with vulnerability to changes in global economy, de-industrialization, and higher unemployment, examples such as Detroit or Spain..

◗ Established modes of urban finance and resource mobilization with higher accountability levels.

◗ Important levels of human capital investment, particularly at higher levels of education.

◗ Populations who are increasing their average and median ages, leading to the need for new kinds of social policies to meet their particular requirements in health care, transportation, or leisure, to mention a few.

◗ New forms of marginalization, particularly with the lack of economic opportunities for increasing shares of youth and immigrants within their urban populations.

◗ Slowing down of rates of demographic growth due to lower birthrates which in turn often reflect reduced economic growth.

◗ Large waves of immigration to Western Europe from Africa, the Middle East, and Eastern Europe, as well as continued high immigration to the US from Latin America.

Differences in urban conditions and challenges which exist and would influence policy recommendations and specific solutions of the New Urban Agenda

More developed public and political institutions and local capacities, with higher levels of trained staff and municipal revenues

Nearly half of the cities in developed regions are shrinking, some keeping good quality of life and others with important deteriorations

Historical patterns of production, employment, and incomes are changing in the face of shifts in the global economy

What these mean in practice is that developed countries and cities have in general more solid and efficient institutions with stronger levels of coordination across tiers of government. National incomes are higher, and in many cases there are extensive public expenditures for social services and social security in these countries. Nearly half of the cities in developed regions are shrinking, some keeping good quality of life and others with important deteriorations. Frequently there are highly entrenched patterns of intra-urban inequality, concentrations of private wealth, and relatively slow growth of opportunities for income growth and social mobility in a rather polluted ecological context and deteriorating infrastructure. Inequalities are especially visible in the spatial construct of cities, with associated worsening of relations between groups and a growing incidence of violence, particularly with a growing immigration and racial, ethnic, and religious diversity. The cities of industrialized countries also face urgent problems of environmental pollution, waste management, and protection of green space. In some cases they have become dangerous heat islands which have to be remedied by city level environmental policies. The New Urban Agenda needs to take into consideration these specific features of cities in developed countries

While urban areas in more advanced regions have a longer historical trajectory as industrialized cities suggested above, it is notable how much historical patterns of production, employment, and incomes are changing in

the face of shifts in the global economy, as indicated in earlier chapters.[57] Earlier assumptions about the stability of local economies and the continued benefits coming from installed infrastructure, firms, and labor forces have been severely disrupted over the last several decades, with a first wave coming from the reconstruction of East Asian economies such as Japan, Korea, and Taiwan and their growing share of world trade which challenged producers in Europe and North America in many sectors, and a second wave in the 1990s with the liberalization of national economies following the Washington Consensus. The third wave is from globalization itself as new patterns of outsourcing have completely transformed global value chains in most productive sectors.[58]

These changes have had particularly heavy impacts on secondary cities in developed countries. Whereas many secondary cities were able to economically specialize in certain products and develop a comparative advantage at the national level over time, they proved to be overly dependent on vertical specialization which characterized their economic organization. Economies of scale worked within a framework of vertical specialization, but when these industries were challenged by lower labor costs in Latin America and later in Asia, they were unable to compete. De-industrialization first hit North America and Europe and later Latin America as jobs moved to China and other African and Asian countries. In contrast, secondary cities with heavy investments in human capital have been able to adjust to the spread of new technologies and have been able to shift from their focus on single

People with face masks and protections are increasingly seen in various Asian cities. This family on a motorbike is from Hanoi, where levels of pollution for this motorized way of transport are becoming higher and higher. Hanoi, Viet Nam, May 2014.

Source: Eduardo L. Moreno

Box 9.2: Primate and secondary cities in developed nations and the New Urban Agenda

Over the past three decades or so, developed countries have undergone large-scale industrial restructuring as a result of trade liberalization, the end of communism and the rise of Asian economic power. Relocation of manufacturing to low-wage countries has combined with lengthening value chains to de-industrialise numbers of secondary cities while primate conurbations remained privileged locations for the services sector. Taken together, the differences between primate and secondary cities in developed countries can be summarized as follows:

1. Primate cities are demographically larger and therefore tend to feature more economic diversity; they can take advantage of economies of agglomeration, and thus are more productive, with higher income levels.

2. Strong economic performance generates higher average incomes, but also high-income inequality and differences in social mobility and other opportunities across cities of different scales.

3. High inequality leads to social conflicts between income levels, racial, ethnic, and religious groups, and a growing duality between those who benefit from urban scale and those who do not.

4. While larger cities may have stronger institutional capacities to manage these conflicts, the scale and multipliers of such conflicts are greater.

5. With some exceptions, primate cities tend to have more robust municipal institutions and revenue bases, and thus are more able to finance a fuller range of infrastructure and social services.

6. Even though some secondary cities feature outstanding institutional capacities, most, however, suffer from weaker institutional and financial bases and are, thus, more vulnerable to infrastructure failure and natural disasters.

industries and to diversify. This is particularly true for industries within the knowledge economy where skills can work across sectors and where agglomeration economies are more important.[59]

The implication of these economic changes is that shifting structures of production have major consequences for local tax bases, for population growth, for the availability of finance for public services, and for patterns of accumulation, savings, and capital formation. The economic dynamism of many secondary cities, therefore, has not proven to be able to withstand global economic change and volatility. While some cities are able to prosper, others collapse, with the average level of economic prosperity in secondary towns considerably below average wage levels in primate cities whose more diverse and larger economies are more likely to withstand external shocks (Box 9.2 presents the difference between primate and secondary cities in developed countries).

Developing countries: Urban opportunities and challenges

In contrast to developed countries, the developing countries face another set of urban challenges that are to be considered when preparing the New Urban Agenda. Although these problems are not homogeneous they affect cities in different levels and intensities, including:

◗ Continued rapid urban demographic growth.
◗ Low levels of infrastructure provision and little improvement, particularly in sanitation and road connectivity among cities.
◗ Ineffective housing policies, and particularly poor urban planning, with resulting high shares of urban residents living in slums.
◗ De-densification of urban areas resulting in urban sprawl and increasing demand for transport.
◗ Poor provision of green and public spaces, including streets networks.
◗ High levels of urban poverty, growing levels of intra-urban inequality, and marginalization of various groups including women.
◗ Low levels of human capital.
◗ Slow growth of formal sector employment, with high levels of informality and unemployment, particularly among youth
◗ Declining environmental quality
◗ Weak urban governance and poor provision of public goods.
◗ Weak municipal finance, with low revenue base.
◗ Weak ability to prepare for and withstand disasters.
◗ Weak management of potentially productive rural-urban linkages.[60]

The differences between primate and secondary cities are greater in developing than in developed countries, reflecting generally lower incomes, less developed municipal institutions with weaker capacities, and higher rates of demographic and spatial expansion. The

Shifting structures of production have major consequences for local tax bases, for population growth, for the availability of finance for public services

The differences between primate and secondary cities are greater in developing than in developed countries

Box 9.3: Primate and secondary cities in developing countries and the New Urban Agenda

Secondary urban areas feature increasingly diverse conditions, reflecting geography and shifting economic opportunities.[61]

1. Just as many urban areas started as trading or administrative posts during colonial times, today many secondary cities are growing in response to new opportunities, including across borders (e.g. natural resources for export).

2. Domestic patterns have been transformed by rapid expansion of small towns, as they turn into transport corridors or development hubs, transforming local and regional economies, and creating new, emergent urban forms.

3. At the same time, rates of demographic growth are often higher in secondary compared with primate cities with attendant stronger demand for housing, infrastructure, jobs and social services. This "secondary cities mismatch" is the gap between demand and the capacity of public institutions and the local economy to meet it.

5. Despite their critical role in urban hierarchies and in rural-urban linkages, the question of institutional capacities remains. Public sector weakness is reflected in uncontrolled sprawl and expansion of settlements on peri-urban fringes, resulting

in rapid declines in overall density and associated higher costs of extending infrastructure in financially strapped municipalities.

6. Most secondary cities rank low against UN-Habitat's City Prosperity Index and much remains to be done in terms of quality of life, infrastructure and the environment. Production of goods and services is still low, as a reflection of underdevelopment. Historical structural problems, chronic inequality of opportunities, widespread poverty, inadequate capital investments in public goods, and lack of pro-poor social programmes characterize these cities.[62]

Most secondary cities rank low against UN-Habitat's City Prosperity Index and much remains to be done in terms of quality of life, infrastructure and the environment

Innovations demonstrate that real change is possible if institutionally supported and imaginatively designed. Latin America has become a major locus of innovative urban management

challenge for secondary cities is the degree of recognition and support they are given within the broader framework of national urban policies, keeping in mind that their populations are often expanding faster than those of primate cities. The most defining features of these cities are presented in Box 9.3.

Developing countries: Observing differences through a regional lens

While the differences between cities in developed and developing countries are significant, further understanding can be achieved through looking at the developing countries through a largely regional typology. While many typologies have been developed, this subsection uses a typology linking the rural and urban sectors with the scale of urban growth and the absorptive capacity of urban areas. Four categories of countries are identified:

1. **African countries**, with rapid recent urbanization, fuelled by rural migration, with weak capacity to respond to the demands for housing, infrastructure, decent employment and social services.[63] Lack of manufacturing is coupled with scarce public services and severe poverty. Towns are more likely to be trading centres with close links to agriculture, the challenge being to turn them to production centres, with the tax revenues required for infrastructure. Employment is mostly informal, featuring low profitability and weak job creation potential. Therefore, the urgent need for

economic transformation calls for job creation and improved electricity, water, and sanitation supplies, with basic services and infrastructure improving densities, and attendant energy and greenhouse emissions savings.

2. **Latin American countries** feature historic urban centres with large contributions to GDP, with supporting infrastructure and social services. The economy has slowed down after the bouts of dynamism of the 1950-1980 period, rural-urban migration has diminished sharply and many countries have achieved a demographic transition. Peru, Uruguay, Panama and Mexico have managed significant reductions in poverty but inequality is steep in most urban areas[64], as middle classes expand but larger numbers still live in precarious conditions. Low densities and sprawl heighten public transport costs and marginalise significant shares of the population in Mexico City, São Paulo or Buenos Aires. Nonetheless, important urban management innovations have been undertaken, for instance, in Curitiba and São Paulo, Brazil; in Bogotá and Medellín, Colombia; and Mexico City and Guadalajara, Mexico. These innovations demonstrate that real change is possible if institutionally supported and imaginatively designed.[65] Latin America has become a major locus of innovative urban management.

3. **Large South Asian countries** - Bangladesh, India, Pakistan - feature massive, expanding urban populations in mega-cities such as Dhaka, Mumbai, Delhi,

Karachi, or Lahore, as well as in growing numbers of secondary cities (500,000 to one million) an thousands of cities with populations under 500,000. In face of the daunting magnitude of projected urban demographic growth over the next 20 years,[66] accommodating the needs of these populations through planned city extensions is going to be a challenge. In India, urban areas already contribute more than 60 per cent of GDP and an extra 300 million new urban residents are projected by 2050, leading to a call by the Indian Government to build 100 new cities over the period. The attendant amount of additional greenhouse gases would have consequences on climate change. The alternative, if challenging, is to build denser, low-energy, low-infrastructure cities. Central to this challenge are the twin bottlenecks of municipal finance, i.e. lack of tax revenues to provide urban services, and infrastructure finance for transport, electricity, communications, water supply, and sanitation in support of production.[67] These problems are also found in Bangladesh and Pakistan, municipal institutions and finance must be strengthened for the sake of effective urban management.

4. **Fast growing, rapidly urbanizing countries** as a category takes in Tunisia and Turkey on top of China,

Korea, and Malaysia. Rural migration has taken vast proportions in China, where more than 50 cities with populations over one million, stimulate the economy, particularly the construction and manufacturing sectors.[68] Korea and Malaysia have also demonstrated their economic dynamism and ability to compete in global markets.[69] As in Latin America, East Asian cities have demonstrated their interest in innovative urban management, most recently with moves to reduce air pollution and traffic congestion.[70]

In conclusion, the principles presented in this chapter should be the foundation of a New Urban Agenda. They reflect broader shifts in global thinking. While general and universally applicable, they also must fit within a widely diverse panorama of countries and cities, as suggested in the typologies presented above which distinguish developed from developing countries, primate and secondary cities within both categories, and regional differences as well. Each lens suggests some of the specificities, which need to be considered in the formulation of a compelling and credible New Urban Agenda that needs to be problem-oriented, programmatic and practicable if our emerging futures are to be sustainable for all.

New Urban Agenda that needs to be problem-oriented, programmatic and practicable if our emerging futures are to be sustainable for all

Notes

1. Global Commission, 2014.
2. World Bank, 2009b.
3. Brenner, 2014.
4. Moser, 2009.
5. Soja, 2000.
6. Gutman, 2011.
7. United Nations, 2014.
8. Gutman, 2011.
9. UN-Habitat, 2013g.
10. McKinsey, 2011.
11. Cohen, 2008.
12. Cohen, 2012b.
13. Miller and Cohen, 2014.
14. IPCC, 2014.
15. Creutzig, Baiocchi, Blerkandt, Pichler and Seto, 2014.
16. Cohen, 2014.
17. DiBlasio, 2015.
18. These principles refer, for instance, to the "triple helix" approach of (i) sustainable development, (ii) protection of the Earth's life-support system and (iii) the fundamental notion of planetary wellbeing.
19. Cohen, 1998.

20. Hirschman, 1958.
21. Cohen, 1996.
22. Piketty, 2013.
23. Harvey, 2006.
24. The New York Times, 2015; Sassen, 2014.
25. UN-Habitat, 2014d.
26. OECD, 2015.
27. Angel, 2015.
28. Roberts, op.cit.
29. Soja, 2010.
30. Bullard, 2005.
31. Gutman, op.cit.
32. Roberts, op.cit.
33. Tacoli, 2012.
34. Angel, op.cit.
35. Bertaud, 2014b.
36. Angel, op. cit.
37. Patrick, 2013.
38. Rosenzweig, Solecki, Hammer and Mehrotra, 2012.
39. Increased drought coupled with heavier monsoon rains in India and Pakistan have reduced agricultural production and placed growing strains on rural households.

40. Piketty, 2013.
41. OECD, 2014, UN-Habitat and CAF,2014.
42. Milberg and Winkler, 2013.
43. CEPII.
44. Moretti, 2013.
45. For example, the informal sector now contributes some about 80 per cent of the Indian economy and similar data is registered in many African cities and Arab economies. WIEGO data, UN-Habitat, 2010d.
46. Piketty, op.cit, Stiglitz, op.cit.
47. Buckley, Chisholm and Simet, 2014.
48. Tippett, Deweever and Rockeymoore, 2014.
49. Center for the Urban Future, 2014.
50. Obernauer, 2015.
51. UN-Habitat, 2014d.
52. « (…) l'urbanisation, c'est-à-dire un aménagement de la vie collective» in George, P. (1952).
53. An apt example being Ouarzazate, Morocco, on the edge of the Sahara: in this marginal historic landmark turned boomtown, every single plot in yet-unbuilt

residential developments already comes with connections to water and sanitation networks, with sockets for electric power supplies from across the Atlas mountain.
54. UN-Habitat and CAF,2014..
55. UNEP, 2013b.
56. UN-Habitat and CAF,2014..
57. Moretti, 2014.
58. Milberg and Winkler, op.cit.
59. Moretti, op.cit.
60. Satterthwaite, 2006.
61. Roberts, op.cit.
62. UN-Habitat, 2012.
63. UN-Habitat, 2010d.
64. UN-Habitat and CAF,2014.
65. Agencia de Cooperación e Inversión de Medellín Y el Area Metropolitana, 2011 and Lerner, 2005.
66. Asian Development Bank, 2008.
67. Government of India, 2011b.
68. Miller, 2012.
69. Khloe and Roberts, 2012.
70. Roberts, 2006.

10

The New Urban Agenda

QUICK FACTS

1 The diagnosis of cities with respect to processes of globalization and national development, and the analysis of the most important transformations since Habitat II provide the basis to define some of the key elements of the New Urban Agenda.

POLICY POINTS

1 The New Urban Agenda must be forward looking, and focused on problem solving with clear means of implementation. It should adopt a city-wide approach to development with concrete strategies and actions, introducing clear funding mechanisms and effective means of monitoring.

2 The agenda conveys a sense of urgency in the implementation of policies and actions that cannot depend on political schedules or opportunistic moments, but in clear and well-defined implementation plans.

3 The new agenda will seek to create a mutually reinforcing relationship between urbanization and development, with the aim that they become parallel vehicles for sustainable development.

4 The New Urban Agenda should establish links to other global agreements and agendas and to be clearly connected to the 2030 Agenda for Sustainable Development.

5 The vision of the New Urban agenda can be steered to induce transformative change promoting a new urbanization model that is universal and adaptable to different national circumstances.

NEW URBAN AGENDA

> Must be **BOLD,** forward thinking and tightly focused on problem solving

> It should have clear means of **implementation**

> Adopt a **city-wide** approach

> Propose **concrete** strategies and actions

> Create a **mutually reinforcing** relationship between urbanization and development

> **Support** a paradigm shift

> Devise **well-activated** set of strategies

> Transfom **urbanization** into a tool of **development**

> Constitute a framework of **cooperation**

> Convey a **SENSE OF URGENCY**
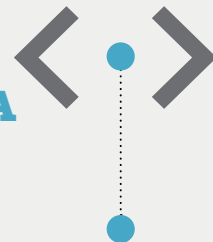
NEW URBAN AGENDA ‹ • › SUSTAINABLE DEVELOPMENT G⊙ALS

Build on **ACTION PLANS, STRATEGIC GOALS** of 2030 Development Agenda

5 GUIDING PRINCIPLES FOR THE NEW URBAN AGENDA

4 COMPONENTS

> National Urban Policies
> Rules and Regulations
> Territorial planning and Design
> Municipal Finance

7 LEVERS

> Planned city extensions
> Planned city infills
> Land readjustment
> Public space planning and regulations
> Housing at the centre
> Access to basic services
> Global monitoring framework

SUSTAINABLE CITIES

UN-Habitat's City Prosperity Initiative (CPI)

> Monitoring and Reporting NUA + SDGs
> Systemic approach to the city
> Incorporate new analytical tools (SPATIAL INDICATORS)
> Multi-scale decision - making

CPI

- Urban Governance and Legislation Index
- Air Quality Sub Index
- Institutional Capacity Sub Index
- Accountability and Transparency Sub Index
- Participation Sub Index
- Productivity Index
- Economic Growth Sub Index
- Waste Management Sub Index
- Economic Agglomeration
- Natural Resources Management Sub Index
- Employment Sub Index
- Environmental Sustainability Index
- Infrastructure Development Index
- Housing Infrastructure Sub Index
- Gender Inclusion Sub Index
- Social Inclusion Sub Index
- Economic Equity Sub Index
- Equity and Social Inclusion Index
- Health Sub Index
- Quality of Life Index
- Social Infrastructure
- ICT Sub Index
- Education Sub Index
- Safety and Security Sub Index

Unsustainable imbalances between geography, ecology, economy, society, and institutions are making the "emerging futures" of too many cities unpromising. Rapid demographic and spatial growth, coupled with the expansion of economic activities and the environmental footprint of cities, have triggered dynamics which public institutions are unable to manage effectively.

While in some cities, for some people, former New York City Mayor Bloomberg's "urban renaissance" is occurring, for most of the world this is absolutely not the case. Urban policy failure has been spectacular in its visibility and devastating in its impacts on men, women and children in many cities. Passive (or "spontaneous") urbanization as a model has proven to be unsustainable. As noted in previous chapters, there are too many people living in poor quality housing without adequate infrastructure services such as water, sanitation, and electricity, without stable employment, reliable sources of income, social services, or prospects for upward social mobility. Prosperity was once described as a tide that raised all boats, but the impression today is that prosperity only raises all yachts.

> Unsustainable imbalances between geography, ecology, economy, society, and institutions are making the "emerging futures" of too many cities unpromising

As indicated in Chapter 9, *Stocks* of all kinds are being depleted faster than the *flows* (or novel stocks) being created to replenish. In developed countries, the stocks of infrastructure are deteriorating for lack of maintenance and in many cases, obsolescence, with New York City alone having more than 1,000 miles of water pipes more than a century old. Similar conditions can be found in European cities. In addition, efforts to protect the environment have failed to stop water and air pollution, and substantially reduce solid waste. As for developing countries, they often lack the stock of housing and infrastructure that would meet the basic needs of urban populations, as shown in Chapter 3. This is certainly true in Africa and South Asia. Such shortfalls can also be found for some specific kinds of infrastructure such as potable water, the marginal cost of which is increasing in most cities in both developed and developing countries. Lack of sanitation is all-too visible in many cities.

> Prosperity was once described as a tide that raised all boats, but the impression today is that prosperity only raises all yachts

The spatial extent of many cities, both in developed and developing countries, has grown on average two to three times more than their population worsening urban sprawl and mobility. As stated in Chapter 7 of this report, concomitant to urban expansion, population densities have been dramatically reducing thereby compromising economies of agglomeration and delivery of infrastructure and public goods. In developing countries, urban spatial expansion is often highly informal and poorly laid out, without appropriate road infrastructure, sustainable housing or adequate public space.

While the unsustainability of this type of urban growth and the incidence of these problems vary across cities, scarcity and deprivation are not to be found solely in one sector, such as housing: instead, they cut across sectors and have negative effects at the household, community, and city-wide levels. Of particular concern is the fact that the patterns of deprivation observed in slums in the South just like various forms of exclusion and marginalization in the North, are cumulative and reinforcing, resulting in deepening poverty and intra-urban inequality (as discussed in Chapter 4), and the phenomenon has become inter-generational as well. Spectacular examples, such as the collapse of Detroit, US, or the *banlieues* outside Paris, show that these problems generate patterns of cumulative causality frequently resulting in high youth unemployment, frustration, crime, and violence.

> The patterns of deprivation observed in slums in the South just like various forms of exclusion and marginalization in the North, are cumulative and reinforcing

These dynamics reflect the inadequacy of existing stocks of services and a lack of job opportunities in the face of an ever-growing flow of unsatisfied demand. Neither markets nor public policies are working effectively to provide the goods, infrastructure, social services, and employment for increasing urban populations. In some cases, like housing, both market and public policy solutions are ineffective, as suggested by the thousands of empty apartments designed and built without regard for other dimensions of urban life and with poor concern for affordability.[1] Gaps in infrastructure result in damages to urban ecologies, including the pollution of air, land, and water, while also generating emissions, which contribute to climate change.

This chapter presents the key elements of what a **New Urban Agenda** could comprise within the broader global goals of sustainable development and structural transformation. The diagnosis of cities in the current processes of globalization and national development, together with an analysis of the most important transformations since Habitat II, provide the basis from which some of the constitutive elements of this agenda can be defined. The underlying principles, as elaborated in Chapter 9, provide a firm foundation for the agenda, with clear guidance and recommendations.

The New Urban Agenda must be bold, forward looking, and tightly focused on problem-solving with clear means of implementation. This major programmatic docu-

ment should establish links to other global agreements and agendas,[2] with explicit connections to the 2030 Agenda for Sustainable Development in order to ensure consistent, efficient and inclusive implementation, follow-up, review and monitoring.[3] Building on the achievements and shortcomings of the 1996 Habitat Agenda, which was more prescriptive and sector-based, the outcome document of the Habitat III conference should adopt a city-wide approach to development with concrete strategies and actions, setting out clear funding mechanisms and effective means of monitoring the results.

The New Urban Agenda must seek to create a mutually reinforcing relationship between urbanization and development, the aim being that they become joint vehicles for sustainable development.[4] The agenda should also facilitate collaboration with international arrangements and mechanisms regarding climate change.[5]

In this sense, the New Urban Agenda must set out the conditions needed to support a paradigm shift towards a new (i.e. positive) model of urbanization that can better respond to the challenges of our time. Issues such as inequality, climate change, informality in the urbanization process and in job creation, and the unsustainable forms of urban expansion, are all of pressing importance. The New Urban Agenda must respond to these challenges, devising a well-articulated set of strategies that will transform urbanization into a tool of development at city and country level. Implementation of the agenda must add value and promote shared prosperity within a framework of human rights. Although the primary focus must be on medium-term structural transformation, it will be for the agenda at the same time to identify a set of priorities to steer policies and actions in the immediate future; in this sense, the New Urban Agenda must convey a sense of urgency— the urgent implementation of policies and actions can longer depend on political schedules or opportunistic moments, but instead it should be set in clear, well-defined agendas.

Genuine progress is in order — every single day, and starting now.[6] As experienced every single day by too many urban dwellers around the world, these issues cannot wait. Cities are in trouble and need change. The New Urban Agenda must respond to the critical challenges facing cities today, including the positive, transformative force of urbanization with all the great opportunities it can bring. A properly designed and implemented New Urban Agenda can help steer cities away from spontaneous, unsustainable, inefficient, costly and outdated patterns of urbanization. The New Urban Agenda can generate strings

of mutually reinforcing effects which have the capacity to change the character of cities, contributing to a positive urban structural transformation. In turn, this dynamic process can activate a pattern of urban growth that can positively impact other spheres of national development.

The New Urban Agenda must also constitute a framework for cooperation and accountability in a way that favours much-needed local, national and international policy consistency in the area of sustainable urbanization. It should be recognized that any new agenda for action is not written in stone, but will only become alive and meaningful when it is adapted to specific circumstances by the people who will be affected by it.

The New Urban Agenda must be both a proposal and an incitement: on top of identifying priority areas for urgent policy and action; it must elicit national and local engagement, with governments and civil society concurring along the following line: "This is *our* collective business. We will take these suggestions to heart and see how they can be addressed in our own institutional and cultural circum-

The New Urban Agenda must be bold, forward looking, and tightly focused on problem-solving with clear means of implementation.

The New Urban Agenda must set out the conditions needed to support a paradigm shift towards a new (i.e. positive) model of urbanization

Box 10.1: The New Urban Agenda - defining features

- Perceived as universally applicable.
- Flexible, i.e. acknowledging differences among regions, countries, and cities, demonstrating how those differences can be addressed by a similar set of objectives and strategies.
- Convey a sense of urgency and at the same time propose medium-term structural changes.
- Link normative objectives to concrete commitments and actions which can act as catalysts of positive change.
- Engage governments and public opinion, together with civil society and non-government organizations, for the sake of a broad-based, shared agenda with global advocacy.
- Pass the test of common sense, and use globally understood images and narratives.
- Combine the objectives of building prosperity for everyone, while focusing special attention on the most needy. In this sense, the Agenda must combine poverty-fighting, productivity, equity, and environmental sustainability, and stop well short of suggesting that there can be trade-offs between them.
- Based on a global monitoring mechanism, adapted to national and local conditions, that provides a general framework for periodic assessments of the various dimensions of urbanization and their impacts.
- Linked to Goal 11 and other SDGs indicators and targets that include an urban component

stances." Some local resistance— to the substance of the agenda and the assertion that adopting these priorities will be positive for all countries— should be welcomed. This is because the issues addressed are simply so important for nations and cities that the solutions cannot be left for international organizations to identify. Adoption and implementation is, above all, *a local political process* requiring local political agreement and engagement.

An important consideration in agenda-setting is the fact that there is no "blank slate" on any of the issues to be addressed. This is not an exercise in scientific discovery of a new disease or a new remedy. Rather, it is above all a reflection on the way cities have developed over centuries, and how their present conditions and governance are affecting the future prospects of cities, nations, and the world in the medium and long terms. This recognition of the importance of history is critical both to a proper understanding of the starting point, and to asking the central questions: Where do we stand now? Where do we need to go? How can we do it? Choosing a historical starting point is also critical to any later assessment of the success of a new urban agenda. How far countries and cities advance in the suggested direction will depend on their own specific starting points, reflecting institutional capacities, material resources, and the political mandates for change which their respective polities are ready to support.[7] Progress will also depend on the commitment of local and national governments with regard to defining baselines, benchmarks and specific targets, and to measuring progress in implementation of this agenda, identifying possible setbacks and constraints.

The New Urban Agenda starts from a single fact: the Earth is not flat, it is urban. This fact reflects the historical reality that countries have not improved socioeconomic development and welfare without urbanizing. The *route to progress goes through urban areas*, which are the sites of enhanced productivity, creativity, cultural and scientific innovation, and political democracy. Historically, urbanization has been seen as an effective defence against poverty in rural areas, and it is also for the New Urban Agenda to enhance two-way connections instead of driving wedges between cities and rural areas through policies and actions. As the Habitat III Issue Paper on *Rural-Urban Linkages* states: "urbanization is a process that profoundly reshapes peri-urban and rural areas and has the ability to both positively and negatively affect their economies, inclusiveness and sustainable development,"[8] the new agenda must define the general conditions for

local collaborative development and functional linkages across territories. While a single agenda cannot be uniformly applied to all countries, the fact that urbanization is a transformative force (Chapter 2) cannot be denied. What it means practically, and the way it is approached locally, will necessarily vary. In this sense, it is useful to remember that island- and land-locked states, countries with significant rural populations and with other specificities will necessarily have different development strategies. One size cannot fit all.[9]

10.1
The Components of a New Urban Agenda

As mentioned before, the New Urban Agenda must focus on implementation, building on the action plans and strategies of the 2030 Agenda for Sustainable Development. If it is to be genuinely transformative, the agenda must rely on the key principles presented in Chapter 9 and include a set of concrete components and levers for change.

◗ The **key principles** of the New Urban Agenda can be understood as normative directions for the transformation of cities, enabling these to achieve sustainable goals as elaborated below, while also specifically contributing to the achievement of the 2030 Agenda for Sustainable Development and its 17 specific Goals as agreed by the United Nations. These principles have been formulated in the light of the transformative shifts promoted by the 2030 Agenda to guide development programmes at country and city levels. They do not stand alone as isolated principles, but are rather informed by several broad-based international agreements and declarations.[10] These principles respond to the questions: What is the direction of transformation? Where is it going? How does it connect to the world that we want?

◗ The **components** of the New Urban Agenda are focused on desired directions of change for urban areas in the context of national development. These
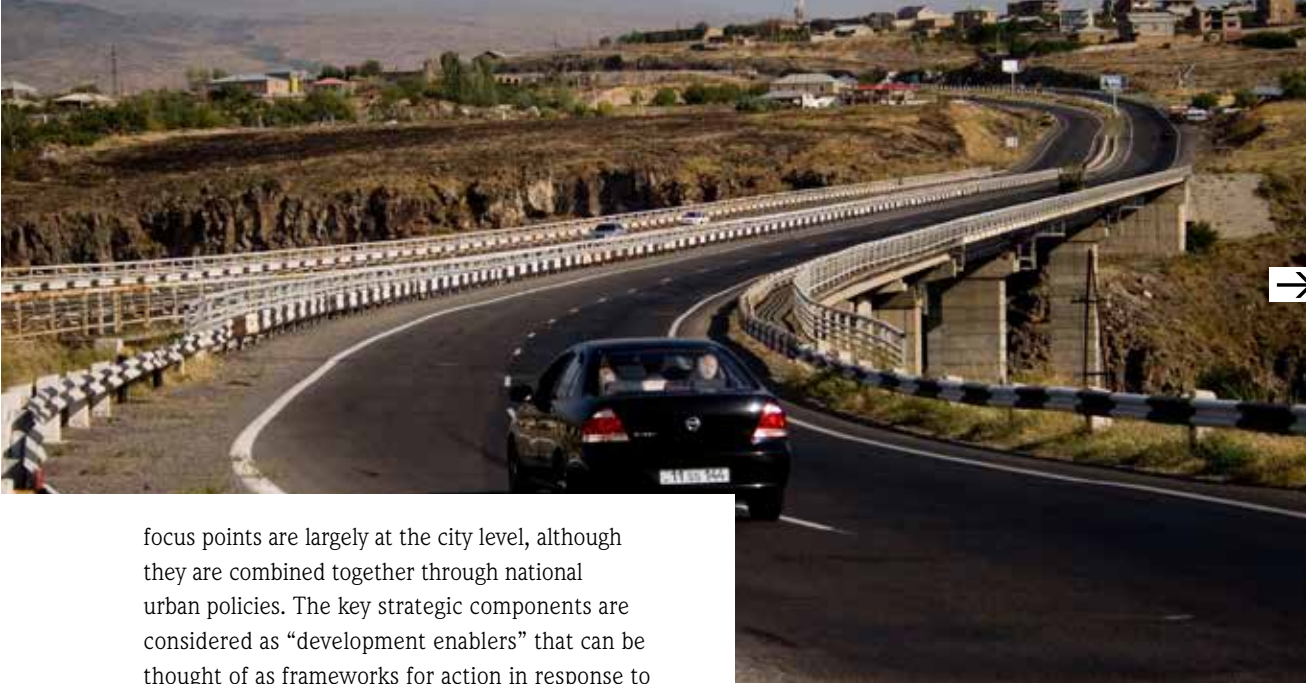
focus points are largely at the city level, although they are combined together through national urban policies. The key strategic components are considered as "development enablers" that can be thought of as frameworks for action in response to the multiple challenges raised by the often chaotic forces of urbanization; and also, at the same time, as frameworks for action to harness the opportunities that the same urbanization brings. The New Urban Agenda highlights three development enablers, which are jointly referred to as a "three-pronged" approach: (1) rules and regulations; (2) urban planning and design; and (3) municipal finance mechanisms. Along with national urban policies, these three development enablers underpin planned urbanization and they can generate across-the-board sustainable urban development. The components overall respond to the question of **what** needs to change.

◗ The **levers** of the New Urban Agenda include the specific policies and actions required to effect change. Levers are considered as "operational enablers" that aim to bolster particular aspects of transformation in cities through key strategic interventions. Levers support cities in their efforts to implement concrete actions, laying the foundation for improved vertical integration across different tiers of government.[11] The five proposed operational enablers include: (1) planned city extensions; (2) planned city infills; (3) land readjustment interventions; (4) public space regulations; and (5) the monitoring of the New Urban Agenda. It is for public authorities to adapt these operational enablers to their respective circumstances. When implemented, these enablers result in better outcomes for patterns of land use, inequality reduction, and improvements in urban form, increasing compactness and walkability.

Obviously, the core issues of the 1996 Habitat Agenda— adequate housing for all and basic service delivery— remain on the table, as the numbers of people worldwide living in slums or in inadequate housing continue to grow.[12] Interventions in these two areas are also considered as "operational enablers", but they must be reframed within an overall picture of city-wide interventions. Together, these seven enablers are the "how" in this process.

10.2
Key Principles of the New Urban Agenda

The principles set out in Chapter 9 provide the conceptual underpinnings for the New Urban Agenda. Aspects such as democratic development and respect for human rights should feature prominently, as should the relationship between the environment and urbanization.[13] Similarly, the new agenda must pay critical attention to equity, safety and security of everyone, regardless of gender, origin, age or sexual orientation. Risk reduction and resilience will also play prominent roles in this agenda. Likewise, the new agenda must emphasize the need to figure out how a global monitoring mechanism can be set up to track progress on all of these issues and concerns."[14]

The agenda itself rests on five principles that reflect five broad shifts in strategic and policy thinking:

1. ensuring that the new urbanization model includes mechanisms and procedures that protect and promote human rights and the rule of law;
2. ensuring equitable urban development and inclusive growth;
3. empowering civil society, expanding democratic par-

The levers of the New Urban Agenda include the specific policies and actions required to effect change

The new agenda must emphasize the need to figure out how a global monitoring mechanism can be set up to track progress

ticipation and reinforcing collaboration;

4. promoting environmental sustainability;

5. promoting innovations that facilitate learning and the sharing of knowledge.

In addition to these five guiding principles,[15] the vision of the New Urban Agenda can be broadened and deepened to induce transformative change by considering these other elements:

◗ Promote a new urbanization model that is universal and adaptable to diverse national circumstances and that is based on the key urbanization challenges and opportunities shared by all countries.

◗ Promote integrated implementation of a new urbanization model in order to address the environmental, social, and economic objectives of sustainability, which have many interlinkages, as well as the concerns of various tiers of government.

◗ Promote smart, greener cities, with adequate use of technology, which involves establishing critical connections between science, the environment, economic growth, urban planning, and governance.

◗ Promote a principle of subsidiarity that entails a process of re-arrangement of State institutions, involving transfers of responsibilities and resources (Chapter 6) to the lowest reasonable level.[16]

◗ Promote a global data revolution for effective, results-based implementation and monitoring of the New Urban Agenda at the local, national, and global levels.

10.3
The Components of the New Urban Agenda

The principles listed above suggest, in general terms, what should be changed. Their generality, however, means that they would be largely unobjectionable to most governments and interested civil society groups. They point to a direction of change, but stop short of suggesting what needs to be changed, how, or in what time frame. The answer to the "what" question lies in the specific

components of the new urban agenda, which are elaborated below in some detail.

Adopt and implement national urban policies

The first suggested component of a New Urban Agenda is the adoption and implementation of national urban policies. The term can mean many things, but foremost in current global and national policy contexts is the recognition that cities require priority high-level attention in national development strategies, both in macro-economic and social policy terms.

Inclusion of National Urban Policies as one of the Policy Units for Habitat III and as a proposed indicator for Goal 11 of the SDGs comes as a recognition of the crucial role they have to play in any sustainable urban development agenda.

National Urban Policies (NUPs) are considered as fundamental "development enablers" that aim to amalgamate the disjoined energies and potential of urban centres within national systems of cities and as part of strategic territorial regional planning. NUPs can establish synergetic connections between the dynamics of urbanization and the overall process of national development, recognizing the importance of fostering mutually reinforcing rural-urban linkages and leveraging the rural-urban nexus for development. National Urban Policies contribute to building linkages between human settlements of various sizes and defining the broad parameters within which the transformative power of urbanization is activated and steered. These policies also enhance the coordination of various tiers of government (local, regional and national), establishing the incentives for nudging economic and social agents towards more sustainable practices (Chapter 6).[17]

A NUP is defined as "a coherent set of decisions derived through a deliberate government-led process of coordinating and rallying various actors for a common vision and goal that will promote more transformative, productive, inclusive, and resilient urban development for the long term."[18]

NUPs are essential tools through which governments can facilitate positive urbanization patterns to support sustainable development and the prosperity of cities. Some of the key attributes of NUPs[19] are:

◗ the definition of national development priorities that can bring more harmonious regional and territorial

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Cities require priority high-level attention in national development strategies, both in macro-economic and social policy terms

National Urban Policies contribute to building linkages between human settlements of various sizes

NUPs are essential tools through which governments can facilitate positive urbanization patterns to support sustainable development and the prosperity of cities

urban development, balancing social, economic and environmental concerns;

▶ the provision of guidance on the future development of the national urban system and its spatial configuration, supported by specific plans, tools and means of implementation;

▶ increasing the numbers and coordinating the involvement of diverse stakeholders, various levels and areas, with more public and private investments and the possibility of more effective allocation of resources across the national territory;

▶ the implementation of better combined, transformative solutions in key regional and urban development areas such as urban mobility, urban energy, infrastructure development, etc.;

▶ combining together the other three key urban "development enablers": legal frameworks, planning and design, and municipal finance, which can be better and more effectively coordinated, both horizontally and vertically through NUPs.

However, it is important to acknowledge that designing and implementing NUPs can involve some problems or challenges. First, not many national government institutions have the expertise and authority to understand the direct and indirect impacts of public policies on cities. Pre-eminent government departments (e.g. interior, economics and finance) often fail to appreciate that the ministries of energy, education, health, transport, or public works have major impacts on urban areas. Expertise in this sense requires a broad-ranging institutional view on the way the public sector as a whole affects urban processes, well beyond housing and basic services, to the framing of the economy and society. This implies that, to start with, a national authority must have the capacity to take stock of all of these impacts at the urban level as well as the authority to play a coordinating function across ministries. The National Economic and Social Development Board of Thailand (1990s) and the diagnosis conducted by the Ministry for Regional Development of the Czech Republic (2014) prior to the implementation of NUPs, are significant examples of this.[20]

A second challenge for governments is to determine what should be included and what is to be left out in a NUP, and which level of government should be responsible for each activity. In other words, what is

to be the substance of a national urban policy, and how should it be deployed? A truly comprehensive national urban policy would effectively consider all of the policies and activities to be undertaken in cities, or would have an effect on them. This would start with assessing the impact on cities of macro-economic policies, patterns of infrastructure investment, and social policies, for example, asking where would public expenditure go, with what expected effects, and what kinds of economic and employment multipliers might be generated. Or, how would national credit policies affect the high demand for credit in urban areas and the competition between loans for housing or the construction sector versus other productive sectors?

A truly comprehensive national urban policy would effectively consider all of the policies and activities to be undertaken in cities, or would have an effect on them

These are complex issues which require an understanding of economics and finance, as well the characteristics of investment in manufacturing as well. What this means, in practice, is that governments in all countries must place urban policy at the core of the highest levels of policy analysis and debate if the sophistication and complexity of these issues is actually to be appreciated and government policies are to be properly coordinated. One approach to this substantive challenge, therefore, is to develop a set of analytic tools, much like those in environmental impact assessment, which would be directly brought to bear on national development policies in order to evaluate the probable effects of specific policies and programmes on urban areas.[21] These might include spatial assessments of the likely impact of policies on intra-urban equality.[22] Rather than focus on the evaluation of impacts of policies and programmes *after* implementation, much more attention should be devoted *upfront* to understanding the probability of impacts *before* adoption of policies and programmes. A national urban policy is an excellent tool or strategy not just for resource allocation across cities but also to redress spatial inequalities.

Rules and regulations: Strengthening urban legislation and systems of governance

Laws, institutions, regulatory mechanisms and systems of governance bound by the rule of law all integrate a composite set of factors which embody the normative and operational principles, organizational structures and institutional and social relationships that underpin the process of positive urbanization.[23] Encapsulated under the

Governments in all countries must place urban policy at the core of the highest levels of policy analysis and debate

A national urban policy is an excellent tool or strategy not just for resource allocation across cities but also to redress spatial inequalities

notion of Rules and Regulations, they constitute the second component of the New Urban Agenda. This "development enabler" aims to promote a clearer — better formulated — and more transparent legal framework for urban development. The emphasis lies on the establishment of adequate rules and regulation systems that respond to real needs, actual capacities and available resources that can provide a solid, forward-looking framework, to guide urban development[24] — a framework that is based on accountability, the rule of law, clear implementation mechanisms, and can be continuously enforced as part of efforts to harness the transformative force of urbanization.

> A national urban policy is an excellent tool or strategy not just for resource allocation across cities but also to redress spatial inequalities

Urban policies, from national (NUPs) to very local levels (neighbourhoods and districts) depend on laws and regulations as the primary framework for action, implementation, monitoring and evaluation. Lack of clear legislative frameworks can act as one of the major impediments to effective design and implementation of these policies, standing in the way of "positive urbanization." Still, more often than not local and national governments formulate policies without appropriate legislative support, or without the capacities to enforce and regulate existing legal instruments.[25]

> The establishment of adequate rules and regulation systems that respond to real needs, actual capacities and available resources

Taking into account the intricacy of the urbanization process and the plethora of legal instruments, this second component must identify the key elements that can assist cities to become more prosperous and sustainable. Cities can adopt essential elements of laws that are grounded in sustainable processes and systems, and move on to more elaborated arrangements and legal instruments as management and governance institutions mature. These elements include: (1) regulations related to the public space, (2) establishment of development rights, (3) the building codes governing the quality and standards of buildings, and (4) adequate street and plot layouts.[26]

> Rules and regulations provide security and stability for residents, promote social and economic inclusion, legal certainty and fairness in the urbanization process

These essential regulatory elements "have the power to shape the form and character of the city by playing an essential role in the implementation of urban plans."[27] They are necessary to make cities sustainable, otherwise overabundant laws, regulations and standards can become so complex that they represent a negative externality for decision-making. With clear mechanisms and processes and well-defined responsibilities and coordination mechanisms, rules and regulations can expand to other key development areas, including, *inter alia*: (a) municipal finance (i.e. tax collection, property tax, prop-

> Regulatory elements "have the power to shape the form and character of the city by playing an essential role in the implementation of urban plans

erty registration and land value capture and sharing); (b) environmental sustainability regulations (protection of natural assets and biodiversity, land use planning, impact assessment regulations, waste management, air and water quality); (c) urban governance (decentralization and local autonomy laws, empowerment of citizens and public participation rules, accountability mechanisms) and (d) equitable access to opportunities (laws facilitating wealth redistribution, protecting commons and ensuring provision of public goods)— to name just a few.

Rules and regulations must have a clear objective and sound coordination mechanisms. They must be adapted to any country's and city's specific needs, resources and capacities and be enacted according to specific circumstances. Rules and regulations must allow for evolution and adaptation over time, but with clear checks and balances to prevent elites and powerful interest groups capturing or using them for their own benefit.[28]

Another dimension of this issue is the substance of urban regulations themselves. Since the 1990s, extensive research in many countries on urban regulations such as building codes, zoning, environmental rules, and others suggests that many urban regulations are out of date. Some reflected colonial heritage, others were biased in favour of middle- and upper-income groups, while others still generated perverse economic incentives for private (as opposed to public) investment in housing and other services.[29] This goes to show that reform of urban regulations is an important lever for change. Such reform can also strengthen existing institutional functions such as land value capture through property taxation and other measures.

As an urban development enabler, rules and regulations provide security and stability for residents, promote social and economic inclusion, legal certainty and fairness in the urbanization process. Laws, rules and regulations must not discriminate in substance or in practice ("just sustainabilities", Chapter 5), ensuring that benefits are geared towards those most in need so as to avoid reinforcement of inequalities and exclusionary processes. Balancing regulations with incentives provides the framework through which the transformative force of urbanization is nurtured and deployed. This component creates the normative basis for action and advancement.

This second component (rules and regulations) of the New Urban Agenda goes to the core of the

issues raised above in relation to national urban policies. While some of the issues are substantive, as suggested, the absence of effective national urban policies is also a result of weak legislation namely, failure to recognize the complexity of the relationships and interdependencies of policies and programmes, which are important dimensions of urban governance. For instance, in many low-income countries, for lack of autonomy and managerial capacity at the local level public health is managed directly and exclusively by the relevant central government department, without any regard for the important role of local management of environmental sanitation— which, somewhat paradoxically, makes it unlikely that major national urban health goals can be achieved locally. The laws establishing the institutions of government, at the national, state, and local levels, should reflect a multi-level institutional understanding which helps to strengthen complementary forms of supervision and responsibility (Chapter 6) working as a continuum, not in conflict. These forms should reinforce institutional responsibilities rather than promote competition among various tiers. Inconsistencies across the public institutions involved in urban affairs are there for all to see, demonstrating that effective political governance is founded on sound legislation in the first place.

Effective urban governance should acknowledge that a narrow definition of local responsibility and competency is a recipe for disaster, because municipalities need to be involved in a direct way in issues ranging from building codes to environmental regulations, from public information to public investment, from community consultation to financial accountability, etc. If economic and social impacts occur in actual spatial arenas— on specific blocks on streets, in neighbourhoods, in public places, as well as in the city centre— the jurisdiction of local governments should be as large or as small as these sites may be. In a participatory governance framework, this is also essential for democratic accountability.

Legislation affecting governance, therefore, should ask what kind of governance is to be encouraged. What kinds of local institutions do national legislators wish to establish? What are the expectations for the performance of these institutions? Do they expect local public institutions to spearhead urban transformation — or are they satisfied with business as usual and incremental change? These are important questions, because as earlier chapters in this report suggest, the challenges faced by a New Urban Agenda call for urgent policy reform and action.

These issues take on real significance in the debates about metropolitan governance in which multiple municipalities must decide whether and how they will work together (Chapter 6). The metropolitan level is particularly interesting, because this is where any spillover effects and externalities which go beyond municipal jurisdictions and have effects on a larger scale, are to be addressed. While many countries have been unable to withstand what might be called "the metropolitan imperative," only very few have actually been able to obtain the benefits of coordinated planning, regulation, and investment.

Reinvigorating territorial planning and urban design

Against today's problematic urban background, the challenge of territorial planning and appropriate urban design is much greater than at any time in history. As noted in Chapter 9, urban areas operate in a context of changing geographies, ecologies, economies, technologies, institutions, and culture; all of them interacting, and with great imbalances among them. In both developing and developed countries, cities keep allowing a passive, spontaneous model of urbanization that is unsustainable in a variety of ways, as indicated in Chapter 2. Many have found themselves woefully unprepared in the face of the spatial and demographic challenges associated with urbanization, not to mention those of an environmental nature and climate change.[30]

In various cities, urban planning has been instrumentalized by property developers and other economic and political stakeholders. These approaches either respond to the interests of the better-off, or they focus only on strategic economic interventions in specific spaces, all of which tends to create enclaves of prosperity. Urban planning also can all too easily be turned into a technical exercise (see Chapter 7) that overlooks the fundamental need to steer and control urban expansion (i.e. positive urbanization as conducted by "the city that plans"), instead creating cities where existing plans or regulations are ignored, and sustainability cannot be achieved.[31]

Analysis of the most important dimensions of the urbanization process clearly shows that cities must reassert control over their own destinies, acting on form, character and functionality, through a reinvented urban planning (as discussed in Chapter 7). The proposed third component of the New Urban Agenda aims to respond to this structural transformation for the sake of shared prosperity and harmonious, sustainable development. Proper urban planning,

supported by adequate laws, can make cities more compact, integrated, connected and sustainable.

Well-planned cities can optimize economies of agglomeration, increase densities (where needed), generate mixed land uses, promote public spaces with vibrant streets, and encourage social diversity— all critical elements of sustainability.[32] A new legal framework that is based on the public interest and relies on effective institutions and adequate urban plans will be in a better capacity to protect the "commons," integrate environmental concerns, promote social inclusion and facilitate rural-urban interactions. This city-wide integrated response puts urban authorities in a better position to optimize existing resources and harness the potentialities of the future.

A revived form of urban planning and design is a "development enabler" that responds to the imperatives of urban expansion, extending across various scales of intervention, from small neighbourhood to city to metropolitan forms of government to manage ever-expanding urban areas. The New Urban Agenda should respond to all these local urban contexts with appropriate policy instruments and actions (Box 10.2).

As a constituent of the New Urban Agenda, urban planning aims to "reinvent" the 21st century city model in the sense of a more sustainable approach that has the power to raise densities, reduce energy consumption in transport and other infrastructure, and bridge the urban divide with strategic interventions. It is clear that various forms of inequality, large environmental footprints and suburban sprawl all conspire against sustainable urban development. Urban planning interventions in areas such as planned city extensions, planned city infills, land readjustment programmes and public space regulations and projects are key levers to effect transformative change.

The list of instruments in Box 10.2 summarizes the shifting understanding of context and the expanding scale of the arena for action. Yet, this shift has not gone far enough. For example, if generating urban employment is a major objective, then it is for macroeconomic policy to stimulate consumption, activating urban economic multipliers within specific geographies. This means targeting opportunities to low-income households living in slums, mobilizing the informal sector where multipliers work most rapidly, and doing all of

City-wide integrated response puts urban authorities in a better position to optimize existing resources and harness the potentialities of the future

Urban planning aims to "reinvent" the 21st century city model in the sense of a more sustainable approach that has the power to raise densities

the above within denser, more environmentally aware urban areas. It is important for the New Urban Agenda to recognize that the activities taking place in any city are more important determinants of urban form than generally assumed. This is why this important type of link should not be left to chance or serendipity. Instead, it must be designed by intention, and urban planning and design plays a fundamental role in this respect.

Some observers of internationally-supported urban assistance projects have remarked that some projects seemed to want the context more closely to resemble the projects, rather than the projects actually relating to the real world. This criticism seems appropriate again today, given the number of "new city" projects which in many regions seem to emulate the modernist designs of Le Corbusier, i.e. "vertical" cities of skyscrapers and urban highways. Rather, lessons from several decades of policy practice and programme assistance should be reflected in the design of urban extensions and infill projects in existing cities and towns. In this respect, public authorities can learn from the experience of international development assistance and, more positively, carefully selected best practice. In all projects, context matters, and in every case, context wins in the end. Indeed, the resilience of local contexts to exogenous threats and changes is at the very core of definitions of sustainability.

The example of planning and design for new urban extensions is important, because experience demonstrates that individual initiatives should not "projectize" the city (i.e. impose self-contained architectural and functional patterns without any regard for context), but rather embed extensions in existing urban ecologies, infrastructure networks, and institutional frameworks. If people are to live in urban extensions, these must feature reliable services such as waste collection, schools and clinics, adequate security with police and street lighting, to name a few requisites. A successful urban extension will be one where "urban density is understood as a public good" and where proximity and accessibility of housing, employment, and services are primary criteria for design. The fact that many housing projects in Mexico City, New Delhi, or São Paulo remain vacant exposes them as isolated sector projects, not "urban extensions." Therefore, the "urban" imperative must be followed at every scale: from neighbourhood, to city, to region.

Box 10.2: Planning instruments and the notions of context and scale

Context has influenced planning instruments, but instruments have also reinforced new definitions of contexts. Instruments as varied as master plans, projects, strategic investment plans, urban policies and contracts have implicitly and explicitly addressed the issue of context.

Master Plans - The use of master plans in the 20th century reflected the perception that urban areas could be ordered, planned, and managed through conscientious arrangement of space. These plans were largely of a spatial nature, as reflected in their colourful presentations in which distinct colours represented distinct uses. These were essentially two-dimensional plans aiming at dynamic representations of urban growth and change while in fact they were more frequently static. Master plans explicitly required professionals and the citizenry alike to fit their aspirations and their desired physical forms into the patterns they set out. The plan was the context. Whatever lay "outside the plan" was, indeed, out of mind. In many urban areas, what was outside the plan was by definition also illegal and thereby subject to demolition by public authorities.

Projects - Within the physical framework of the master plan, designated sites were approved for projects. Sites came with specific boundaries and linkages to other parts of the plan. Projects were intended to embody the physical objectives of the plan in built urban forms, whether those were housing, infrastructure, or social services. Projects were by definition narrowly circumscribed and often ignored what lay on the perimeter and/

or periphery of the site. Such typical oversights included the dynamic pressures of the land market, eligibility for access to land, at what price, and the way individual sites contributed to the broader urban form. The context of the project was deliberately excluded in maps where neighbouring areas were often coloured white, as though nothing stood there or, if anything, it had no material bearing on what was included in the project.

Strategic Investment Plans - emerged in the 1990s. These plans linked together a number of projects acting as instruments aimed at addressing a broader set of urban issues. In some sense, these strategic investment plans were the first step towards recognizing the city was a "space of flows," implying that the projects were intended to help in directing, channelling, and managing these to ensure that basic needs were met. Investment Plans included objectives such as public transport efficiency, or promotion of "integrated development" of both housing and residential infrastructure, along with so-called productive investments such as industrial parks or factories. Strategic investment plans acknowledged that the urban area was larger than a project area, that some spaces deserved higher priority than others, and that "strategy" meant making choices in a spatial context.

Policies and Regulations - These were meant to guide urban behaviour, not just to allocate investment resources as was often the case in projects and strategic investment plans. Policies would shift attention to desired outcomes— needs and requirements— on an assumption that stakeholders would abide

by certain rules of behaviour for design, construction, and use. The challenge, therefore, was to determine which rules might encourage behaviour in specific directions and what were the so-called "enabling conditions" required for desired outcomes to be achieved.

Market-Oriented Policies - These were an important variant of policy itself. The difference lay in the assertion that market-oriented policies were intended to affect not only individual entities, both corporate and otherwise, but the whole pattern of behaviour of all entities, both individually and collectively. Context, in this sense, meant not only spaces, sites, and flows, but also all the interactions between entities which in turn contributed to determine supply, demand, and price. Such policies were, for example about "land", not "sites", reflecting policy focus on efficient allocation and assembly of land for various economic purposes. The assumption was that market-oriented policies bore on everything within a specified geographical area. Yet they failed to recognize that their outcomes would necessarily organize spaces, sites, and flows in any particular shape or location, except to assert that these relations would somehow maximize individual welfare, and in so doing, also maximize collective welfare. Advocates of these policies saw the city as "urban growth machines", focusing more on maximizing individual returns in property or business, while ignoring their adverse consequences for the environment or society at large.

Sources: Castells, 1989; Logan and Molotch, 1987.

Municipal finance: Harnessing the urban economy and creating employment opportunities

As noted above, a much higher amount of policy-maker attention to the role of urban economies is a critical component of any new urban agenda. Since cities concentrate ever-higher shares of national populations and production, urban productivity deserves priority policy attention from national and local governments and local residents must keep it in mind, too.

This fourth suggested component of the New Urban Agenda refers to the very foundation of urbanization, as the locus of change and interactions, and the basis for transformation and accumulation. The productivity of cities contributes to economic growth and development and generates income, providing decent jobs and equal opportunities for all through adequate planning, effective laws and policy reforms.[33] Many urban areas and regions require economic regeneration and renewal programmes, strategies for cluster development and industrial zones, as well as access to safe, affordable, accessible and sustainable transport, as recommended by SDGs.[34] Proper connectivity and adequate infrastructure are also needed.

The most productive cities benefit from comprehensive economic and structural diversification plans, knowledge-sharing and technology-learning platforms, as well as employment generation and income-growth programmes for vulnerable groups, including newly arrived immigrants. These can have positive multiplier effects in various development areas, especially when redistributive mechanisms are put in place, including: extension of public spaces, provision of public goods, and job-creating public procurement. Adequate urban planning and design maximizes agglomeration economies, creating the sustainable densities required to develop the local urban economy and reduce inequality of opportunities among different groups of society.

The current worldwide shortage of jobs reflects long-standing poor industrialization in developing countries and more recent industrial restructuring in more advanced economies.[35] With the growing share of urban-based economic activities in GDP, the economic performance of cities should be understood as a nationwide macro-economic issue. The productivity of cities must be enhanced by higher investments in infrastructure, sound contractual and legal frameworks, human capital formation, adequate and affordable lending mechanisms, and urban forms that are more conducive to economies of agglomeration through better design.

Macro-economic performance is highly dependent on local economies. It was noted many years ago that "an inefficient Cairo meant an inefficient Egypt." This image could be extended not just to large cities in any country but also more and more to any country's *system* of cities. However, for cities to be productive, competitive and efficient, they need sound financial planning that integrates proper budgeting, revenue generation and expenditure management.[36] More productive cities are able to increase production with unchanged amounts of resources, generating additional real income that can raise living standards through more affordable goods and services.[37]

Sound business and financial plans can generate the revenues required to support better urbanization which, in turn, can be a source of further value generation. Local authorities can reap some of the benefits of this process that translates into higher land and property values than can be captured by various taxation mechanisms to enhance municipal revenue. For that purpose, adequate financial frameworks and governance systems must be in place, including: (i) the capacity of a municipality to finance and deliver infrastructure plans; (ii) effective institutions, with clear roles and adequate human and financial capacities; (iii) fiscal mandates and capacity to raise revenues, e.g. through land and property taxes; (iv) regulatory support and clear legal frameworks that guarantee accountability and transparency in the use of the resources.[38]

Municipal finance requires innovative strategies like public-private partnerships (PPPs) and land readjustment schemes that can leverage additional resources to cope with constraints on public sector resources. Land readjustment generates value, enabling both municipalities and landowners to share the profits derived from changes in land use and more rational planning. For the purposes of the New Urban Agenda, land readjustment counts as an "operational enabler."

All these strategies and actions are important first steps towards more productive urban economies. Necessary as they are, more is needed. Myriad actions can be taken to ensure that the conditions for productive economic activity are in place. Some of these actions can be well-illustrated by a comparison between Bogotá (Colombia) and New York (US) both cities where 90 per cent of businesses employ fewer than 10 and 20 staff respectively.

In Bogotá, the numerous *empresas* are too

a much higher amount of policy-maker attention to the role of urban economies is a critical component of any new urban agenda

Adequate urban planning and design maximizes agglomeration economies, creating the sustainable densities required to develop the local urban economy and reduce inequality of opportunities among different groups of society

small to benefit from economies of scale, and low profitability constrains wages and capital expenditure on machinery and technology, let alone advertising. Whether formal or informal, these businesses lack the infrastructure, equipment, access to materials and markets which any firm of any size anywhere needs to expand— and create higher quality jobs. The net result is low employment generation in the Colombian capital as a whole, the bulk being in the informal sector. This was confirmed by findings of UN-Habitat's City Prosperity Initiative recently implemented in 23 Colombian cities.[39] Technical assistance and strategic, temporary subsidies would enable smaller firms to overcome these obstacles, leveraging them into higher efficiency and breaking the current cycle of low productivity: this is an effective policy to consider. Recent research also confirms that expansion of road and connectivity networks in Colombia has positive effects on urban economies.[40]

In contrast, economic expansion in New York has occurred over the last decade through proliferation of start-up firms with fewer than five staff, with high levels of technology and a competitive focus on high value-added services including innovation and design. As noted earlier, over 90 per cent of New York businesses employ fewer than 20 staff; but since 2001, 67 per cent of new firms employ fewer than five. High-end New York firms are now mostly located in Brooklyn where fixed costs are lower than in Manhattan, turning New York into "the second Silicon Valley" of the US. Given those firms' recent creation, productivity is relatively high, all of which reflects low barriers to entry and access to inputs. Critical to this 21st century technological industrial revolution is the high level of education of these mostly young new entrepreneurs.

Another critical dimension of urban productivity is the role of urban form. Economies of agglomeration and proximity significantly reduce costs and facili-

Urban form creates opportunities in terms of population and infrastructure density, availability of production sites, better connectivity, and access to essential productive inputs

Box 10.3: Strengthening municipal finance

As dynamic sites of exchange between stocks and flows, cities must increase revenues to finance public expenditures to put in place building, operating, and maintenance of services such as infrastructure, environmental services, health, education, and security, while also producing public goods such as clean air, unpolluted water, and public space. As suggested in Chapters 4 and 9, many cities experience growing concentrations of private income and wealth, but this is accompanied by a decline in, and depreciation of, public resources and assets. Short of public revenues, cities will face serious challenges on the way to prosperity.

The challenge of strengthened municipal finance lies in the conundrum which urban dynamism is up against these days – and more than ever in the face of urbanization: cities must provide the stocks of durable assets (decent housing, infrastructure, public buildings, together with serviced trading, factory and storage sites, public buildings) needed to accommodate and support over time the never-ending flows of abilities and skills (from physical strength to top-level research) brought about by "urbanization"

– with the constant interplay among these resulting in urban prosperity for all. Those stocks— fixed, durable assets expected to last for 50 to 80 years— are best funded through long-term financing instruments.

Higher incidence of climate change effects and extreme weather events has highlighted the importance of these municipal finance issues. In northern cities with cold climates, the extreme freezing temperatures of recent years have resulted in many infrastructure failures, with burst water mains, cracks in bridges, pavements and highways, and accelerated depreciation. In 2014, over 300 municipalities in the Northeast US experienced these kinds of infrastructure failures ascribed to extreme cold weather. At the same time, coastal cities in both developed and developing countries face the prospect of flooding and sea-level rise. Urban areas in low-lying Bangladesh are already feeling the effects of flooding on low-income communities. One local study in Dhaka revealed the increased importance of "safe storage" in these homes, leading to a re-design of houses to meet these new needs.[43] This widespread and shared issue is

likely to become a critical priority for all coastal cities over the next 50 years, suggesting that any mitigation strategy must include saving resources for these purposes. In 2012, the Government of the Netherlands approved a 100-year plan for annual savings in order to be able to face disasters in a not so distant future.

In contrast, rapidly-growing cities and towns in developing countries face another set of problems, including ever-higher demand for water and the need to go farther and deeper to find quality, abundant resources, which together contribute ever-higher marginal costs. The financing of water supply is therefore an urgent need in most developing countries. Similarly, the financing of sanitation, particularly in Africa, is a critical priority, yet the short-term cost of water-borne sewerage systems seems prohibitive for most countries. The financing of ICT is also a key priority for cities to increase connectivity that can enhance human well-being and prosperity. Innovative municipal finance solutions, such as value-capture, can improve the prospects of developing necessary infrastructure in specific urban areas, reducing spatial inequalities.

tate commercial transactions (Chapter 8). Urban form creates opportunities in terms of population and infrastructure density, availability of production sites, better connectivity, and access to essential productive inputs; urban form can also impose costs which affect the quality and pace of growth of urban economies. Cities with long commutes will hinder labour force access to available jobs, reducing productivity as in Buenos Aires, for instance, or Ciudad Juarez, Mexico.[41] Traffic congestion and attendant air pollution constrain economic productivity in Bangkok, which costs the Thai economy a measurable GDP loss every year. The cost of serious air pollution has become increasingly recognized in Beijing and Delhi. These issues have received increasing academic and policy attention as urban areas have grown in spatial terms.[42] De-densification, as mentioned earlier, also reduces the potential for economies of agglomeration and proximity.

10.4
Levers for the New Urban Agenda

Levers for the New Urban Agenda include specific policies and actions with the potential to drive transformative change. These levers act as "operational enablers" in support of the development of a new urbanization model. While the guiding principles and components of the New Urban Agenda aim to address longer-term, structural factors, including practices, beliefs and behaviours, these levers respond to today's challenges and opportunities, and call for key specific interventions.

Seven levers of change are suggested to be considered in the New Urban Agenda to help achieve the desired outcomes of sustainable urbanization. These levers must be adapted to the whole variety of urban circumstances, as there is no "one-size-fits all" solution. This is why they must be designed at both local and national levels, taking into consideration the needs and specific conditions of every cities and town, and the degree of development of the countries deploying these levers. The seven proposed levers are the following: (i) planned city extensions; (ii) planned city infills; (iii) land readjustment interventions; (iv) public space regulations; (v) basic

service delivery; (vi) adequate housing for all; (vii) a global monitoring framework for the New Urban Agenda.

Planned city extensions

Over the last 20 years, many cities around the world have expanded to distant peripheries far beyond initial or formal limits, with high degrees of fragmentation and vast interstitial open spaces.[44] In this process, densities have dramatically reduced, affecting cities' capacities to generate economies of agglomeration and preventing them from realizing the potential that urbanization offers.[45] Many cities have expanded without any adequate urban street layouts (poor structures of nodes and connections) and inefficient (if at all) integration to the city.

Cities, particularly in developing countries, are bound to expand ever farther to accommodate the needs of nearly 75 million people who will be added to their population every year over the next 20 years. Even in a positive scenario of densification, cities will still require vast areas of land to respond to the spatial needs of these populations.[46]

Planned City Extensions (PCE) are powerful levers of change that can help public authorities to respond to projected urban growth in an orderly manner. Otherwise, cities will continue to expand through inefficient land use patterns and ever-longer commutes, and correspondingly ever-higher energy consumption. Planned City Extensions can prevent the leap-frogging over vast areas that generates wasteful and speculative areas within the city and results in prohibitive costs for urban services and infrastructure provision in distant places.

PCEs are best deployed in large areas of vacant land on urban fringes, where the potential for development is higher. When deployed next to existing neighbourhoods, these planned extensions offer urban dwellers the possibility to live, work, rest and play in close proximity to consolidated urban areas. This first lever of change contributes to more efficient and sustainable development patterns steering urban expansion towards areas that are more suited for positive urbanization. When developed at the scale required to respond to future population needs, PCEs can optimize land use and deploy adequate public spaces and streets, generating the economies of agglomeration that are needed for job creation and economic growth.[47] These interventions are cost-effective and have great potential to prevent slum formation and reduce unplanned development, while reducing the social, economic and environmental costs of urban sprawl.

Planned City Extensions are to be developed in

a progressive manner according to local, institutional and financial capacities. They must come together with proper legal instruments to manage urban and peri-urban land, assess compensation, create public spaces, and regulate mixed land uses. Successful interventions overpower land speculation, contribute to lower land values, reduce city footprints and lessen pressure for development of environmentally sensitive areas.

Planned city infills

Many cities across the world feature vast quantities of open, fragmented spaces with an urban fabric that is made of disconnected patches and large areas of vacant land. Poor planning systems, wasteful and disorderly urban expansion, land speculation, and various forms of sprawl are the main factors behind such fragmentation. Both built and natural environments are affected by these practices that work against environmental sustainability and the ecology of open spaces inside cities.[48] Various other cities suffer from unused or undeveloped areas that often include vacant lands, or properties in undesirable locations or in prime areas that are prone to speculation.

Planned City Infills (PCI) can act as effective remedies to these problems in cities with low densities, various forms of segregation, poor connectivity and inefficient use of existing infrastructure. This is a very powerful lever for change indeed, which, by "filling up space gaps"[49] achieves an urban structure that reduces transport and service delivery costs, optimizes land use and helps preserve and organize open spaces.[50] Infill development contributes to the higher or sustained population densities that are needed to deploy and maintain public

spaces and green areas, community services, public transport, retail trade and affordable housing.[51] These strategic interventions provide benefits in terms of improved street life, economic viability, proximity and walkability.[52]

Through the New Urban Agenda, planned city infills have the potential to transform central and middle urban areas into vibrant places for a more intense community life, as existing vacant sites and underused areas are (re)developed or re-used.[53] PCI is a major alternative to produce housing solutions that meet the needs of current and future residents, keeping costs down while adding to the variety of available options.[54] These interventions can take the form of area densification, brownfield development, building conversions or transit-oriented developments.

Local authorities can implement urban infill projects at relatively low costs through a fresh look at the rules, regulations and ordinances affecting urban development in these areas, such as targeted code changes, land readjustment protocols, zoning bylaws that govern lot coverage, and the height and grade of buildings. These projects provide the foundation for public and private investments and for more complex future interventions that improve accessibility for the urban poor. PCI can enhance local revenue collection through higher local taxation, through land value capture and sharing that is accrued by these interventions.

Land readjustment

One of the major impediments to equitable urban development is lack of affordable serviced land, i.e. land with connections to the city and equipped with

Planned city infills have the potential to transform central and middle urban areas into vibrant places for a more intense community life

PCI can enhance local revenue collection through higher local taxation, through land value capture and sharing that is accrued by these interventions

appropriate infrastructure and services.[55] Historically poorly designed plots, compounded by various forms of land speculation, have resulted in fragmented and unconnected urban fabrics.[56] These suboptimal forms have, in turn, resulted in random development, inadequate urban layouts, with cloudy land rights and insecure tenure in numerous cases. All these elements have caused chronic shortages of land, especially for the urban poor[57] reducing the efficiency of the city.

Land readjustment can act as a crucial lever of change to "fix" the form and function of a city, rebuilding key strategic areas and "repackaging" them, as it were. These interventions increase supply and reduce the costs of land and housing, and are opportunities to review regulations, subsidies and their potential effects.[58] If well conducted, land readjustment can turn into a significant financing mechanism, enabling public authorities to capture part of the land values they release.[59] Whatever land readjustment may be called (land sharing, land pooling or land re-plotting), the tool enables local government to develop new areas and reorganize others— in the process remedying any planning-related shortcomings and better balancing the benefits.[60]

For the purposes of the New Urban Agenda, land readjustment can play a central role, shifting from sector-based interventions on land and housing to broader land use management and city planning, as a means of achieving planned, equitable and efficient urban development. The possibility to build appropriate infrastructure and improve residential densities with better locations for transport systems enhances the prospects of boosting labour markets and jobs.[61]

This type of intervention can run into various problems, though: land-owners' engagement, technical expertise, time-consuming processes, ineffective dispute resolution instruments, and lack of reliable land evaluation mechanisms.[62] However, land readjustment is a century-old technique that is gaining more and more traction. Several countries and cities are adopting and adapting this technique in order to accommodate a variety of legal frameworks and public-private relationships.[63] Many others are improving the legal tools to assist with this process.

Land readjustment can be considered as a major lever of change for the New Urban Agenda, one that can bring better development outcomes. Once land-owners realize that they have the right to participate fairly and equally in this process, they are readier to assemble plots for unified planning and servicing as part of plans for adequate roads, sewerage and other infrastructure requiring ample public space.[64] Higher levels of efficiency, safety and quality of life will be achieved in the process and land property values will be enhanced.[65] Local authorities will be in a position to capture land value increases for the benefit of the public good, with the proceeds going to additional infrastructure and public facilities.[66]

Public space planning and regulations

Cities can operate in an efficient, equitable, and sustainable manner only when private and public spaces work in a symbiotic relationship, enhancing each other.[67] However, in the last 20 years since Habitat II, there has been a tendency to enclose common areas, reduce or privatize public spaces and deplete them through unsustainable practices. In many cities, even long-established public spaces such as parks and open areas are under threat from development. The most common public space, street surface areas are being reduced in newly urbanized areas of both developed and developing countries.[68] It is not only that the share of the public space is cut down, but also the very notion of the public realm. Fortunately, there is also a clear tendency in recent years to recognize public spaces as important factors behind the prosperity of cities.[69] More and more residents and decision-makers recognize those spaces as a public common good with the capacity to define the cultural, economic and political functions of cities.

The planning, design and regulation of public spaces jointly provide a fundamental lever of change for the New Urban Agenda. This lever recognizes that these public spaces – specifically streets, boulevards and public open spaces – are needed to sustain the productivity of cities, social cohesion and inclusion, civic identity, and quality of life.[70]

Public spaces must be designed and planned in every detail for prospective users, keeping the public good in mind.[71] Public spaces must be distributed across the city as a fundamental component of equity and social

If well conducted, land readjustment can turn into a significant financing mechanism, enabling public authorities to capture part of the land values they release

Land readjustment can play a central role, shifting from sector-based interventions on land and housing to broader land use management and city planning

Cities can operate in an efficient, equitable, and sustainable manner only when private and public spaces work in a symbiotic relationship, enhancing each other

These public spaces – specifically streets, boulevards and public open spaces – are needed to sustain the productivity of cities, social cohesion and inclusion

Youth activities in Mexico City. Public spaces have a capacity to define the cultural, economic and political functions of cities.

Source: Augustín Ramos Martínez / UN-Habitat

inclusion.[72] Quality must be put first for both design and materials, at the same time preserving the special character of the various locations. Well-designed public spaces encourage not just alternative mobility (walking and cycling) but first and foremost various positive social and economic interactions. Some of the most transformative changes in cities are indeed happening in public spaces, but it takes a consistent legal framework for this to happen, with clearly defined land and occupation rules that encourage a mix of houses, building types, blocks and street patterns, as well as rules for access to, and enjoyment of, these spaces, particularly for the most vulnerable citizens.

Access to, and use of, public open spaces is also a first, physical though highly symbolic, step toward civic empowerment and greater access to institutional and political spaces. Well-designed and well-maintained streets and public spaces result in lower crime and violence. Public space can make cities to work better, changing people's lives and the image of the city. More generally, residents find it easier to project themselves out on more amenable urban environments, generating a sense of civic sharing and belonging for current and the next generations that must be nurtured for the purposes of participatory governance.[73]

Re-positioning housing at the centre of the New Urban Agenda

Housing lay at the core of Habitat II strategic recommendations, particularly the statement affirming the right to adequate and affordable housing for all and the recognition of housing as an important component of local and national economic development. Progress has been made since 1996, as over 100 countries have included housing in constitutional rights and millions of people now live in adequate conditions. The importance of issues such as security of tenure, affordability and accessibility has been better recognized and they have been integrated under various forms into the 2030 Agenda for Sustainable Development.

However, millions of people still live in slums, informal settlements and inadequate housing (Chapter 3). Housing has become more of a speculative asset and it has been at the centre of a global financial crisis, with strong adverse effects on wellbeing and exacerbated inequalities.[74] A lot of what went wrong in cities is related in one way or another to housing and it is widely recognized that the patterns and policies in this sector have contributed to many of today's fragmented, unequal and dysfunctional urban areas.

Repositioning housing as part of a renewed approach to urban form and sustainable development constitutes an important lever for the New Urban Agenda. This comes as a clear recognition of the prominent role that housing can play in widespread fulfilment of human rights and as a policy instrument of national development.[75] Urbanization and access to housing together offer a unique opportunity for growth and prosperity.

This lever of change aims to place housing "at the centre" of national and local urban agendas. Governments at all levels must shift from simply building houses to a holistic framework for housing development that abides by the fundamental principles of sustainable urban development.[76] This new approach re-establishes the crucial role of housing, stimulating the economy, reducing poverty and promoting inclusion, while also responding to climate change challenges.

The components of the New Urban Agenda— urban planning and design, rules and regulations, the urban economy— must be connected to well-defined housing strategies which, in turn, are linked to the other levers of change, particularly Planned City Extensions and Planned City Infills. With support from systemic and institutional reforms as well as long-term policies and finance, and coupled with affordable land and adequate infrastructure, housing can re-establish people at the centre of urban life, stimulating economic growth and supporting territorial transformations that maximize affordability, improve the prospects of better located employment and facilitates spatial inclusion - all of these being fundamental elements of the sustainability agenda.

Governments at all levels must shift from simply building houses to a holistic framework for housing development that abides by the fundamental principles of sustainable urban development

Housing can re-establish people at the centre of urban life, stimulating economic growth and supporting territorial transformations

Expanding access to basic services

A central lever for change in the New Urban Agenda is expanded access to basic urban services. While much of this Report highlights the continuing demand for such expanded access for growing urban populations (and mostly for low-income households), the very meaning of basic services themselves must change as well. This change involves much more focus on environmentally sound design, reducing waste and energy consumption, and integrating services into higher density settlements. This will require more bundling of services, as well as new ways to save energy and to reduce greenhouse gas emissions in cities.

Provision of water supply and sanitation remains essential for healthy urban life and productive employment. As noted earlier, the increasing marginal cost of urban water supply in most cities in the developing world points to the urgent need for more efficient use and conservation of the resource. At the same time, sanitation remains a critical priority. Together, these services represent essential building blocks for more resilient cities, while reducing the vulnerability of the poor.

Basic urban services requires integrated, human rights-based (especially gender- and disabled- sensitive) planning, innovative solutions in the face of climate change, adequate financing and investments, effective partnerships with the private sector and all relevant stakeholders, technological support that promotes a "greener" economy, and retrofit and rehabilitation schemes for existing infra-

structure. Basic services and infrastructure development, including transport and mobility, must be people-centred, with clearly-defined links to land-use plans and housing programmes, with the main focus on vulnerable and marginalized groups.[77] Prioritizing basic service and infrastructure delivery must feature in any long-term economic and social development and environmental protection strategy. Provision of these public goods must feature high in the New Urban Agenda, considering that the most prosperous and harmonious cities are those that have vastly improved the range and quality of their infrastructure for the benefit of residents and businesses alike.[78]

A global monitoring framework for the New Urban Agenda

This last lever offers a real opportunity for change. Governments must pay more attention to how, when, and with which standards[79] they measure issues such as accessible and sustainable transport, adequate and affordable housing, inclusive urbanization, universal access to safe public spaces, and many other important urban targets that are strongly connected to the New Urban Agenda.

The need to enhance the availability and usefulness of data to support decision-making and the accountability mechanisms for delivering and reporting is part of the data revolution efforts required to ensure that "no one is left behind."[80] The New Urban Agenda offers the possibility to put in place a new global monitoring framework to assess how countries and cities are progressing in the implementation of this Agenda and achievement of SDG targets. This monitoring and reporting mechanism must ensure the continued engagement of stakeholders and enhance the

Basic services and infrastructure development, including transport and mobility, must be people-centred, with clearly-defined links to land-use plans and housing programmes, with the main focus on vulnerable and marginalized groups

Trams waiting in front of the central station in Amsterdam the Netherlands. A reliable, people-centred transport system is key for sustainable urbanization.

Source: Steve Photography / Shutterstock.com

Box 10.4: The CPI: Measuring sustainable urban development.

Data and metrics are essential if any public authority is to deliver on the promise of sustainable development for all. Governments, at all levels, must collect social, economic and environmental data and information to substantiate decision-making, including reliable spatial data. Despite considerable progress in recent years, whole groups of people remain outside statistics and important aspects of people's lives and city conditions are still not measured. For residents, this can lead to denial of basic rights, and for cities, the likelihood that they are not taking full advantage of the transformative potential which urbanization offers.

In 2012, UN-Habitat devised a specific tool to measure the sustainability of cities, which was subsequently transformed into a global initiative (the City Prosperity Initiative, CPI). The CPI provides both a metric and a framework for policy dialogue, giving cities and governments the possibility to devise indicators and baseline information, often for the first time. The CPI also helps to define targets and goals that can support the formulation of evidence-based policies, including the definition of city visions and long-term plans that are both ambitious, and measurable.

Today, the CPI is implemented in more than 400 cities across the world, producing reliable, relevant and timely data in critical areas of sustainable urban development. The CPI uses a policy framework based on the principles and components of what can constitute the New Urban Agenda, supporting the formulation of transformative interventions aiming at sustainability and shared prosperity. Recently, the CPI has been adapted to integrate SDG Goal 11 and other urban indicators in the same monitoring platform. Adoption of the CPI enables national and local governments to use a common platform for comparability. This platform proposes a systemic approach to city planning and development, providing a single composite value that can be disaggregated by components of the new agenda or by specific SDG targets. The CPI sets global and local benchmarks, together with baseline data and information, that are needed to support the formulation of more informed policies.

Sources: United Nations, 2012; Sustainable Development Solutions Network, 2015; UN-Habitat 2016a.

Agenda's inclusiveness, legitimacy and accountability.[81]

Reviewing the effective implementation of the principles and components of this urban agenda, including the results and impact of the levers for change, requires a sound monitoring framework that can be adapted to national and local contexts. This framework allows for periodic assessments of the various dimensions of urbanization and the overall conditions of cities. Still, it is for governments to define the scope, frequency and form of the monitoring and reporting, enabling policy-makers to measure progress and identify areas for improvement, including capacity-building needs. Such monitoring will also enable public authorities to identify potential setbacks and constraints, thus pre-empting unintended consequences. In order to avoid overload and duplication in national and local monitoring and reporting, including the potential for double counting, it is recommended to adopt common metrics and methodologies with a unified global platform.

UN-Habitat's City Prosperity Initiative (CPI) puts cities in a strong position to devise a systemic, local approach to current issues, incorporating new analytical tools based on spatial indicators. The CPI works as a support for multi-scale decision-making, connecting the city with the region and the overall country. This global monitoring framework has been adapted to facilitate integration of the forthcoming New Urban Agenda with the SDGs, putting cities in better positions to address the environmental, social and economic components of sustainability (Box 10.4).

Activation of the six levers of change identified above can only generate powerful rippling effects and multipliers. These will significantly change the form, patterns, and many stocks and flows which provide cities with their historical foundations - and their dynamism today. Each lever of change involves thinking differently about urban areas, reforming laws and institutions, and unleashing economic, social, and political energies to contribute to social transformation. Appreciating the need for change and identifying the many problems and challenges which cities face is not enough.

This is the global background against which any reinvention of cities must occur. The need is for a "reset" or "spatial fix":[82] an acknowledgement that the status quo is no longer valid, that urban space is crying out for proper, democratic management, and that a global commitment to a number of basic, shared principles is the best way for countries and the world over to get a grip on the unique historical opportunity urbanization is opening up for brighter, more prosperous and sustainable futures for all. Clearly, much of this "reset" can only

Data and metrics are essential if any public authority is to deliver on the promise of sustainable development for all

Each lever of change involves thinking differently about urban areas, reforming laws and institutions, and unleashing economic, social, and political energies to contribute to social transformation

start with cities; but then, these being the focal point of domestic economies, it is for national governments to make sure that urban prosperity radiates across whole countries through well-organized rural-urban linkages. Short of this, both urban and rural areas will find themselves mired into increasingly intractable poverty and socioeconomic tension. This is why the frame for effective action on urbanization is not just the city, but the nation as a whole.

For this to happen, governments, international organizations, bilateral aid and civil society must recognize the transformative power of cities and their unique capacity to generate new forms of economy, with greater sensitivity to the environment, culture, and social life. Such recognition assumes that innovation is not only necessary, but that it is not going to happen if not actively inspired and managed, encouraged and supported. For governments, adopting urban policies means that they accept that the world consists not just of national macro-economies, but also of urban areas, with many different sizes, forms and characters. This is why today we stand at a Galilean

moment. The Earth is not flat. It is urban. If we do not recognize that the settlement down the road is related to where we live, we shall all suffer, and unnecessarily so.

However, the challenge for the New Urban Agenda is not, however, only about perception. It is also about values. As suggested in the major global shifts identified by the United Nations (see Chapter 9), the fundamental challenge lies in the values the governments of this world will opt for in a collective effort to set shared priorities and the degree of urgency with which they are to address them. We must recognize that this is no longer 1976, or 1996, but 2016. In some cities, the sand in the hour glass has already dropped through the hole. The many examples of challenges facing cities are like canaries in the coal mine. They are footprints of our future, warning us of the world to come and imploring us to do better. It is for the Habitat III conference to steer the "emerging futures" of our cities on to a sustainable, prosperous path. This is about our children and grandchildren. We have no choice but to act— now!

It is for the Habitat III conference to steer the "emerging futures" of our cities on to a sustainable, prosperous path

Notes

1. UN-Habitat, 2013a; López and Blanco, 2014.
2. Particularly with regard to the 2030 Development Agenda, the Addis Ababa Action Agenda (AAAA), the Paris Agreement and the Sendai Framework for Disaster Risk Reduction (Schreiber et al, 2016) .
3. United Nations, 2016.
4. Citiscope, 2015.
5. Schreiber et al, 2016.
6. Kotter, 2008.
7. Acemoglu and Robinson, 2014.
8. United Nations, 2015m.
9. Chenery, 1973.
10. Schreiber et al, 2016
11. Ibid.
12. As recognized by the "city goal" (i.e., No 11) of the SDGs, and particularly Target 1 "by 2030, ensure access for all to adequate, safe and affordable housing and upgrade slums."
13. Citiscope, 2015.
14. Ibid.
15. These principles are adjusted from the document 'Urbanization and sustainable development: Towards a New Urban Agenda', UN-Habitat, 2014d.
16. Schreiber et al, 2016.
17. UN-Habitat, 2014d.
18. UN-Habitat, 2015k.
19. Ibid.
20. UN-Habitat, 2015k.
21. An interesting perspective on this issue was suggested by Annik Osmont, a French anthropologist, who wrote a book

arguing that the World Bank's "sites and services" and slum upgrading programmes in Burkina Faso, Côte d'Ivoire, Mali and Senegal had much less effect on those countries than the macro-economic adjustment programmes which the countries had been encouraged to adopt (Osmont, 1995).
22. Research on the spatial distribution of public expenditures in cities is scarce (Cohen and Dario,1994).
23. UN-Habitat, 2014 a.
24. UN-Habitat, 2014 b.
25. UN-Habitat, 2015k.
26. UN-Habitat, 2014e.
27. UN-Habitat, 2016d.
28. A UN-Habitat survey on inclusion conducted in 27 cities in Asia (10), Africa (7) and Latin America (10) showed that a majority of respondents believed that the rich political elites and civil servants benefited the most from urban reforms (69, 71 and 59 per cent, respectively) followed by politicians and bureaucrats (61, 77 and 39 per cent, respectively)[UN-Habitat, 2010a].
29. Regulatory floor area ratios in Mumbai, for instance, resulted in lower than needed densities, which in turn raised land and housing prices. This example demonstrates how rules governing housing occupancy can have major consequences on urban density reduction (Angel, 2000).
30. UN-Habitat, 2013a.
31. Ibid.

32. UN-Habitat, 2014d.
33. UN-Habitat, 2016a.
34. SDG, Goal 11, Target 11.2 *Accessible and Sustainable Transport Systems for all.*
35. World Bank, 2013a.
36. UN-Habitat, 2016d.
37. UN-Habitat, 2013a.
38. UN-Habitat, 2016d.
39. ONU-Hábitat, 2015.
40. Ibid.
41. Prud'homme et al, 2004; Dillinger, 1992.
42. Angel et al., 2011; Angel and Blei, 2015; Jenks et al , 2008.
43. Jabeen, 2014.
44. A recent study on land policies found that between 1985 and the year 2000, the world urban population grew from 1.8 to 2.7 billion, a 50 per cent increase, while urban land cover expanded, on average, from 13,000 to 33,000 hectares per city, or a 153 per cent increase (Angel et al., 2011).
45. UN-Habitat, 2016a.
46. At present densities, this would translate into over 80,000 sq km of land that must be added to cities in the next 10 years, over 60 per cent of which in medium-size cities (UN-Habitat, 2014)c.
47. UN-Habitat, 2013a.
48. Angel and Civco, 2012.
49. Sustainable Cities Institute, 2016.
50. UN-Habitat, 2014f.
51. Sustainable Cities Institute, op. cit.
52. UN-Habitat, 2014f.
53. The City of Sacramento, 2016.
54. The City of Portland, 2016.

55. UN-Habitat, 2016c.
56. Metu, op. cit.
57. UN-Habitat, 2016c.
58. Lincoln Institute of Land Policy, 2007.
59. Metu, op. cit.
60. Ibid.
61. Satterthwaite, 2016.
62. Metu, op. cit..
63. Ibid.
64. UN-Habitat, 2016c.
65. Bangkok Metropolitan Administration, 2012.
66. Lincoln Institute, op. cit.
67. UN-Habitat, 2015l.
68. UN-Habitat estimates that, on average, new expansions reduce by 30 to 40 per cent the land surface allocated to streets in comparison to the land allocated to streets in consolidated or historic areas. UN-Habitat, 2013d.
69. UN-Habitat, 2013a.
70. UN-Habitat, 2015l.
71. Burden, 2016.
72. Vancouver Public Space Network, 2016.
73. Burden, op. cit..
74. UN-Habitat, 2013f.
75. United Nations, 2015l.
76. UN-Habitat, 2015c
77. UN-Habitat, 2014d.
78. UN-Habitat, 2013a.
79. The Guardian, 2016.
80. United Nations, 2014
81. Schreiber et al, 2016.
82. UN-Habitat, 2013g.

Statistical Annex

General Disclaimer: The designations employed and presentation of the data in the Statistical Annex do not imply the expression of any opinion whatsover on the part of the Secretariat of the United Nations concerning the legal status of any country, city or area of its authorities, or concerning the delimitation of its frontiers or boundaries.

Table A.1: Urban Population Size and Rate of Change

	Urban population ('000)				Rate of change of the urban population (%)			Level of urbanization (%)				Rate of change in percentage urban (%)		
	1995	2005	2015	2025	1995-2005	2005-2015	1995-2015	1995	2005	2015	2025	1995-2005	2005-2015	1995-2015
WORLD	2,568,063	3,199,013	3,957,285	4,705,774	2.20	2.13	2.16	44.7	49.1	54.0	58.2	0.93	0.95	0.94
More developed regions	860,171	920,702	985,831	1,034,150	0.68	0.68	0.68	73.3	75.8	78.3	80.4	0.33	0.32	0.33
Less developed regions	1,707,892	2,278,311	2,971,454	3,671,623	2.88	2.66	2.77	37.4	43.0	49.0	54.0	1.40	1.31	1.35
Least developed countries	133,757	198,147	295,178	427,084	3.93	3.99	3.96	22.9	26.5	31.4	36.6	1.47	1.70	1.59
Less developed regions, excluding least developed countries	1,574,134	2,080,164	2,676,276	3,244,540	2.79	2.52	2.65	39.5	45.7	52.2	57.6	1.46	1.33	1.39
Less developed regions, excluding China	1,303,727	1,693,998	2,166,067	2,696,694	2.62	2.46	2.54	39.5	42.9	46.8	50.7	0.83	0.87	0.85
High-income countries	873,730	954,869	1,042,669	1,106,576	0.89	0.88	0.88	75.5	78.0	80.4	82.3	0.33	0.30	0.31
Middle-income countries	1,544,557	2,033,716	2,615,346	3,180,233	2.75	2.52	2.63	38.7	44.8	51.3	56.8	1.45	1.36	1.40
Upper-middle-income countries	928,664	1,229,547	1,574,772	1,857,018	2.81	2.47	2.64	44.6	53.9	63.5	70.7	1.88	1.64	1.76
Lower-middle-income countries	615,893	804,168	1,040,574	1,323,215	2.67	2.58	2.62	32.3	35.7	39.8	44.5	0.98	1.09	1.04
Low-income countries	133,543	191,782	278,657	397,055	3.62	3.74	3.68	23.2	26.4	30.8	35.7	1.28	1.54	1.41
Sub-Saharan Africa	163,172	240,036	359,534	522,530	3.86	4.04	3.95	29.1	33.0	37.9	42.9	1.25	1.39	1.32
AFRICA	236,904	330,742	471,602	658,814	3.34	3.55	3.44	33.1	36.3	40.4	44.9	0.93	1.08	1.01
Eastern Africa	**43,843**	**65,109**	**101,034**	**154,745**	**3.95**	**4.39**	**4.17**	**19.5**	**21.8**	**25.6**	**30.3**	**1.15**	**1.59**	**1.37**
Burundi	448	728	1,304	2,217	4.87	5.82	5.34	7.2	9.4	12.1	15.4	2.62	2.52	2.57
Comoros	132	167	218	287	2.39	2.63	2.51	28.3	27.9	28.3	30.1	-0.15	0.15	0.00
Djibouti	507	596	696	803	1.63	1.55	1.59	76.3	76.8	77.3	78.5	0.06	0.08	0.07
Eritrea	564	917	1,525	2,404	4.87	5.09	4.98	16.5	18.9	22.6	27.5	1.33	1.81	1.57
Ethiopia	7,885	11,958	19,266	30,190	4.16	4.77	4.47	13.8	15.7	19.5	24.2	1.27	2.15	1.71
Kenya	5,007	7,757	11,978	17,973	4.38	4.35	4.36	18.3	21.7	25.6	30.3	1.71	1.67	1.69
Madagascar	3,470	5,270	8,508	13,131	4.18	4.79	4.48	25.8	28.8	35.1	41.4	1.11	1.97	1.54
Malawi	1,322	1,946	2,816	4,255	3.87	3.70	3.78	13.3	15.1	16.3	18.7	1.27	0.78	1.02
Mauritius	489	505	497	505	0.33	-0.15	0.09	43.3	41.6	39.7	39.4	-0.39	-0.48	-0.44
Mayotte	51	88	110	133	5.53	2.24	3.88	41.5	50.2	47.0	45.0	1.92	-0.67	0.62
Mozambique	4,394	6,303	8,737	12,336	3.61	3.27	3.44	27.5	30.0	32.2	35.8	0.87	0.71	0.79
Réunion	580	731	850	943	2.31	1.52	1.91	86.1	92.4	95.0	95.9	0.70	0.28	0.49
Rwanda	557	1,818	3,581	6,024	11.83	6.78	9.30	9.8	19.3	28.8	37.9	6.73	4.02	5.37
Seychelles	37	44	51	56	1.74	1.28	1.51	49.5	51.1	53.9	57.1	0.31	0.54	0.42
Somalia	1,994	2,977	4,399	6,576	4.00	3.91	3.96	31.4	35.2	39.6	44.6	1.12	1.18	1.15
South Sudan	863	1,379	2,285	3,371	4.69	5.05	4.87	15.9	17.2	18.8	21.6	0.78	0.92	0.85
Uganda	2,419	3,743	6,463	10,889	4.37	5.46	4.91	11.7	13.0	16.1	19.9	1.11	2.12	1.61
United Republic of Tanzania	6,152	9,646	16,528	26,761	4.50	5.39	4.94	20.5	24.8	31.6	38.6	1.90	2.41	2.15
Zambia	3,281	4,199	6,351	9,774	2.47	4.14	3.30	37.1	36.6	40.9	45.7	-0.13	1.11	0.49
Zimbabwe	3,693	4,336	4,871	6,115	1.60	1.16	1.38	31.7	34.1	32.4	32.6	0.72	-0.52	0.10
Middle Africa	**28,525**	**42,363**	**63,061**	**90,976**	**3.96**	**3.98**	**3.97**	**34.5**	**39.1**	**44.0**	**49.0**	**1.25**	**1.18**	**1.22**
Angola	3,496	5,984	10,052	15,605	5.38	5.19	5.28	28.9	36.2	44.1	51.3	2.25	1.97	2.11
Cameroon	5,930	8,804	12,721	17,670	3.95	3.68	3.82	42.6	48.5	54.4	59.6	1.31	1.14	1.22
Central African Republic	1,220	1,508	1,923	2,538	2.12	2.43	2.28	37.2	38.1	40.0	43.8	0.22	0.50	0.36
Chad	1,499	2,183	3,057	4,498	3.76	3.37	3.56	21.5	21.8	22.5	24.7	0.15	0.30	0.23
Congo	1,535	2,161	3,054	4,140	3.42	3.46	3.44	56.4	61.0	65.4	69.4	0.78	0.70	0.74
Democratic Republic of the Congo	13,796	20,248	30,275	44,000	3.84	4.02	3.93	32.8	37.5	42.5	47.8	1.32	1.26	1.29
Equatorial Guinea	172	235	319	433	3.13	3.08	3.10	38.8	38.9	39.9	42.3	0.01	0.27	0.14
Gabon	814	1,151	1,526	1,916	3.46	2.82	3.14	75.4	83.4	87.2	88.5	1.02	0.44	0.73
Sao Tome and Principe	63	90	132	175	3.47	3.86	3.67	48.6	58.0	65.1	69.5	1.76	1.15	1.46
Northern Africa	**73,732**	**90,706**	**112,069**	**136,284**	**2.07**	**2.11**	**2.09**	**47.3**	**49.4**	**51.6**	**54.3**	**0.44**	**0.44**	**0.44**

Table A.1 Continued

	Urban population ('000)				Rate of change of the urban population (%)			Level of urbanization (%)				Rate of change in percentage urban (%)		
	1995	2005	2015	2025	1995-2005	2005-2015	1995-2015	1995	2005	2015	2025	1995-2005	2005-2015	1995-2015
Algeria	16,416	21,677	28,739	35,145	2.78	2.82	2.80	56.0	63.8	70.7	75.6	1.31	1.03	1.17
Egypt	26,188	30,884	36,538	43,610	1.65	1.68	1.67	42.8	43.0	43.1	45.0	0.05	0.03	0.04
Libya	3,608	4,302	4,962	5,769	1.76	1.43	1.59	76.0	76.9	78.6	80.7	0.12	0.21	0.17
Morocco	13,871	16,607	20,439	24,473	1.80	2.08	1.94	51.7	55.1	60.2	64.9	0.64	0.88	0.76
Sudan	7,906	10,347	13,391	18,220	2.69	2.58	2.63	32.2	32.8	33.8	36.7	0.16	0.31	0.24
Tunisia	5,522	6,543	7,510	8,464	1.70	1.38	1.54	61.5	65.1	66.8	69.2	0.57	0.26	0.42
Western Sahara	221	345	489	603	4.46	3.49	3.98	87.2	80.6	80.9	81.9	-0.78	0.04	-0.37
Southern Africa	**24,360**	**31,165**	**37,813**	**43,318**	**2.46**	**1.93**	**2.20**	**51.4**	**56.5**	**61.6**	**66.1**	**0.94**	**0.87**	**0.91**
Botswana	776	1,033	1,181	1,357	2.87	1.34	2.10	49.0	55.1	57.4	60.5	1.17	0.42	0.80
Lesotho	297	428	579	762	3.65	3.01	3.33	17.0	22.2	27.3	32.8	2.72	2.05	2.38
Namibia	493	743	1,116	1,567	4.09	4.08	4.08	29.8	36.6	46.7	55.4	2.06	2.42	2.24
South Africa	22,572	28,717	34,663	39,313	2.41	1.88	2.14	54.5	59.5	64.8	69.4	0.89	0.85	0.87
Swaziland	222	243	274	318	0.92	1.18	1.05	23.0	22.0	21.3	22.1	-0.45	-0.34	-0.39
Western Africa	**66,445**	**101,399**	**157,625**	**233,491**	**4.23**	**4.41**	**4.32**	**32.3**	**38.1**	**45.1**	**51.4**	**1.63**	**1.69**	**1.66**
Benin	2,200	3,271	4,782	6,768	3.97	3.80	3.88	36.8	40.0	44.0	48.7	0.84	0.95	0.89
Burkina Faso	1,527	2,891	5,349	8,833	6.38	6.15	6.27	15.1	21.5	29.9	37.7	3.53	3.27	3.40
Cabo Verde	195	276	333	394	3.49	1.88	2.68	48.8	57.7	65.5	71.0	1.68	1.27	1.48
Côte d'Ivoire	5,859	8,147	11,538	15,968	3.30	3.48	3.39	41.2	46.8	54.2	60.5	1.28	1.46	1.37
Gambia	462	752	1,175	1,714	4.87	4.46	4.67	43.4	52.3	59.6	64.4	1.88	1.30	1.59
Ghana	6,728	10,116	14,583	19,506	4.08	3.66	3.87	40.1	47.3	54.0	60.0	1.64	1.33	1.49
Guinea	2,310	3,142	4,589	6,608	3.08	3.79	3.43	29.5	32.8	37.2	42.4	1.07	1.25	1.16
Guinea-Bissau	372	581	882	1,249	4.46	4.18	4.32	32.6	40.9	49.3	56.0	2.25	1.88	2.07
Liberia	956	1,506	2,238	3,083	4.54	3.96	4.25	46.0	46.1	49.7	53.9	0.02	0.76	0.39
Mali	2,294	3,828	6,490	10,522	5.12	5.28	5.20	25.5	32.1	39.9	47.1	2.28	2.19	2.24
Mauritania	1,056	1,671	2,442	3,311	4.59	3.79	4.19	45.3	53.1	59.9	65.0	1.60	1.19	1.40
Niger	1,446	2,204	3,609	6,332	4.22	4.93	4.57	15.8	16.7	18.7	22.2	0.58	1.14	0.86
Nigeria	34,919	54,541	87,681	132,547	4.46	4.75	4.60	32.2	39.1	47.8	55.3	1.93	2.01	1.97
Saint Helena	2	2	2	2	-1.55	-1.39	-1.47	41.3	39.9	39.4	40.6	-0.34	-0.12	-0.23
Senegal	3,452	4,634	6,544	9,283	2.95	3.45	3.20	39.6	41.1	43.7	47.8	0.37	0.61	0.49
Sierra Leone	1,352	1,886	2,524	3,304	3.33	2.91	3.12	34.4	36.8	39.9	44.2	0.68	0.81	0.74
Togo	1,316	1,949	2,866	4,067	3.93	3.85	3.89	30.7	35.2	40.0	45.1	1.36	1.27	1.32
ASIA	1,211,260	1,621,843	2,113,137	2,561,409	2.92	2.65	2.78	34.8	41.1	48.2	53.9	1.68	1.58	1.63
Eastern Asia	**550,368**	**747,566**	**982,410**	**1,156,060**	**3.06**	**2.73**	**2.90**	**37.7**	**48.3**	**60.0**	**68.6**	**2.46**	**2.17**	**2.32**
China	383,156	560,518	779,479	947,540	3.80	3.30	3.55	31.0	42.5	55.6	65.4	3.17	2.68	2.93
China, Hong Kong SAR	6,144	6,897	7,314	7,743	1.15	0.59	0.87	100.0	100.0	100.0	100.0	0.00	0.00	0.00
China, Macao SAR	398	468	584	667	1.62	2.22	1.92	99.9	100.0	100.0	100.0	0.01	0.00	0.00
Democratic People's Republic of Korea	12,845	14,242	15,313	16,621	1.03	0.73	0.88	59.0	59.8	60.9	63.2	0.13	0.18	0.15
Japan	97,117	109,174	118,572	118,715	1.17	0.83	1.00	78.0	86.0	93.5	96.3	0.97	0.84	0.91
Mongolia	1,305	1,579	2,106	2,562	1.90	2.88	2.39	56.8	62.5	72.0	78.4	0.95	1.42	1.19
Republic of Korea	34,936	38,259	41,031	43,232	0.91	0.70	0.80	78.2	81.3	82.5	83.8	0.39	0.14	0.26
OTHER NON-SPECIFIED AREAS	14,466	16,430	18,010	18,980	1.27	0.92	1.10	68.4	72.3	76.9	80.4	0.56	0.61	0.59
South-Central Asia	389,068	507,255	651,197	819,597	2.65	2.50	2.58	28.3	31.2	35.0	39.6	0.95	1.16	1.06
Central Asia	22,733	23,607	26,767	31,345	0.38	1.26	0.82	42.8	40.9	40.5	42.3	-0.46	-0.11	-0.29
Kazakhstan	8,696	8,243	8,930	9,832	-0.53	0.80	0.13	55.9	54.7	53.2	54.3	-0.22	-0.27	-0.24
Kyrgyzstan	1,669	1,779	2,038	2,497	0.64	1.36	1.00	36.3	35.3	35.7	38.1	-0.30	0.12	-0.09
Tajikistan	1,670	1,799	2,306	3,027	0.74	2.48	1.61	28.9	26.4	26.8	28.7	-0.88	0.13	-0.38
Turkmenistan	1,876	2,234	2,689	3,218	1.75	1.85	1.80	44.8	47.0	50.0	54.1	0.49	0.62	0.55
Uzbekistan	8,822	9,552	10,804	12,771	0.79	1.23	1.01	38.4	36.7	36.4	38.7	-0.47	-0.09	-0.28
Southern Asia	**366,335**	**483,648**	**624,430**	**788,252**	**2.78**	**2.55**	**2.67**	**27.8**	**30.8**	**34.8**	**39.5**	**1.05**	**1.22**	**1.13**
Afghanistan	3,474	5,692	8,547	12,419	4.94	4.06	4.50	19.8	22.9	26.7	31.4	1.47	1.54	1.51
Bangladesh	26,004	38,374	54,984	74,020	3.89	3.60	3.74	21.7	26.8	34.3	41.6	2.12	2.46	2.29
Bhutan	105	201	300	391	6.56	3.99	5.27	20.5	31.0	38.6	45.3	4.11	2.22	3.16
India	254,314	329,517	419,939	525,459	2.59	2.42	2.51	26.6	29.2	32.7	37.0	0.94	1.13	1.04
Iran (Islamic Republic of)	36,424	47,393	58,316	68,473	2.63	2.07	2.35	60.2	67.6	73.4	77.8	1.15	0.83	0.99
Maldives	63	100	163	222	4.69	4.84	4.77	25.6	33.8	45.5	53.7	2.75	3.00	2.87
Nepal	2,243	3,840	5,294	7,162	5.38	3.21	4.29	10.9	15.2	18.6	22.7	3.32	2.04	2.68
Pakistan	40,333	54,863	72,921	95,618	3.08	2.85	2.96	31.8	34.7	38.8	43.8	0.87	1.10	0.98
Sri Lanka	3,375	3,667	3,967	4,488	0.83	0.79	0.81	18.5	18.4	18.4	19.6	-0.07	-0.01	-0.04
South-Eastern Asia	**168,068**	**231,789**	**301,579**	**370,921**	**3.21**	**2.63**	**2.92**	**34.6**	**41.3**	**47.6**	**53.3**	**1.75**	**1.44**	**1.59**

Table A.1 Continued

	Urban population ('000)				Rate of change of the urban population (%)			Level of urbanization (%)				Rate of change in percentage urban (%)		
	1995	2005	2015	2025	1995-2005	2005-2015	1995-2015	1995	2005	2015	2025	1995-2005	2005-2015	1995-2015
Brunei Darussalam	203	270	331	381	2.89	2.02	2.45	68.6	73.5	77.2	79.7	0.68	0.49	0.59
Cambodia	1,864	2,561	3,249	4,274	3.18	2.38	2.78	17.3	19.2	20.7	23.6	1.02	0.78	0.90
Indonesia	70,027	103,119	137,422	170,111	3.87	2.87	3.37	36.1	45.9	53.7	60.3	2.42	1.57	1.99
Lao People's Democratic Republic	847	1,586	2,711	3,936	6.28	5.36	5.82	17.4	27.4	38.6	47.7	4.55	3.44	3.99
Malaysia	11,542	17,210	22,898	28,005	4.00	2.86	3.43	55.7	66.6	74.7	80.1	1.79	1.15	1.47
Myanmar	11,570	14,517	18,469	22,938	2.27	2.41	2.34	25.5	28.9	34.1	39.8	1.25	1.64	1.45
Philippines	33,613	39,995	45,173	53,548	1.74	1.22	1.48	48.3	46.6	44.4	44.9	-0.36	-0.49	-0.42
Singapore	3,483	4,496	5,619	6,334	2.55	2.23	2.39	100.0	100.0	100.0	100.0	0.00	0.00	0.00
Thailand	17,858	24,598	33,952	40,978	3.20	3.22	3.21	30.3	37.5	50.4	60.4	2.15	2.95	2.55
Timor-Leste	195	262	384	547	2.94	3.83	3.38	22.5	26.3	32.8	38.6	1.55	2.19	1.87
Viet Nam	16,866	23,175	31,372	39,870	3.18	3.03	3.10	22.2	27.3	33.6	39.9	2.07	2.08	2.07
Western Asia	**103,756**	**135,233**	**177,952**	**214,830**	**2.65**	**2.75**	**2.70**	**62.4**	**65.9**	**69.9**	**72.8**	**0.54**	**0.60**	**0.57**
Armenia	2,129	1,935	1,874	1,872	-0.96	-0.32	-0.64	66.1	64.2	62.7	62.6	-0.29	-0.24	-0.26
Azerbaijan	4,057	4,486	5,250	5,961	1.01	1.57	1.29	52.2	52.4	54.6	57.8	0.03	0.42	0.23
Bahrain	498	778	1,207	1,406	4.45	4.40	4.42	88.4	88.4	88.8	89.5	0.00	0.04	0.02
Cyprus	582	705	779	846	1.92	1.00	1.46	68.0	68.3	66.9	66.8	0.03	-0.20	-0.08
Georgia	2,728	2,348	2,309	2,287	-1.50	-0.17	-0.83	53.8	52.5	53.6	56.1	-0.26	0.22	-0.02
Iraq	14,006	18,826	24,847	32,654	2.96	2.78	2.87	68.8	68.8	69.5	71.2	0.00	0.10	0.05
Israel	4,845	6,044	7,297	8,419	2.21	1.88	2.05	90.9	91.5	92.1	92.8	0.07	0.07	0.07
Jordan	3,385	4,253	6,435	7,495	2.28	4.14	3.21	78.4	81.2	83.7	85.7	0.35	0.30	0.33
Kuwait	1,555	2,255	3,524	4,366	3.71	4.47	4.09	98.0	98.2	98.3	98.5	0.01	0.02	0.02
Lebanon	2,573	3,452	4,437	4,489	2.94	2.51	2.72	84.8	86.6	87.8	89.0	0.21	0.14	0.17
State of Palestine	1,824	2,601	3,423	4,476	3.55	2.75	3.15	70.2	73.1	75.3	77.6	0.40	0.30	0.35
Oman	1,544	1,826	3,228	3,885	1.68	5.70	3.69	71.7	72.4	77.6	81.4	0.10	0.70	0.40
Qatar	476	800	2,333	2,653	5.19	10.70	7.95	95.0	97.4	99.2	99.7	0.25	0.18	0.22
Saudi Arabia	14,607	19,994	24,854	29,086	3.14	2.18	2.66	78.7	81.0	83.1	85.0	0.29	0.26	0.28
Syrian Arab Republic	7,184	9,771	12,837	17,213	3.08	2.73	2.90	50.1	53.8	57.7	61.8	0.71	0.70	0.70
Turkey	36,356	45,919	56,288	65,011	2.34	2.04	2.19	62.1	67.8	73.4	77.7	0.87	0.80	0.83
United Arab Emirates	1,838	3,413	8,192	10,072	6.19	8.76	7.47	78.3	82.3	85.5	87.7	0.49	0.39	0.44
Yemen	3,568	5,828	8,837	12,639	4.90	4.16	4.53	23.8	28.9	34.6	40.4	1.97	1.79	1.88
EUROPE	514,365	525,635	547,066	561,571	0.22	0.40	0.31	70.5	71.7	73.6	75.8	0.17	0.26	0.22
Eastern Europe	**211,380**	**204,275**	**202,950**	**200,152**	**-0.34**	**-0.07**	**-0.20**	**68.2**	**68.5**	**69.4**	**71.0**	**0.05**	**0.13**	**0.09**
Belarus	6,921	6,993	7,099	7,020	0.10	0.15	0.13	67.9	72.4	76.7	80.0	0.63	0.58	0.61
Bulgaria	5,665	5,423	5,260	5,023	-0.44	-0.31	-0.37	67.8	70.6	73.9	77.0	0.41	0.47	0.44
Czech Republic	7,717	7,530	7,866	8,101	-0.25	0.44	0.10	74.6	73.6	73.0	73.5	-0.14	-0.08	-0.11
Hungary	6,750	6,699	7,060	7,279	-0.08	0.52	0.22	65.2	66.4	71.2	75.3	0.17	0.71	0.44
Poland	23,663	23,479	23,139	23,287	-0.08	-0.15	-0.11	61.5	61.5	60.5	61.4	-0.01	-0.15	-0.08
Republic of Moldova	2,009	1,707	1,546	1,508	-1.63	-0.99	-1.31	46.3	45.3	45.0	47.0	-0.22	-0.07	-0.14
Romania	12,347	11,758	11,774	11,838	-0.49	0.01	-0.24	53.8	53.2	54.6	57.0	-0.11	0.26	0.07
Russian Federation	109,032	105,737	105,164	103,200	-0.31	-0.05	-0.18	73.4	73.5	74.0	75.3	0.01	0.07	0.04
Slovakia	3,032	2,996	2,925	2,923	-0.12	-0.24	-0.18	56.5	55.6	53.6	53.6	-0.17	-0.36	-0.27
Ukraine	34,243	31,953	31,116	29,973	-0.69	-0.27	-0.48	67.0	67.8	69.7	72.1	0.12	0.28	0.20
Northern Europe	**72,230**	**75,896**	**82,403**	**88,759**	**0.50**	**0.82**	**0.66**	**77.5**	**78.9**	**81.2**	**83.3**	**0.18**	**0.29**	**0.23**
Channel Islands	44	47	51	56	0.76	0.81	0.79	30.5	30.7	31.5	33.0	0.07	0.23	0.15
Denmark	4,447	4,651	4,964	5,260	0.45	0.65	0.55	85.0	85.9	87.7	89.2	0.10	0.21	0.16
Estonia	1,007	911	865	836	-1.01	-0.52	-0.76	70.3	68.7	67.5	67.5	-0.23	-0.18	-0.20
Faroe Islands	14	20	21	23	3.60	0.60	2.10	30.9	39.8	42.0	44.5	2.52	0.53	1.53
Finland	4,136	4,349	4,599	4,801	0.50	0.56	0.53	81.0	82.9	84.2	85.6	0.24	0.16	0.20
Iceland	245	276	317	351	1.19	1.38	1.29	91.6	93.0	94.1	94.9	0.15	0.12	0.13
Ireland	2,091	2,515	2,989	3,429	1.84	1.73	1.79	57.9	60.5	63.2	66.4	0.43	0.45	0.44
Isle of Man	37	42	45	49	1.10	0.86	0.98	51.8	51.9	52.2	53.5	0.02	0.06	0.04
Latvia	1,711	1,515	1,369	1,299	-1.22	-1.01	-1.11	68.8	68.0	67.4	67.9	-0.11	-0.09	-0.10
Lithuania	2,441	2,190	1,995	1,941	-1.08	-0.94	-1.01	67.3	66.6	66.5	67.3	-0.10	-0.02	-0.06
Norway	3,216	3,583	4,139	4,663	1.08	1.44	1.26	73.8	77.5	80.5	82.9	0.49	0.38	0.44
Sweden	7,399	7,614	8,319	9,056	0.29	0.89	0.59	83.8	84.3	85.8	87.3	0.06	0.18	0.12
United Kingdom	45,442	48,182	52,730	56,996	0.59	0.90	0.74	78.4	79.9	82.6	84.8	0.20	0.33	0.26
Southern Europe	**94,510**	**101,567**	**109,414**	**113,571**	**0.72**	**0.74**	**0.73**	**65.5**	**67.6**	**70.1**	**72.6**	**0.31**	**0.36**	**0.33**
Albania	1,307	1,494	1,835	2,158	1.34	2.06	1.70	38.9	46.7	57.4	65.7	1.83	2.06	1.94
Andorra	60	73	69	70	2.04	-0.62	0.71	93.7	90.3	85.1	81.2	-0.37	-0.59	-0.48

Table A.1 Continued

	Urban population ('000)				Rate of change of the urban population (%)			Level of urbanization (%)				Rate of change in percentage urban (%)		
	1995	2005	2015	2025	1995-2005	2005-2015	1995-2015	1995	2005	2015	2025	1995-2005	2005-2015	1995-2015
Bosnia and Herzegovina	1,388	1,521	1,519	1,593	0.92	-0.01	0.45	39.4	39.2	39.8	42.5	-0.05	0.14	0.04
Croatia	2,575	2,476	2,509	2,568	-0.39	0.13	-0.13	54.9	56.4	59.0	62.6	0.27	0.44	0.36
Gibraltar	27	29	29	29	0.64	0.09	0.37	100.0	100.0	100.0	100.0	0.00	0.00	0.00
Greece	7,696	8,221	8,679	8,930	0.66	0.54	0.60	72.1	74.5	78.0	80.9	0.32	0.47	0.39
Holy See	1	1	1	1	0.22	0.03	0.12	100.0	100.0	100.0	100.0	0.00	0.00	0.00
Italy	38,124	39,743	42,166	43,459	0.42	0.59	0.50	66.9	67.7	69.0	70.9	0.12	0.18	0.15
Malta	360	388	411	422	0.76	0.58	0.67	90.9	93.6	95.4	96.3	0.29	0.19	0.24
Montenegro	328	383	398	407	1.55	0.38	0.97	53.4	62.2	64.0	66.2	1.53	0.29	0.91
Portugal	5,161	6,046	6,734	7,200	1.58	1.08	1.33	51.1	57.5	63.5	68.5	1.18	0.98	1.08
San Marino	24	28	30	31	1.73	0.68	1.21	91.7	94.0	94.2	94.5	0.25	0.02	0.14
Serbia	5,379	5,429	5,235	5,105	0.09	-0.36	-0.14	51.8	54.5	55.6	57.4	0.50	0.19	0.35
Slovenia	1,008	1,010	1,032	1,057	0.02	0.22	0.12	50.6	50.5	49.7	50.5	-0.02	-0.17	-0.10
Spain	29,903	33,522	37,561	39,301	1.14	1.14	1.14	75.9	77.3	79.6	81.7	0.18	0.30	0.24
TFYR Macedonia	1,172	1,202	1,204	1,241	0.25	0.02	0.14	59.6	57.5	57.1	59.2	-0.35	-0.07	-0.21
Western Europe	136,244	143,897	152,300	159,090	0.55	0.57	0.56	74.8	76.4	78.9	81.1	0.22	0.32	0.27
Austria	5,254	5,423	5,645	5,965	0.32	0.40	0.36	65.8	65.8	66.0	67.2	0.00	0.02	0.01
Belgium	9,834	10,235	10,944	11,317	0.40	0.67	0.53	96.8	97.4	97.9	98.2	0.06	0.05	0.06
France	43,456	47,393	51,674	55,548	0.87	0.86	0.87	74.9	77.1	79.5	81.7	0.29	0.31	0.30
Germany	60,936	61,498	62,170	62,654	0.09	0.11	0.10	73.3	73.4	75.3	77.5	0.01	0.26	0.14
Liechtenstein	5	5	5	6	0.08	0.45	0.26	16.5	14.7	14.3	14.7	-1.12	-0.31	-0.71
Luxembourg	338	396	490	561	1.59	2.11	1.85	82.9	86.6	90.2	92.3	0.44	0.40	0.42
Monaco	31	34	38	42	0.96	1.25	1.11	100.0	100.0	100.0	100.0	0.00	0.00	0.00
Netherlands	11,227	13,471	15,243	16,188	1.82	1.24	1.53	72.8	82.6	90.5	94.2	1.27	0.91	1.09
Switzerland	5,163	5,443	6,089	6,811	0.53	1.12	0.83	73.6	73.5	73.9	75.1	-0.01	0.06	0.02
LATIN AMERICA AND THE CARIBBEAN	355,089	432,804	502,793	567,089	1.98	1.50	1.74	73.0	76.9	79.8	82.1	0.52	0.37	0.44
Caribbean	**21,708**	**25,829**	**30,328**	**34,032**	**1.74**	**1.61**	**1.67**	**59.5**	**64.3**	**70.4**	**74.7**	**0.77**	**0.90**	**0.84**
Anguilla	10	13	15	16	2.54	1.45	1.99	100.0	100.0	100.0	100.0	0.00	0.00	0.00
Antigua and Barbuda	23	24	22	22	0.39	-1.00	-0.31	34.0	29.2	23.8	21.4	-1.50	-2.06	-1.78
Aruba	39	45	43	43	1.36	-0.40	0.48	48.8	44.9	41.5	40.5	-0.83	-0.78	-0.80
Bahamas	227	271	321	360	1.78	1.71	1.74	81.0	82.3	82.9	83.8	0.16	0.07	0.12
Barbados	88	90	90	95	0.29	0.04	0.17	33.3	32.9	31.5	31.7	-0.10	-0.45	-0.28
British Virgin Islands	7	10	13	16	2.95	2.85	2.90	40.4	43.2	46.2	49.4	0.66	0.67	0.67
Cayman Islands	32	49	60	65	4.29	2.10	3.19	100.0	100.0	100.0	100.0	0.00	0.00	0.00
Cuba	8,120	8,597	8,670	8,644	0.57	0.08	0.33	74.3	76.1	77.1	78.4	0.25	0.12	0.18
Dominica	46	47	51	55	0.15	0.73	0.44	64.8	66.6	69.5	72.2	0.27	0.43	0.35
Dominican Republic	4,595	6,294	8,413	10,043	3.15	2.90	3.02	57.6	67.4	79.0	85.4	1.57	1.59	1.58
Grenada	35	37	38	40	0.65	0.27	0.46	34.5	35.9	35.6	36.5	0.39	-0.09	0.15
Guadeloupe	394	437	463	482	1.03	0.58	0.81	97.7	98.4	98.4	98.5	0.07	0.00	0.04
Haiti	2,555	4,083	6,219	8,051	4.69	4.21	4.45	32.6	44.1	58.6	67.5	3.02	2.85	2.94
Jamaica	1,246	1,416	1,541	1,688	1.28	0.84	1.06	50.6	52.8	54.8	57.7	0.42	0.37	0.40
Martinique	326	354	361	369	0.82	0.19	0.50	88.4	89.3	88.9	89.1	0.10	-0.05	0.03
Montserrat	1	0	0	1	-10.54	0.48	-5.03	12.5	9.3	9.0	9.3	-2.91	-0.34	-1.62
Sint Maarten (Dutch part)	35	37	47	54	0.57	2.27	1.42	100.0	100.0	100.0	100.0	0.00	0.00	0.00
Caribbean Netherlands	12	11	15	17	-0.70	3.23	1.27	76.4	74.8	74.7	75.4	-0.22	0.00	-0.11
Curaçao	126	117	147	156	-0.74	2.26	0.76	87.7	90.5	89.3	88.8	0.32	-0.13	0.09
Puerto Rico	3,458	3,540	3,445	3,454	0.23	-0.27	-0.02	93.7	94.1	93.6	93.5	0.04	-0.05	-0.01
Saint Kitts and Nevis	14	16	18	21	0.85	1.19	1.02	33.7	32.0	32.0	34.0	-0.51	0.00	-0.25
Saint Lucia	42	38	34	38	-1.02	-1.10	-1.06	28.8	23.1	18.5	19.3	-2.20	-2.21	-2.21
Saint Vincent and the Grenadines	47	51	55	59	0.86	0.79	0.82	43.4	47.0	50.6	54.0	0.80	0.73	0.76
Trinidad and Tobago	121	128	114	107	0.62	-1.22	-0.30	9.6	9.9	8.4	8.0	0.29	-1.59	-0.65
Turks and Caicos Islands	12	23	32	37	6.38	3.10	4.74	79.9	87.7	92.2	94.5	0.93	0.49	0.71
United States Virgin Islands	97	101	102	102	0.42	0.10	0.26	90.4	93.7	95.3	96.3	0.35	0.18	0.26
Central America	**85,888**	**105,726**	**126,854**	**147,690**	**2.08**	**1.82**	**1.95**	**67.2**	**70.6**	**73.8**	**76.5**	**0.49**	**0.44**	**0.47**
Belize	98	126	153	186	2.48	1.94	2.21	47.5	46.3	44.0	43.8	-0.25	-0.52	-0.38
Costa Rica	1,898	2,837	3,842	4,625	4.02	3.03	3.53	54.6	65.7	76.8	83.3	1.85	1.57	1.71
El Salvador	3,102	3,744	4,288	4,796	1.88	1.36	1.62	54.0	61.6	66.7	71.0	1.33	0.79	1.06
Guatemala	4,304	5,981	8,383	11,470	3.29	3.38	3.33	43.1	47.2	51.6	56.2	0.90	0.89	0.90
Honduras	2,401	3,347	4,610	6,041	3.32	3.20	3.26	42.9	48.5	54.7	60.2	1.22	1.21	1.21
Mexico	69,987	84,498	99,245	112,981	1.88	1.61	1.75	73.4	76.3	79.2	81.8	0.39	0.38	0.39

Table A.1 Continued

	Urban population ('000)				Rate of change of the urban population (%)			Level of urbanization (%)				Rate of change in percentage urban (%)		
	1995	2005	2015	2025	1995-2005	2005-2015	1995-2015	1995	2005	2015	2025	1995-2005	2005-2015	1995-2015
Nicaragua	2,494	3,051	3,678	4,388	2.02	1.87	1.94	53.5	55.9	58.8	62.3	0.44	0.50	0.47
Panama	1,603	2,143	2,656	3,204	2.90	2.14	2.52	58.1	63.7	66.6	69.7	0.91	0.45	0.68
South America	**247,493**	**301,248**	**345,611**	**385,366**	**1.97**	**1.37**	**1.67**	**76.8**	**80.9**	**83.3**	**85.2**	**0.51**	**0.29**	**0.40**
Argentina	30,710	34,816	38,677	42,231	1.25	1.05	1.15	88.2	90.1	91.8	93.0	0.22	0.18	0.20
Bolivia	4,535	6,005	7,553	9,241	2.81	2.29	2.55	59.4	64.2	68.5	72.2	0.78	0.65	0.71
Brazil	125,643	154,190	174,508	191,032	2.05	1.24	1.64	77.6	82.8	85.7	87.8	0.65	0.34	0.50
Chile	12,208	14,286	16,047	17,533	1.57	1.16	1.37	84.5	87.4	89.5	90.9	0.34	0.24	0.29
Colombia	25,791	31,775	37,858	43,434	2.09	1.75	1.92	70.5	73.6	76.4	79.0	0.43	0.38	0.40
Ecuador	6,537	8,502	10,343	12,324	2.63	1.96	2.29	57.8	61.7	63.7	66.4	0.66	0.32	0.49
Falkland Islands (Malvinas)	2	2	2	2	2.63	1.08	1.86	66.0	70.8	76.2	80.1	0.71	0.74	0.72
French Guiana	107	164	221	284	4.27	2.98	3.63	77.0	81.1	84.4	86.5	0.53	0.39	0.46
Guyana	212	215	231	255	0.15	0.69	0.42	29.1	28.3	28.6	30.3	-0.29	0.09	-0.10
Paraguay	2,503	3,386	4,196	5,109	3.02	2.15	2.58	52.1	57.4	59.7	62.6	0.95	0.40	0.68
Peru	16,985	20,802	24,495	28,403	2.03	1.63	1.83	71.0	75.0	78.6	81.4	0.56	0.47	0.51
Suriname	288	333	362	390	1.46	0.84	1.15	66.1	66.7	66.0	66.4	0.09	-0.10	0.00
Uruguay	2,919	3,103	3,269	3,411	0.61	0.52	0.57	90.5	93.3	95.3	96.5	0.30	0.21	0.26
Venezuela (Bolivarian Republic of)	19,052	23,669	27,848	31,717	2.17	1.63	1.90	86.2	88.6	89.0	89.6	0.27	0.05	0.16
NORTHERN AMERICA	229,947	264,278	294,834	325,100	1.39	1.09	1.24	77.3	80.0	81.6	83.4	0.34	0.21	0.27
Bermuda	61	64	66	66	0.43	0.22	0.33	100.0	100.0	100.0	100.0	0.00	0.00	0.00
Canada	22,755	25,842	29,353	32,756	1.27	1.27	1.27	77.7	80.1	81.8	83.6	0.31	0.21	0.26
Greenland	45	47	50	50	0.44	0.48	0.46	80.9	82.9	86.4	89.4	0.24	0.42	0.33
Saint Pierre and Miquelon	6	5	5	6	-0.20	-0.05	-0.12	88.9	89.5	90.4	91.2	0.07	0.10	0.08
United States of America	207,080	238,319	265,361	292,222	1.41	1.07	1.24	77.3	79.9	81.6	83.3	0.34	0.21	0.27
OCEANIA	20,497	23,711	27,853	31,791	1.46	1.61	1.53	70.6	70.5	70.8	71.1	0.00	0.03	0.02
Australia/New Zealand	18,742	21,616	25,359	28,763	1.43	1.60	1.51	86.0	87.7	88.9	90.1	0.20	0.14	0.17
Australia	15,606	18,058	21,393	24,400	1.46	1.69	1.58	86.1	88.0	89.4	90.6	0.22	0.16	0.19
New Zealand	3,136	3,557	3,966	4,363	1.26	1.09	1.17	85.3	86.1	86.3	86.9	0.08	0.03	0.06
Melanesia	1,217	1,488	1,856	2,323	2.01	2.21	2.11	19.6	19.0	19.3	20.2	-0.31	0.13	-0.09
Fiji	353	410	480	533	1.51	1.56	1.53	45.5	49.9	53.7	57.3	0.92	0.74	0.83
New Caledonia	114	146	185	221	2.52	2.33	2.43	60.1	64.0	70.2	74.7	0.62	0.93	0.78
Papua New Guinea	664	799	993	1,287	1.85	2.17	2.01	14.1	13.1	13.0	13.9	-0.72	-0.08	-0.40
Solomon Islands	53	84	131	187	4.63	4.44	4.54	14.7	17.8	22.3	26.6	1.96	2.25	2.10
Vanuatu	34	48	69	94	3.55	3.55	3.55	20.2	23.1	26.1	29.3	1.36	1.23	1.30
Micronesia	297	331	347	390	1.10	0.47	0.79	63.8	66.0	66.8	67.8	0.35	0.12	0.24
Guam	134	148	161	181	1.02	0.79	0.90	92.1	93.6	94.5	95.2	0.17	0.09	0.13
Kiribati	28	39	47	57	3.48	1.71	2.60	36.4	43.6	44.3	46.3	1.79	0.17	0.98
Marshall Islands	34	36	39	42	0.67	0.57	0.62	66.7	69.9	72.7	75.1	0.46	0.39	0.43
Micronesia (Fed. States of)	27	24	23	27	-1.28	-0.12	-0.70	25.1	22.3	22.4	23.5	-1.16	0.04	-0.56
Nauru	10	10	10	11	0.14	0.01	0.08	100.0	100.0	100.0	100.0	0.00	0.00	0.00
Northern Mariana Islands	52	58	49	50	1.15	-1.62	-0.24	89.6	89.8	89.2	89.2	0.03	-0.06	-0.02
Palau	12	15	19	22	2.27	1.81	2.04	71.4	77.7	87.1	90.9	0.84	1.14	0.99
Polynesia	241	277	291	315	1.38	0.49	0.93	41.6	43.2	42.5	42.8	0.37	-0.16	0.10
American Samoa	45	52	48	52	1.44	-0.73	0.36	85.3	88.1	87.2	87.1	0.33	-0.10	0.11
Cook Islands	11	14	16	17	2.49	1.19	1.84	58.7	71.0	74.5	76.9	1.91	0.48	1.20
French Polynesia	122	144	158	172	1.65	0.94	1.30	56.6	56.4	55.9	55.9	-0.04	-0.10	-0.07
Niue	1	1	1	1	-1.38	-0.92	-1.15	31.5	35.2	42.5	49.2	1.13	1.89	1.51
Samoa	37	38	37	38	0.41	-0.34	0.04	21.5	21.2	19.1	18.5	-0.14	-1.05	-0.60
Tokelau	0	0	0	0	0.00	0.00		0.0	0.0	0.0	0.0	0.00	0.00	0.00
Tonga	22	23	25	29	0.64	0.76	0.70	22.9	23.2	23.7	25.0	0.13	0.24	0.18
Tuvalu	4	5	6	7	1.72	2.06	1.89	44.0	49.7	59.7	67.3	1.22	1.84	1.53
Wallis and Futuna Islands	0	0	0	0				0.0	0.0	0.0	0.0	0.00	0.00	0.00

Source: United Nations, Department of Economic and Social Affairs, Population Division (2014). World Urbanization Prospects: The 2014 Revision.

Table B.1: Households with Improved Water and Improved Sanitation in Selected Cities

Country	City	Year	Improved water (%)	Improved sanitation (%)
Angola	Luanda	2006	51.4	92.4
Angola	Other cities/towns	2006	70.6	61.6
Angola	Luanda	2011	63.9	93.7
Angola	Other cities/towns	2011	89.5	79.9
Benin	Djougou	2011	65.2	26.9
Benin	Porto Novo	2011	82.9	62.2
Benin	Cotonou	2011	98.7	84.6
Benin	Other cities/towns	2011	80.5	45.5
Burkina Faso	Ouagadougou	2010	98.6	93.9
Burkina Faso	Other cities/towns	2010	91.2	72.4
Burundi	Bunjumbura	2012	98.2	37.7
Burundi	Other cities/towns	2012	96.5	22.1
Cameroon	Younde	2004	97.9	81.8
Cameroon	Douala	2004	86.9	75.5
Cameroon	Other cities/towns	2004	82.5	75.6
CAR	Bangui	1994	74.9	49.4
CAR	Other cities/towns	1994	33.4	50.0
Chad	Ndjamena	2004	87.8	67.5
Chad	Other cities/towns	2004	63.9	36.7
Comoros	Moroni	2012	97.3	27.3
Comoros	Other cities/towns	2012	94.2	62.9
Congo	Brazaville	2009	98.8	62.7
Congo	Other cities/towns	2009	94.0	59.1
Cote d'Ivoire	Abidjan	2011	98.8	88.5
Cote d'Ivoire	Other cities/towns	2011	87.2	68.1
DRC	Kinshasa	2013	99.0	64.9
Egypt	Cairo	2014	100.0	100.0
Egypt	Alexandria	2014	100.0	99.9
Egypt	Port Said	2014	96.9	99.5
Ethiopia	Addis Ababa	2010	99.8	71.3
Ethiopia	Other cities/towns	2010	90.6	39.9
Gabon	Libreville	2012	99.0	85.4
Gabon	Other cities/towns	2012	96.5	48.7
Gambia	Banjul	2013	98.9	97.4
Gambia	Other cities/towns	2013	95.1	76.4
Ghana	Accra	2008	60.1	93.8
Ghana	Other cities/towns	2008	88.0	85.3
Guinea	Conakry	2012	99.0	91.3
Guinea	Other cities/towns	2012	91.5	80.0
Kenya	Nairobi	2008	98.3	93.6
Kenya	Mombasa	2008	74.0	78.8
Kenya	Other cities/towns	2008	90.0	75.5
Lesotho	Maseru	2009	90.4	61.7
Lesotho	Other cities/towns	2009	91.7	60.3
Liberia	Monrovia	2011	78.2	58.4
Liberia	Other cities/towns	2011	90.6	59.2
Madagascar	Antananarivo	2013	94.6	35.6
Madagascar	Other cities/towns	2013	81.6	35.1
Malawi	Lilongwe	2012	86.6	42.8
Malawi	Other cities/towns	2012	95.3	46.0
Mali	Bamako	2012	97.5	90.6
Mali	Other cities/towns	2012	88.5	80.9
Mauritania	Nouakchott	2001	94.4	57.6
Mauritania	Other cities/towns	2001	68.4	64.3
Morocco	Casablanca	2004	100.0	98.9
Morocco	Rabat	2004	99.9	99.7
Morocco	Fes	2004	99.6	99.6
Morocco	Marrakech	2004	99.7	99.7
Morocco	Tangier	2004	95.5	100.0
Morocco	Maknes	2004	99.2	97.0
Morocco	Other cities/towns	2004	95.3	96.8
Mozambique	Maputo	2011	98.0	40.4
Mozambique	Other cities/towns	2011	73.8	36.0
Namibia	Windhoek	2013	99.4	81.6
Namibia	Other cities/towns	2013	96.3	68.0
Niger	Niamey	2012	97.5	84.5
Niger	Other cities/towns	2012	96.1	70.9
Nigeria	Lagos:Lagos	2013	57.2	85.6
Nigeria	Oyo:Ibadan	2013	74.5	67.6
Nigeria	Kaduna:Zaria	2013	79.4	92.9
Nigeria	Ondo:Akure	2013	71.7	75.6
Nigeria	Ekiti:Effon Alaiye	2013	73.1	54.2
Nigeria	Yobe:Damaturu	2013	60.6	94.1
Nigeria	Kano	2013	93.6	96.4
Nigeria	Abuja	2013	75.9	94.1
Nigeria	Other cities/towns	2013	78.1	72.2
Rwanda	kigali	2011	93.1	94.8
Rwanda	Other cities/towns	2011	85.0	77.6
Senegal	Dakar	2010	98.2	91.5
Senegal	Other cities/towns	2010	88.4	67.3
Sierra Leone	Freetown	2008	95.7	83.9
Sierra Leone	Other cities/towns	2008	72.5	66.8
South Africa	CapeTown	1998	95.8	82.3
South Africa	Durban	1998	98.4	90.3
South Africa	Pretoria	1998	100.0	75.0
South Africa	Port Elizabeth	1998	97.2	65.7
South Africa	West Rand	1998	99.4	84.8
South Africa	Other cities/towns	1998	98.8	81.8
Swaziland	Mbabane	2006	88.6	72.5
Swaziland	Manzini	2006	92.8	77.0
Swaziland	Other cities/towns	2006	94.6	86.4
Tanzania	Dar es Salaam	2010	86.2	42.3
Tanzania	Arusha	2010	93.5	37.4
Tanzania	Other cities/towns	2010	73.4	50.0
Togo	Lome	2013	83.9	89.4
Togo	Other cities/towns	2013	84.0	60.5
Uganda	Kampala	2011	82.5	91.7
Uganda	Other cities/towns	2011	91.6	93.3
Zambia	Other cities/towns	2013	84.1	64.2
Zambia	Lusaka	2013	98.3	87.3
Zimbabwe	Harare	2010	91.6	93.5
Zimbabwe	Other cities/towns	2010	97.9	93.3
Bolivia	La Paz	2008	97.5	84.2
Bolivia	Sucre	2008	94.4	77.5
Bolivia	Cochabamba	2008	84.4	83.3
Bolivia	Oruro	2008	97.2	70.2
Bolivia	Potosi	2008	98.1	83.4
Bolivia	Tarija	2008	99.3	87.8
Bolivia	Santa Cruz	2008	98.9	79.6
Bolivia	Trinidad	2008	65.0	68.2
Bolivia	Cobija	2008	86.7	77.5
Brazil	Capilal, large city	1991	94.6	94.5

Table B.1 Continued

Country	City	Year	Improved water (%)	Improved sanitation (%)
Brazil	Other cities/towns	1991	82.4	80.8
Brazil	Sao Paulo	1996	98.2	90.7
Brazil	Rio de Janeiro	1996	89.4	83.0
Brazil	Belo Horizonte	1996	90.9	90.0
Brazil	Fortaleza	1996	82.4	59.3
Brazil	Curitiba	1996	90.0	88.6
Brazil	Brasilia	1996	90.2	83.1
Brazil	Goiana	1996	95.7	83.3
Brazil	Victoria	1996	94.6	92.1
Brazil	Other cities/towns	1996	82.8	66.0
Colombia	Bogota	2010	99.9	99.8
Colombia	Medellin	2010	98.9	99.3
Colombia	Barranquilla	2010	98.6	97.0
Colombia	Cartagena	2010	93.2	92.3
Colombia	Cali	2010	98.7	98.9
Colombia	Arauca	2010	99.7	99.3
Colombia	Yopali	2010	98.4	99.4
Dominican Republic	Santo Domingo	2013	86.4	98.0
Guatemala	Guatemala city	1995	93.7	82.6
Haiti	Port-Au-Prince	2012	50.2	84.6
Haiti	Other cities/towns	2012	48.5	75.1
Honduras	Tegucigalpa	2005	89.4	86.5
Honduras	La ceiba	2011	98.4	96.5
Honduras	Trujillo	2011	99.5	94.8
Honduras	Comayagua	2011	98.5	92.6
Nicaragua	Managua	2001	99.8	81.9
Nicaragua	Jinotega	2001	98.2	59.6
Peru	Lima	2012	94.0	94.6
Armenia	Yerevan	2010	100.0	99.6
Azerbaijan	Baku	2006	92.7	98.8
Bangladesh	Dhaka	2007	100.0	55.1
Bangladesh	Rajshahi	2007	99.4	64.9
Bangladesh	Other cities/towns	2007	99.2	61.3
Cambodia	Phnom penh	2005	96.7	92.4
Cambodia	Siem Reap	2005	94.3	64.7
India	Mumbai	2006	99.0	95.5
India	Kolkota	2006	99.0	98.2
India	New Delhi	2006	92.6	84.8
India	Hyberabad	2006	99.6	76.6
India	Pune	2006	99.1	78.7
India	Kanpur	2006	98.6	81.3
India	Jaipur	2006	99.3	98.2
India	Coimbatore	2006	95.2	54.5
India	Vijayawada	2006	100.0	100.0
India	Amritsar	2006	100.0	98.7
India	Srinagar	2006	98.8	64.1
India	Jodhpur	2006	97.9	69.2

Country	City	Year	Improved water (%)	Improved sanitation (%)
Indonesia	Jakarta	2007	94.0	96.3
Indonesia	Bandung	2007	80.2	93.6
Indonesia	Surabaja	2007	86.9	81.6
Indonesia	Medan	2007	83.5	93.3
Indonesia	Palembang	2007	79.2	87.4
Jordan	Amman	2009	99.3	100.0
Jordan	Aqaba	2009	99.7	99.8
Kazakhstan	Shimkent	1999	100.0	100.0
Kazakhstan	Zhezkazgan	1999	100.0	100.0
Kazakhstan	Almaty	1999	97.0	89.6
Kazakhstan	Other cities/towns	1999	89.6	90.2
Krygystan	Bishikea	2012	99.1	100.0
Krygystan	Other cities/towns	2012	95.6	98.8
Maldives	Male	2009	99.3	99.9
Moldova	Chisinau	2005	99.5	97.8
Moldova	Other cities/towns	2005	95.6	85.1
Nepal	Kathmandu	2006	83.8	96.5
Nepal	Other cities/towns	2006	92.3	72.7
Pakistan	Faisalabad:Punjab	2012	85.2	85.5
Pakistan	Islamabad	2012	94.4	95.8
Pakistan	Balochistan	2012	91.2	57.9
Pakistan	Other cities/towns	2012	92.3	65.5
Philippines	Metro Manila	2008	99.4	96.9
Philippines	Cebu	2008	99.0	84.4
Philippines	Cagayan	2008	100.0	98.9
Philippines	Bacolod	2008	97.8	78.1
Philippines	Other cities/towns	2008	95.5	93.8
Timor Leste	Dili	2009	98.6	94.3
Timor Leste	Other cities/towns	2009	71.7	61.9
Turkey	Instabul	2004	99.3	99.3
Turkey	Anakara	2004	99.5	99.0
Turkey	Izmir	2004	98.3	99.7
Ukraine	Kyiv	2007	99.3	98.6
Uzebekistan	Tashkent	1996	99.4	89.8
Uzebekistan	Other cities/towns	1996	91.3	69.7
Viet Nam	Ho Chi Minh	2005	100.0	99.5
Viet Nam	Ha Noi	2005	99.7	99.1
Viet Nam	Hai Phong	2005	99.7	96.6
Viet Nam	Da Nang	2005	100.0	100.0
Viet Nam	Other cities/towns	2005	97.0	87.0
Yemen	Sana'a	1991	93.9	60.3
Yemen	Aden	1991	97.0	91.0
Yemen	Taiz	1991	85.6	56.9
YEMEN	Other cities/towns	1991	87.0	55.8

Source: United Nations Human Settlement Programme (UN-Habitat), Global Urban Indicators Database 2015

Table B.2: Urban Population Living in Slums, 1990-2014

Major region or area	Proportion of urban population living in slum (%)						Urban slum population at mid-year by region ('000)[b]					
	1990	1995	2000	2005	2010	2014	1990	1995	2000	2005	2010	2014
Developing Regions	46.2	42.9	39.4	35.6	32.6	29.7	689,044	748,758	791,679	830,022	871,939	881,080
Northern Africa	34.4	28.3	20.3	13.4	13.3	11.9	22,045	20,993	16,892	12,534	14,058	11,418
Sub-Saharan Africa	70.0	67.6	65.0	63.0	61.7	55.9	93,203	110,559	128,435	152,223	183,199	200,677
Latin America and the Caribbean	33.7	31.5	29.2	25.5	23.5	21.1	106,054	112,470	116,941	112,149	112,742	104,847
Eastern Asia	43.7	40.6	37.4	33.0	28.2	26.2	204,539	224,312	238,366	249,884	249,591	251,593
Southern Asia	57.2	51.6	45.8	40.0	35.0	31.3	180,960	189,931	193,893	195,828	195,749	190,876
South-eastern Asia	49.5	44.8	39.6	34.2	31.0	28.4	69,567	75,559	79,727	80,254	84,063	83,528
Western Asia	22.5	21.6	20.6	25.8	24.6	24.9	12,294	14,508	16,957	26,636	31,974	37,550
Oceania [c]	24.1	24.1	24.1	24.1	24.1	24.1	382	427	468	515	563	591

Major region or area	Proportion of urban population (%)						Urban population at mid-year by major area, region ('000) [a]					
	1990	1995	2000	2005	2010	2014	1990	1995	2000	2005	2010	2014
Developing Regions	34.8	37.4	39.9	43.0	46.1	48.4	1,489,941	1,744,964	2,010,932	2,330,044	2,673,959	2,968,517
Northern Africa	45.7	47.3	48.4	49.4	50.5	51.4	63,952	73,732	81,901	90,706	100,776	96,336
Sub-Saharan Africa	27.1	29.1	30.8	33.0	35.4	37.4	132,971	163,172	196,869	240,036	294,164	359,009
Latin America and the Caribbean	70.5	73.0	75.3	76.9	78.4	79.5	313,876	355,089	396,276	432804	467,642	495,857
Eastern Asia	33.9	37.7	42.0	48.3	54.3	58.9	467,014	550,368	632,396	747,566	865,826	960,235
Southern Asia	26.5	27.8	29.1	30.8	32.7	34.4	316,082	366,335	420,685	483,648	550,607	609,139
South-eastern Asia	31.6	34.5	38.1	41.3	44.5	47.0	140,164	168,068	199,681	231,789	265,801	294,409
Western Asia	61.1	62.4	63.8	65.9	68.1	69.6	54,302	66,445	81,203	101,399	126,864	151,084
Oceania[C]	24.4	24.2	23.7	23.4	23.1	23.0	1,579	1,755	1,921	2,096	2,280	2,448

Notes:
(a) United Nations Department of Economic and Social Affairs Population Division - World Urbanization Prospects: The 2014 Revision
(b) Population living in household that lack either improved water, improved sanitation, sufficient living area (more than three persons per room), or durable housing
(c) Trends data are not available for Oceania. A constant figure does not mean there is no change
(d) 2014 urban population figures include South Sudan and Sudan as part of Sub-Saharan Africa

Source: United Nations Human Settlement Programme (UN-Habitat), Global Urban Indicators Database 2015

Table B.3: Urban Population Living in Slums in Selected Countries, 1990-2014

	Proportion of Urban Population living in Slums (%) [a]						"Urban Slum Population at Mid-Year by Country ('000) "					
	1990	1995	2000	2005	2010	2014	1990	1995	2000	2005	2010	2014
AFRICA												
Angola	...	...	86.5	86.5	65.8	55.5	...	...	3,905	5,176	4,897	5,317
Benin	79.3	76.8	74.3	71.8	69.8	61.5	1,311	1,616	1,897	2,260	2,595	2,836
Burkina Faso	78.8	72.4	65.9	59.5	...	65.8	960	1,109	1,374	1,762	...	3,327
Burundi	...	...	...	64.3	...	57.9	...	...	...	452	...	714
Cameroon	50.8	49.6	48.4	47.4	46.1	37.8	2,532	3,160	3,826	4,585	5,188	4,637
Central African Republic	87.5	89.7	91.9	94.1	95.9	93.3	943	1,113	1,296	1,470	1,642	1,747
Chad	98.9	96.4	93.9	91.3	89.3	88.2	1,257	1,507	1,844	2,312	2,714	2,603
Comoros	65.4	65.4	65.4	68.9	...	69.6	80	91	101	119	...	148
Congo	...	...	...	53.4	49.9	46.9	...	...	...	1,098	1,134	1,389
Côte d'Ivoire	53.4	54.3	55.3	56.2	57.0	56.0	2,674	3,366	4,158	5,066	5,979	6,234
Democratic Republic of the Congo	...	...	...	76.4	61.7	74.8	...	...	...	14,491	14,079	21,778
Djibouti	...	...	...	...	...	65.6	...	...	...	...	...	449
Egypt	50.2	39.2	28.1	17.1	13.1	10.6	12,607	10,704	8,447	5,677	6,143	3,807
Equatorial Guinea	...	...	...	66.3	...	66.2	...	...	...	157	...	205
Ethiopia	95.5	95.5	88.6	81.8	76.4	73.9	5,819	7,562	8,653	9,729	10,427	13,570
Gabon	...	...	...	38.7	...	37.0	...	...	...	443	...	550
Gambia	...	...	...	45.4	...	34.8	...	...	...	373	...	392
Ghana	65.5	58.8	52.1	45.4	40.1	37.9	3,571	4,070	4,473	4,755	4,848	5,349
Guinea	80.4	68.8	57.3	45.7	...	43.3	1,385	1,517	1,490	1,390	...	1,913
Guinea-Bissau	...	...	...	83.1	...	82.3	...	...	...	362	...	698
Kenya	54.9	54.8	54.8	54.8	54.7	56.0	2,343	2,859	3,400	4,069	4,762	6,427
Lesotho	...	...	...	35.1	53.7	50.8	...	...	...	163	290	285
Liberia	...	...	...	...	68.3	65.7	...	...	...	...	1,282	1,424
Madagascar	93.0	88.6	84.1	80.6	76.2	77.2	2,470	2,997	3,486	4,046	4,460	6,273
Malawi	66.4	66.4	66.4	66.4	68.9	66.7	725	893	1,192	1,572	2,027	1,808
Mali	94.2	84.8	75.4	65.9	65.9	56.3	1,902	2,066	2,247	2,496	3,009	3,475
Mauritania	...	...	...	...	...	79.9	...	...	...	...	...	1,886
Morocco	37.4	35.2	24.2	13.1	13.1	13.1	4,490	4,904	3,713	2,205	2,416	2,619
Mozambique	75.6	76.9	78.2	79.5	80.5	80.3	2,161	3,216	4,381	5,714	6,940	6,789
Namibia	34.4	34.1	33.9	33.9	33.5	39.4	135	165	200	239	272	423
Niger	83.6	83.1	82.6	82.1	81.7	70.1	1,016	1,219	1,475	1,787	2,121	2,399
Nigeria	77.3	73.5	69.6	65.8	62.7	50.2	26,549	31,538	36,951	42,783	47,612	42,067
Rwanda	96.0	87.9	79.7	71.6	65.1	53.2	372	397	874	1,129	1,208	1,792
Senegal	70.6	59.8	48.9	43.3	38.8	39.4	2,071	2,051	1,955	2,010	2,048	2,487
Sierra Leone	...	...	...	97.0	...	75.6	...	...	...	1,824	...	1,857
Sao Tome and Principe	...	...	...	...	...	86.6	...	...	...	...	...	111
Somalia				73.5	73.6	73.6	...	...	...	2,161	2,486	3,108
South Africa	46.2	39.7	33.2	28.7	23.0	23.0	8,834	8,950	8,475	8,179	7,055	7,859
Sudan	...	...	...	...	...	91.6	...	...	...	...	...	11,939
South Sudan	...	...	...	...	...	95.6	...	...	...	...	...	2,086
Swaziland	...	...	...	...	...	32.7	...	...	...	...	...	88
Togo	...	...	...	62.1	...	51.2	...	...	...	1,486	...	1,413
Tunisia	...	...	...	...	...	8.0	...	...	...	...	...	593
Uganda	75.0	75.0	75.0	66.7	60.1	53.6	1,473	1,833	2,214	2,403	2,578	3,282
United Republic of Tanzania	77.4	73.7	70.1	66.4	63.5	50.7	3,719	4,539	5,335	6,271	7,200	7,952
Zambia	57.0	57.1	57.2	57.2	57.3	54.0	1,778	1,930	2,083	2,350	2,633	3,283
Zimbabwe	4.0	3.7	3.3	17.9	24.1	25.1	121	138	140	801	1,141	1,191
ASIA												
Afghanistan	...	...	...	...	...	62.7	...	...	...	...	...	5,155
Armenia	...	...	...	...	...	14.4	...	...	...	...	...	270
Bangladesh	87.3	84.7	77.8	70.8	61.6	55.1	19,999	23,535	25,819	27,831	27,542	29,273
Cambodia	...	...	...	78.9	...	55.1	...	...	...	2,052	...	1,740
China	43.6	40.5	37.3	32.9	29.1	25.2	131,670	151,437	169,102	183,544	180,560	191,107
India	54.9	48.2	41.5	34.8	29.4	24.0	121,022	122,231	119,698	112,913	104,679	98,449
Indonesia	50.8	42.6	34.4	26.3	23.0	21.8	27,559	29,017	29,671	24,777	23,255	29,212
Iraq	16.9	16.9	16.9	52.8	52.8	47.2	2,131	2,439	2,828	9,974	10,759	11,383
Jordan	...	...	...	15.8	19.6	12.9	...	...	...	689	971	808

Table B.3 Continued

	Proportion of Urban Population living in Slums (%) a						"Urban Slum Population at Mid-Year by Country ('000) "					
	1990	1995	2000	2005	2010	2014	1990	1995	2000	2005	2010	2014
Lao People's Democratic Republic	...	...	...	79.3	...	31.4	...	...	...	1,277	...	813
Lebanon	...	...	...	53.1	...	53.1	...	...	...	1,877	...	2,312
Mongolia	68.5	66.7	64.9	57.9	...	42.7	866	860	882	878	...	876
Myanmar	...	...	...	45.6	...	41.0	...	...	...	6,701	...	7,389
Nepal	70.6	67.3	64.0	60.7	58.1	54.3	1,194	1,585	2,100	2,630	3,075	2,786
Pakistan	51.0	49.8	48.7	47.5	46.6	45.5	18,054	20,688	23,890	27,158	29,965	32,265
Philippines	54.3	50.8	47.2	43.7	40.9	38.3	16,479	17,158	17,613	17,972	18,302	17,055
Saudi Arabia	...	...	...	18.0	...	18.0	...	...	...	3,442	...	4,384
Syrian Arab Republic	...	...	...	10.5	...	19.3	...	...	...	1,080	...	2,429
Thailand	...	...	...	26.0	27.0	25.0	...	...	...	5,539	6,146	8,264
Turkey	23.4	20.7	17.9	15.5	13.0	11.9	7,773	7,859	7,714	7,422	6,728	6,578
Viet Nam	60.5	54.6	48.8	41.3	35.2	27.2	8,118	8,852	9,395	9,491	9,224	8,295
Yemen	...	...	...	67.2	...	60.8	...	...	...	4,088	...	5,166
LATIN AMERICA AND THE CARIBBEAN												
Argentina	30.5	31.7	32.9	26.2	20.8	16.7	8,622	9,772	10,953	9,274	7,737	6,395
Belize	...	...	...	...	...	10.8	...	...	...	...	...	16
Bolivia	62.2	58.2	54.3	50.4	47.3	43.5	2,305	2,590	2,794	2,972	3,080	3,214
Brazil	36.7	34.1	31.5	29.0	26.9	22.3	40,527	42,789	44,604	45,428	44,947	38,491
Chile	...	...	...	9.0	...	9.0	...	...	...	1,285	...	1,429
Colombia	31.2	26.8	22.3	17.9	14.3	13.1	7,077	6,884	6,404	5,670	4,899	4,882
Costa Rica	...	...	...	10.9	...	5.5	...	...	...	291	...	206
Dominican Republic	27.9	24.4	21.0	17.6	14.8	12.1	1,135	1,143	1,145	1,100	1,024	994
Ecuador	...	...	...	21.5	...	36.0	...	...	...	1,786	...	3,655
El Salvador	...	...	...	28.9	...	28.9	...	...	...	1,079	...	1,222
French Guiana	...	...	...	10.5	...	10.5	...	...	...	16	...	23
Grenada	...	...	...	6.0	...	6.0	...	...	...	2	...	2
Guadeloupe	...	...	...	5.4	...	5.4	...	...	...	24	...	25
Guatemala	58.6	53.3	48.1	42.9	38.7	34.5	2,146	2,301	2,438	2,572	2,660	2,797
Guyana	...	...	...	33.7	33.2	33.1	...	...	...	73	72	76
Haiti	93.4	93.4	93.4	70.1	70.1	74.4	1,893	2,393	2,876	2,908	3,557	4,471
Honduras	...	...	...	34.9	...	27.5	...	...	...	1,170	...	1,230
Jamaica	...	...	...	60.5	...	60.5	...	...	...	840	...	924
Mexico	23.1	21.5	19.9	14.4	...	11.1	13,760	14,457	14,800	11,574	...	10,852
Nicaragua	89.1	74.5	60.0	45.5	...	45.5	1,929	1,860	1,676	1,388	...	1,641
Panama	...	...	...	23.0	...	25.8	...	...	...	526	...	672
Paraguay	...	...	...	17.6	...	17.6	...	...	...	608	...	723
Peru	66.4	56.3	46.2	36.1	...	34.2	9,964	9,566	8,776	7,540	...	8,238
Saint Lucia	...	...	...	11.9	...	11.9	...	...	...	5	...	4
Suriname	...	...	...	3.9	...	7.3	...	...	...	13	...	26
Trinidad and Tobago	...	...	...	24.7	...	24.7	...	...	...	40	...	28
Venezuela (Bolivarian Republic of)	...	...	...	32.0	...	32.0	...	...	...	7,861	...	8,780

Notes:
(a) Computed from country household data using the four components of slum (improved water, improved sanitation, durable housing and sufficient living area).

Source: United Nations Human Settlement Programme (UN-Habitat), Global Urban Indicators Database 2015

Table C.1: Gini Coefficients for Selected Cities and Provinces

Country	City	Year	Gini coefficient	Country	City	Year	Gini coefficient
AFRICA				China	Hong Kong	2011i	0.54
Burundi	Bujumbura	2006c	0.47	China	Shanghai	2004-05i	0.32
Cameroon	Yaounde	1996i	0.44	China	Wuhan	2004-05i	0.37
Cameroon	Douala	1996i	0.46	China	Shengyan	2004-05i	0.37
Central African Republic	Bangui	2003c	0.42	China	Fuzhou	2004-05i	0.34
Congo	Brazzaville	2005i	0.45	China	Xian	2004-05i	0.35
Congo	Pointe-Noire	2005i	0.39	China	Wuxi	2004-05i	0.39
Côte d'Ivoire	Abidjan	2008i	0.50	China	Yichan	2004-05i	0.42
D R Congo	Kinshasa	2004-05c	0.39	China	Benxi	2004-05i	0.29
Ethiopia	Addis Ababa	2003i	0.61	China	Zhuhai	2004-05i	0.45
Ethiopia	Addis Ababa	2003c	0.56	China	Baoji	2004-05i	0.34
Ethiopia	Bahir Dar	2000c	0.36	China	Daqing	2004-05i	0.41
Ethiopia	Jimma	2000c	0.36	China	Shenzhen	2004-05i	0.49
Ethiopia	Dire Dawa	2000c	0.39	India	Andhra Pradeshp	2004c	0.37
Ethiopia	Mekelle	2000c	0.39	India	Assamp	2004c	0.31
Gabon	Libreville and Port Genti	1996i	0.45	India	Biharp	2004c	0.33
Ghana	Accra	1992i	0.50	India	Delhip	2011c	0.36
Guinea- Bissau	Bissau	2006c	0.37	India	Gujaratp	2004c	0.30
Kenya	Nairobi	2006i	0.59	India	Haryanap	2004c	0.36
Lesotho	Maseru	1993i	0.58	India	Karnatakap	2004c	0.37
Malawi	Blantyre	2011c	0.50	India	Keralap	2004c	0.40
Malawi	Lilongwe	2011c	0.50	India	Madhya Pradeshp	2004c	0.39
Morocco	Casablanca	2006i	0.52	India	Maharashtrap	2004c	0.37
Mozambique	Maputo	2002-03c	0.52	India	Orissap	2004c	0.35
Nigeria	Lagos	2006c	0.64	India	Punjabp	2004c	0.39
Rwanda	Kigali	2005i	0.47	India	Rajasthanp	2004c	0.37
Senegal	Dakara	2001-02c	0.37	India	Tamil Nadup	2004c	0.36
Sierra Leone	Free Town	2002c	0.32	India	Uttar Pradeshp	2004c	0.37
South Africa	Buffalo City (East London)	2005i	0.75	India	West Bengalp	2004c	0.38
South Africa	Cape Town	2005i	0.67	Indonesia	Jakarta	2013c	0.43
South Africa	Ekurhuleni (East Rand)	2005i	0.74	Jordan	Amman	1997i	0.39
South Africa	eThekwini (Durban)	2005i	0.72	Jordan	Irbid	1997i	0.31
South Africa	Johannesburg	2005i	0.75	Jordan	Zarqa & Mafrq	1997i	0.33
South Africa	Mangaug (Bloemfontein)	2005i	0.74	Jordan	Balqa & Madaba	1997i	0.35
South Africa	Msunduzi (Pietermaritzburg)	2005i	0.73	Jordan	Jerash & Ajloun	1997i	0.31
South Africa	Nelson Mandela Bay (Port Elizabeth)	2005i	0.72	Malaysia	Kuala Lumpur	1999i	0.41
South Africa	Tshwane (Pretoria)	2005i	0.72	Malaysia	Johor Bah ru	1999i	0.37
Tanzania	Dar es Salaam	2012c	0.32	Malaysia	Kuching	1999i	0.38
Togo	Lome	2006c	0.30	Malaysia	Ipoh	1999i	0.37
Tunisia	Tunis	2010c	0.38	Mongolia	Ulaanbaatar	2006c	0.37
Uganda	Kampala	2012c	0.34	Philippines	Manila	2006i	0.40
Zimbabwe	Bulawayo	2011c	0.40	Philippines	Cebu City	2003i	0.38
Zimbabwe	Harare	2011c	0.38	Philippines	Davao City	2003i	0.44
ASIA				Philippines	Zamboanga	2003i	0.42
Bangladesh	Chittagong	2000c	0.29	Sri Lanka	Colombo City	2012-2013i	0.47
Bangladesh	Dhaka	2000c	0.31	Viet Nam	Ho Chi Minh City	2012i	0.35
Bangladesh	Khulna	2000c	0.35	Viet Nam	Hanoi	2012i	0.34
Cambodia	Phnom Penh	2004c	0.37	Viet Nam	Can Tho	2002i	0.38
Thailand	Bangkok	2011i	0.40	Viet Nam	Da Nang	2012i	0.37
Thailand	Nonthaburip	2006i	0.43	Viet Nam	Hai Phong	2012i	0.32
Thailand	Samutprakanp	2006i	0.34	LATIN AMERICA AND THE CARIBBEAN			
Thailand	Nakhon ratchasimap	2006i	0.49	Argentina	Buenos Aires	2010i	0.51
Thailand	Songkhlap	2006i	0.49	Argentina	Formosa	2010i	0.45
Thailand	Chonburip	2006i	0.36	Argentina	Catamarca	2005i	0.55
Thailand	Udonthanip	2006i	0.56	Bolivia	La Paz	2007i	0.57
China	Beijing	2003i	0.22	Brazil	Belo Horizonte	2009i	0.57

Table C.1 Continued

Country	City	Year	Gini coefficient
Brazil	Brasilia	2009i	0.67
Brazil	Curitiba	2009i	0.67
Brazil	Fortaleza	2009i	0.60
Brazil	Goiania	2005i	0.65
Brazil	Rio de Janeiro	2009i	0.58
Brazil	Sao Paolo	2009i	0.55
Chile	Santiago	2009i	0.56
Chile	Chillan	2009i	0.39
Colombia	Bogota	2010i	0.54
Colombia	Cali	2010i	0.55
Colombia	Medellín	2010i	0.56
Colombia	Barranquilla	2010i	0.49
Costa Rica	San Jose	2010i	0.47
Dominican Republic	Santo Domingo	2010i	0.58
Ecuador	Quito	2010i	0.51
El Salvador	San Salvador	2010i	0.41
Guatemala	Guatemala city	2006i	0.51
Honduras	Tegucigalpa	2010i	0.51
Mexico	Mexico city	2010i	0.49
Mexico	Guadalajara	2010i	0.42
Nicaragua	Managua	2005i	0.51
Haiti	Port-Au-Prince	2005i	0.52
Panama	Panama City	2010i	0.46
Paraguay	Asuncion	2010i	0.50
Peru	Lima	2010i	0.40
Uruguay	Montevideo	2010i	0.43
Venezuela	Caracas	2010i	0.38

Country	City	Year	Gini coefficient
"EASTERN EUROPE AND COMMONWEALTH INDEPENDENT STATES (CIS)"			
Albania	Tirana	2002i	0.30
Bulgaria	Sofia	2001i	0.25
Hungary	Budapest	2000i	0.30
Lithuania	Vilnius	2000i	0.31
Moldova	Kishinev	2001i	0.37
Poland	Warsaw	2001i	0.31
Romania	Bucharest	2002i	0.26
Serbia	Belgrade	2002i	0.28
Armenia	Yerevan	2001i	0.31
Azerbaijan	Baku	2001i	0.38
Belarus	Minsk	2001i	0.23
Georgia	Tbilisi	2001i	0.37
Kazakhstan	Astana	2014i	0.23
Kazakhstan	Almaty	2014i	0.25
Kyrgyz republic	Bishkek	2001i	0.27
Russia	Moscow	2014i	0.45
Russia	St Petersburg	2014i	0.44
Tajikistan	Dushanbe	1999i	0.36
Turkmenistan	Ashgabat	1998i	0.29
Uzbekistan	Tashkent	2000i	0.28

Notes:
i. Refers to Gini coefficients based on Income
c. Refers to Gini Coefficients based on consumption
p. Province (urban)

Source: United Nations Human Settlement Programme (UN-Habitat), Global Urban Indicators Database 2015.

Table C.2: National Urban Gini Coefficients for Selected Countries

	Year	Gini coefficient
Algeria	2011i	0.37
Benin	2007c	0.47
Botswana	2001-02i	0.50
Burkina Faso	2003c	0.48
Burundi	2006c	0.49
Cameroon	2001i	0.41
Central African Republic	2003c	0.42
Côte d'Ivoire	2008i	0.44
Democratic Republic of Congo	2004-05c	0.40
Egypt	2010c	0.34
Ethiopia	2004-05c	0.44
Ethiopia	2010c	0.37
Kenya	1999i	0.55
Kenya	2006c	0.45
Malawi	2013c	0.48
Mauritania	2004c	0.39
Morocco	1998c	0.38
Mozambique	2002-03c	0.48
Namibia	1993i	0.63
Namibia	2003c	0.58
Nigeria	2006i	0.54
South Africa	2005i	0.76
Togo	2006c	0.31
Uganda	2005-06i	0.43
Zambia	2010c	0.50
Zimbabwe	2011c	0.38
ASIA		
Bangladesh	2000c	0.37
Cambodia	2004c	0.43
China	2002i	0.32
Fiji	2009c	0.44
India	2004c	0.37
Indonesia	1999c	0.33
Malaysia	1999i	0.42
Mongolia	2006c	0.39
Nepal	2010c	0.35
Pakistan	2004c	0.34
Philippines	2003i	0.45
Sri Lanka	2012c	0.51
Viet Nam	2002i	0.41
LATIN AMERICA AND THE CARIBBEAN		
Argentina	2010i	0.51
Bolivia	2007i	0.51

	Year	Gini coefficient
Brazil	2009i	0.57
Chile	2009i	0.52
Colombia	2010i	0.56
Costa Rica	2010i	0.48
Dominican Republic	2010i	0.56
Ecuador	2010i	0.49
El Salvador	2010i	0.45
Guatemala	2006i	0.55
Honduras	2010i	0.49
Mexico	2010i	0.46
Nicaragua	2005i	0.50
Panama	2010i	0.47
Paraguay	2010i	0.47
Peru	2010i	0.41
Uruguay	2010i	0.42
Venezuela	1994i	0.48
EASTERN EUROPE AND COMMONWEALTH INDEPENDENT STATES (CIS)		
Albania	2002i	0.29
Armenia	2001i	0.28
Azerbaijan	2001i	0.40
Belarus	2001i	0.24
Bulgaria	2001i	0.28
Georgia	2001i	0.36
Hungary	2000i	0.29
Kazakhstan	2001i	0.29
Kosovo	2002i	0.29
Kyrgyz republic	2001i	0.28
Lithuania	2000i	0.31
Moldova	2001i	0.40
Poland	2001i	0.33
Romania	2002i	0.27
Russia	2001i	0.44
Serbia	2002i	0.29
Tajikistan	1999i	0.36
Turkmenistan	1998i	0.40
Uzbekistan	2014i	0.29

Note
i. Refers to Gini coefficients based on Income
c. Refers to Gini Coefficients based on consumption

Source: United Nations Human Settlement Programme (UN-Habitat), Global Urban Indicators Database 2015

Table C.3: Urban Poverty in Selected Countries

	Urban poverty headcount ratio based on national poverty lines	
	Year	Level of poverty* (%)
AFRICA		
Angola	2008	18.7
Benin	2011	31.4
Botswana	2009	11.0
Burkina Faso	2009	25.2
Burundi	2006	34.0
Cameroon	2007	12.2
Cape Verde	2007	13.2
Central African Republic	2008	49.6
Chad	2011	20.9
Congo	2004	43.3
Cote d'Ivoire	2015	35.9
Democratic Republic of the Congo	2012	61.6
Egypt	2010	15.3
Equatorial Guinea	2006	31.5
Ethiopia	2010	25.7
Gambia	2010	32.7
Ghana	2012	10.6
Guinea	2012	35.4
Guinea-Bissau	2010	51.0
Lesotho	2010	39.6
Liberia	2007	55.1
Madagascar	2010	51.1
Malawi	2010	17.3
Mali	2009	18.9
Mauritania	2008	20.8
Morocco	2007	4.8
Mozambique	2008	49.6
Namibia	2009	14.6
Niger	2011	18.6
Nigeria	2009	34.1
Rwanda	2010	22.1
Sao Tome and Principe	2009	63.8
Senegal	2010	33.1
Seychelles	2006	39.0
Sierra Leone	2011	31.2
South Africa	2010	39.2
South Sudan	2009	24.4
Sudan	2009	26.5
Swaziland	2009	31.1
Tanzania	2011	15.5
Togo	2011	34.6
Uganda	2012	9.6
Zambia	2010	27.5
Zimbabwe	2011	46.5
ASIA		
Afghanistan	2011	27.6
Armenia	2013	32.2
Bangladesh	2010	21.3
Bhutan	2012	1.8
Cambodia	2012	6.4
India	2011	13.7

	Urban poverty headcount ratio based on national poverty lines	
	Year	Level of poverty* (%)
Indonesia	2014	8.3
Iraq	2012	14.8
Jordan	2010	13.9
Kazakhstan	2013	1.3
Kyrgyzstan	2014	26.9
Lao People's Democratic Republic	2012	10.0
Malaysia	2014	0.3
Mongolia	2014	18.8
Nepal	2010	15.5
Philippines	2012	13.0
Sri Lanka	2012	2.1
Syrian Arab Republic	2007	30.8
Tajikistan	2014	36.1
Thailand	2013	7.7
Timor-Leste	2007	45.2
Turkey	2012	0.6
Vietnam	2014	3.8
EUROPE		
Albania	2012	13.6
Belarus	2013	4.2
Georgia	2012	10.5
Kosovo	2011	26.7
Moldova	2012	8.2
Montenegro	2012	8.1
LATIN AMERICA AND THE CARIBBEAN		
Argentina	2013	4.7
Bolivia	2013	29.0
Chile	2013	12.4
Colombia	2014	24.6
Costa Rica	2015	19.4
Dominican Republic	2013	36.3
Ecuador	2014	16.4
El Salvador	2014	28.5
Guatemala	2011	35.0
Haiti	2012	40.6
Honduras	2014	61.0
Mexico	2014	50.5
Nicaragua	2014	14.8
Panama	2013	13.8
Paraguay	2014	16.2
Peru	2014	15.3
Uruguay	2014	10.1
OCEANIA		
Fiji	2008	26.2
Papua New Guinea	2009	29.3
Tuvalu	2010	24.8

Note: The percentage of the population living below the national poverty lines

Source: World Bank (2016) World Develeopment Indocators Online database, http://databank.worldbank.org/data/home.aspx

Table D.1: **Green Area, CO$_2$ emissions and ambient PM$_{2.5}$ exposure**

Country	Metropolitan areas	Green area per million people (square meters per million person)			CO$_2$ emissions per capita (tonnes per inhabitant)		"Estimated average exposure to air pollution* [Micrograms per cubic metre]"	
		2000	2010	2014	2000	2008	2002	2011
Australia	Sydney	55.4	49.4	46.5	9.4	9.4	5.5	3.0
Australia	Melbourne	44.0	37.1	34.3	11.2	10.2	4.6	5.0
Australia	Brisbane	697.8	549.3	509.1	11.0	13.6	3.1	3.4
Australia	Perth	54.6	43.9	38.7	7.8	7.6	3.0	3.4
Australia	Adelaide	32.6	29.6	28.5	8.2	7.6	3.3	3.5
Australia	Gold Coast-Tweed Heads	285.4	209.0	193.9	4.3	3.6	2.9	2.7
Austria	Vienna	255.2	231.1	222.0	12.8	14.2	24.1	17.4
Austria	Graz	997.4	906.7	871.3	10.2	10.7	19.7	17.1
Austria	Linz	1791.9	1720.8	1692.0	14.3	17.6	18.6	15.2
Belgium	Brussels	328.0	297.1	285.3	10.7	9.5	17.3	19.0
Belgium	Antwerp	335.6	314.5	306.3	16.0	15.1	17.9	16.4
Belgium	Ghent	795.6	744.4	724.7	19.0	17.2	20.5	16.5
Belgium	Liege	514.6	492.0	483.1	12.0	11.2	17.5	17.2
Canada	Vancouver	124.0	105.7	98.6	14.6	13.4	6.8	6.0
Canada	Montreal	847.8	750.7	712.3	14.9	13.0	12.7	7.2
Canada	Toronto	1682.3	1404.7	1297.8	16.6	14.8	14.2	9.4
Canada	Edmonton	6660.6	5353.0	4880.1	52.1	44.1	8.5	8.0
Canada	Calgary	1530.6	1174.0	1053.1	13.9	13.8	6.8	5.4
Canada	Winnipeg	5082.8	4655.4	4472.7	15.0	13.4	7.9	8.0
Canada	Quebec	1886.1	1678.0	1590.0	15.4	14.2	8.6	5.1
Canada	Ottawa-Gatineau	4746.3	4108.7	3854.7	13.6	12.5	10.2	6.7
Canada	Hamilton	3093.7	2872.1	2782.5	45.7	36.6	13.7	9.1
Switzerland	Zurich	300.4	277.6	268.6	6.5	6.7	19.7	20.0
Switzerland	Geneva	799.8	702.5	663.3	4.9	4.7	16.8	15.6
Switzerland	Basel	389.6	373.8	367.3	5.5	5.4	19.9	17.2
Chile	Valparaíso	4.1	3.6	3.4	2.2	2.2	3.8	3.3
Chile	Santiago	20.0	18.3	17.5	3.1	3.4	8.5	7.8
Chile	Concepción	7.2	6.8	6.6	3.4	3.2	2.7	3.2
Czech Republic	Prague	302.5	275.7	264.1	15.2	13.0	22.8	18.3
Czech Republic	Brno	455.5	444.8	439.7	8.7	7.8	22.3	17.4
Czech Republic	Ostrava	486.2	493.7	496.5	10.5	9.3	25.9	22.3
Germany	Berlin	209.3	207.2	206.0	12.6	12.1	24.0	17.3
Germany	Hamburg	938.7	921.5	914.2	9.1	9.0	18.6	14.0
Germany	Munich	623.2	562.8	539.9	9.1	8.5	19.0	15.1
Germany	Cologne	73.2	71.2	70.3	24.0	27.6	19.7	18.7
Germany	Frankfurt	102.2	100.8	100.2	12.7	13.1	16.9	15.3
Germany	Stuttgart	179.7	177.4	176.3	10.4	10.3	19.3	17.2
Germany	Essen	39.3	41.4	42.3	9.9	9.9	20.5	19.8
Germany	Leipzig	353.3	363.1	366.3	21.5	22.3	23.3	15.1
Germany	Dresden	528.4	514.7	508.3	6.1	5.3	21.8	15.2
Germany	Dortmund	60.8	64.4	65.9	18.1	18.4	19.5	17.7
Germany	Düsseldorf	53.7	53.8	53.8	24.2	24.1	19.3	17.5
Germany	Bremen	1428.3	1423.7	1421.5	16.5	16.2	17.9	13.0
Germany	Hanover	553.8	560.4	562.8	7.0	6.9	20.1	14.0
Germany	Nuremberg	682.1	679.1	677.7	5.3	5.3	18.2	14.3
Germany	Bochum	25.1	27.6	28.6	21.7	23.0	19.3	17.5
Germany	Freiburg im Breisgau	615.8	590.8	580.9	5.1	5.0	18.0	18.5
Germany	Augsburg	771.9	746.9	736.8	5.8	5.7	16.9	16.7
Germany	Bonn	117.6	116.0	115.3	5.8	5.9	18.2	16.8
Germany	Karlsruhe	229.2	222.8	220.2	14.0	13.3	17.4	18.5
Germany	Saarbrücken	297.2	322.0	332.3	18.4	21.1	15.3	13.8
Germany	Duisburg	118.8	125.3	128.0	21.3	22.0	21.1	18.2
Germany	Mannheim	81.5	83.4	84.1	9.7	10.2	17.0	16.3
Germany	Münster	976.6	916.2	892.4	7.4	6.9	19.5	15.5
Germany	Aachen	242.7	247.5	249.0	25.0	29.7	15.9	17.4

Table D.1 Continued

Country	Metropolitan areas	Green area per million people (square meters per million person)			CO$_2$ emissions per capita (tonnes per inhabitant)		"Estimated average exposure to air pollution* [Micrograms per cubic metre]"	
		2000	2010	2014	2000	2008	2002	2011
Denmark	Copenhagen	399.4	382.9	376.2	7.4	7.1	15.1	13.1
Estonia	Tallinn	1466.5	1468.5	1469.2	6.7	7.7	8.4	6.6
Spain	Madrid	31.5	26.4	24.2	7.0	7.1	11.7	10.9
Spain	Barcelona	2.7	2.4	2.3	5.6	5.7	14.8	11.1
Spain	Valencia	17.5	15.2	14.3	5.3	5.4	13.2	10.4
Spain	Seville	15.7	13.9	13.2	5.4	5.6	10.5	10.4
Spain	Zaragoza	64.2	56.4	53.0	4.8	5.3	15.0	13.9
Spain	Málaga	32.7	27.8	25.8	4.4	4.4	12.4	10.1
Spain	Las Palmas	91.2	83.4	80.4	3.0	3.2	12.2	5.8
Spain	Bilbao	218.1	210.9	207.5	7.0	8.2	13.1	6.7
Finland	Helsinki	85.5	79.6	77.4	15.8	15.8	8.1	7.9
France	Paris	98.0	91.6	88.9	8.9	7.9	15.8	14.2
France	Lyon	529.9	487.9	471.5	8.0	7.1	16.3	13.7
France	Marseille	51.5	48.0	46.6	10.6	9.5	12.2	9.4
France	Toulouse	212.6	179.3	166.8	7.3	6.4	11.4	11.2
France	Strasbourg	381.9	361.3	353.0	6.9	6.4	18.1	20.1
France	Bordeaux	1472.1	1318.8	1258.5	6.6	5.8	11.1	10.5
France	Nantes	658.6	592.6	566.3	6.8	6.2	11.3	9.6
France	Lille	42.1	41.1	40.6	7.1	6.8	20.2	17.5
France	Montpellier	232.6	202.9	191.8	6.0	5.6	11.4	9.0
France	Saint-Étienne	1133.5	1115.2	1105.0	5.1	4.6	11.8	11.3
France	Rennes	580.7	505.4	475.8	5.6	5.2	11.6	9.6
France	Grenoble	1159.2	1104.6	1081.5	6.8	6.4	12.0	13.9
France	Toulon	14.5	13.7	13.4	4.0	3.7	11.3	8.8
France	Nice	244.4	231.4	226.0	7.2	6.8	16.1	14.1
France	Rouen	698.9	671.0	657.6	20.9	18.5	14.3	12.6
Greece	Athens	0.9	1.0	1.0	4.6	5.1	15.3	14.0
Greece	Thessalonica	42.3	41.9	41.2	3.6	4.1	20.4	16.7
Hungary	Budapest	426.1	417.0	412.2	9.5	9.5	23.0	19.4
Ireland	Dublin	26.1	21.7	19.5	12.1	12.4	9.6	5.7
Italy	Rome	251.9	232.7	224.8	10.4	9.1	14.6	10.5
Italy	Milan	24.2	22.9	22.4	7.6	7.4	32.9	28.4
Italy	Naples	13.1	13.0	12.9	6.8	6.6	16.4	15.7
Italy	Turin	251.2	242.5	238.8	8.2	8.1	27.4	20.4
Italy	Palermo	45.0	44.7	44.5	2.4	2.3	12.7	10.2
Italy	Genova	322.4	332.7	336.9	9.7	9.9	17.4	15.3
Italy	Florence	523.1	507.0	500.4	5.5	5.0	16.1	11.0
Italy	Bari	0.8	0.7	0.7	3.3	3.2	13.2	10.8
Italy	Bologna	199.5	188.4	183.8	7.2	6.4	23.5	18.0
Italy	Catania	36.2	35.5	35.1	5.1	4.8	15.3	15.0
Italy	Venice	1.2	1.2	1.2	29.1	24.8	30.3	20.5
Japan	Sendai	25.6	24.8	24.4	5.7	5.2	12.3	13.4
Japan	Sapporo	176.6	169.3	166.3	5.8	5.2	8.8	10.3
Japan	Tokyo	5.0	4.7	4.6	7.5	6.8	19.5	18.1
Japan	Nagoya	7.8	7.6	7.5	10.0	8.7	21.5	16.1
Japan	Osaka	11.1	11.0	10.9	6.9	7.1	16.9	13.1
Japan	Fukuoka	7.1	6.6	6.4	6.2	5.5	15.8	14.7
Japan	Niigata	161.6	163.1	163.7	4.3	3.8	14.6	13.8
Japan	Toyama	332.3	331.6	331.2	19.6	17.5	18.7	16.0
Japan	Nagano	246.1	252.7	255.3	5.2	4.7	13.7	13.7
Japan	Kanazawa	130.2	127.0	125.7	4.6	4.1	17.3	16.0
Japan	Utsunomiya	94.0	90.4	89.0	5.8	5.1	16.6	13.3
Japan	Maebashi	38.6	38.4	38.3	8.1	7.4	22.8	19.0
Japan	Mito	70.8	69.8	69.4	5.0	4.4	13.7	11.0
Japan	Kofu	37.3	37.2	37.1	4.2	3.9	16.2	17.1
Japan	Numazu	32.0	32.0	32.0	4.0	3.5	10.3	11.2
Japan	Shizuoka	12.6	12.8	12.9	3.9	3.5	11.3	10.1
Japan	Anjo	1.0	0.9	0.8	14.8	20.0	19.2	14.6

Table D.1 Continued

Country	Metropolitan areas	Green area per million people (square meters per million person)			CO$_2$ emissions per capita (tonnes per inhabitant)		"Estimated average exposure to air pollution* [Micrograms per cubic metre]"	
		2000	2010	2014	2000	2008	2002	2011
Japan	Yokkaichi	28.4	27.1	26.6	24.2	20.6	16.8	15.3
Japan	Himeji	26.4	26.5	26.5	23.2	21.4	14.7	9.7
Japan	Toyohashi	31.7	31.1	30.8	5.1	4.6	14.5	13.5
Japan	Hamamatsu	21.5	21.1	21.0	5.7	5.1	14.9	12.8
Japan	Okayama	87.7	85.0	83.8	6.1	5.3	16.2	11.7
Japan	Kurashiki	22.5	20.8	20.2	12.5	10.1	14.3	12.4
Japan	Fukuyama	33.1	33.5	33.6	3.8	3.4	12.3	11.2
Japan	Hiroshima	12.0	11.6	11.5	5.5	4.8	13.1	9.2
Japan	Takamatsu	19.2	16.7	15.7	3.8	3.1	13.9	13.3
Japan	Wakayama	37.6	39.0	39.5	7.0	6.6	12.2	10.4
Japan	Tokushima	26.0	26.4	26.6	10.8	13.8	16.0	14.9
Japan	Kitakyushu	9.9	10.3	10.4	10.9	10.2	14.7	15.0
Japan	Matsuyama	54.0	53.4	53.2	4.5	4.0	14.8	14.6
Japan	Kochi	23.9	24.4	24.7	6.3	8.0	10.6	10.8
Japan	Oita	62.6	60.9	60.2	13.5	15.2	13.9	12.0
Japan	Kumamoto	24.7	23.8	23.5	4.6	4.0	19.9	21.1
Japan	Nagasaki	14.8	15.4	15.6	3.0	2.7	11.0	12.7
Japan	Kagoshima	12.3	12.2	12.2	3.8	3.4	12.5	10.7
Japan	Naha	99.6	93.5	91.1	4.0	5.5	4.7	5.3
Korea	Seoul Incheon	6.6	5.9	5.3	6.0	5.7	30.9	27.3
Korea	Daegu	33.7	33.5	32.4	5.5	5.4	22.9	20.6
Korea	Busan	8.5	9.1	9.1	4.1	3.7	18.6	16.4
Korea	Cheongju	100.8	90.3	83.7	3.2	2.9	34.3	28.7
Korea	Daejeon	35.1	31.8	29.7	5.4	5.4	25.5	24.4
Korea	Pohang	101.5	102.3	99.8	3.0	7.1	17.7	15.7
Korea	Jeonju	45.1	43.1	40.9	4.4	4.2	29.0	24.1
Korea	Ulsan	62.4	58.2	54.9	22.3	33.9	15.3	14.6
Korea	Changwon	1.6	1.7	1.8	20.4	30.2	17.1	15.8
Korea	Gwangju	45.9	42.5	39.1	4.7	4.1	22.0	26.7
Mexico	Mexicali	11.1	8.5	7.6	2.9	2.9	6.6	5.9
Mexico	Tijuana	1.8	1.2	1.1	1.2	1.4	9.6	8.0
Mexico	Juárez	0.0	0.0	0.0	3.2	2.6	8.0	6.0
Mexico	Hermosillo	37.9	29.3	26.4	1.4	2.5	6.9	6.3
Mexico	Chihuahua	2.9	2.3	2.1	2.4	4.7	7.5	7.1
Mexico	Reynosa	53.0	37.8	32.9	2.3	1.4	10.8	3.8
Mexico	Monterrey	60.4	48.4	41.7	3.3	4.4	12.6	9.7
Mexico	Torreón	68.9	56.8	52.5	1.0	1.0	12.3	11.4
Mexico	Saltillo	10.1	8.0	7.3	0.7	0.7	9.2	6.8
Mexico	Culiacán	758.6	654.3	616.7	3.0	2.3	8.5	8.9
Mexico	Durango	262.8	219.4	204.1	1.2	1.2	7.6	7.0
Mexico	Tampico	494.8	422.5	391.9	7.7	14.4	10.4	8.2
Mexico	San Luis Potosí	38.5	31.5	29.0	1.1	1.2	13.2	9.7
Mexico	Aguascalientes	290.7	225.4	203.2	1.1	1.2	11.7	9.2
Mexico	Benito Juárez	318.2	199.0	165.0	2.0	1.6	5.0	4.0
Mexico	León	159.6	124.8	113.2	4.0	4.1	16.8	14.4
Mexico	Mérida	1202.9	1003.5	928.9	4.2	3.8	5.5	3.3
Mexico	Guadalajara	146.8	121.6	109.1	2.2	2.4	14.3	13.4
Mexico	Irapuato	268.5	220.6	203.9	4.0	3.1	21.0	17.0
Mexico	Querétaro	465.4	342.6	301.2	2.3	2.1	18.8	17.1
Mexico	Celaya	370.3	301.3	277.4	1.4	1.5	21.3	19.3
Mexico	Pachuca de Soto	343.8	252.2	213.0	1.6	1.7	15.2	12.4
Mexico	Morelia	252.5	205.5	188.1	0.9	0.9	17.8	14.9
Mexico	Mexico City	31.4	28.0	26.4	3.1	3.4	17.0	15.2
Mexico	Xalapa	589.9	485.7	449.0	4.1	3.9	10.7	11.6
Mexico	Toluca	290.9	220.6	197.1	2.4	2.5	18.0	17.0
Mexico	Veracruz	670.8	558.7	517.3	1.5	1.6	12.7	11.8
Mexico	Puebla	148.2	118.9	108.4	2.7	2.9	14.8	14.6
Mexico	Cuernavaca	229.7	189.9	175.5	2.2	2.6	28.2	26.6

Table D.1 Continued

Country	Metropolitan areas	Green area per million people (square meters per million person)			CO$_2$ emissions per capita (tonnes per inhabitant)		"Estimated average exposure to air pollution* [Micrograms per cubic metre]"	
		2000	2010	2014	2000	2008	2002	2011
Mexico	Centro	793.3	630.9	575.1	5.2	4.6	12.9	8.9
Mexico	Oaxaca de Juárez	328.1	264.9	240.0	3.0	3.3	6.8	6.3
Mexico	Acapulco de Juárez	815.6	725.2	692.0	1.5	1.7	8.8	7.0
Mexico	Tuxtla Gutiérrez	1506.6	1138.9	1017.6	2.6	2.7	10.4	7.8
Netherlands	Amsterdam	235.6	215.2	207.2	15.9	15.1	18.7	15.3
Netherlands	The Hague	23.4	21.4	20.6	8.5	7.9	17.2	17.6
Netherlands	Rotterdam	74.2	71.9	70.7	16.9	16.4	18.5	17.1
Netherlands	Utrecht	264.6	234.5	222.7	7.1	6.4	17.9	14.5
Netherlands	Eindhoven	874.3	840.5	827.0	6.0	5.9	17.4	15.9
Norway	Oslo	355.9	307.3	289.6	14.7	14.6	8.1	5.8
Poland	Warsaw	1086.1	1041.8	1022.3	7.6	8.3	27.3	16.8
Poland	Katowice	319.7	332.1	337.1	12.2	14.0	28.5	22.1
Poland	Lódz	395.2	413.8	421.1	11.3	12.3	24.4	22.5
Poland	Kraków	742.5	729.0	723.2	7.5	8.0	26.0	22.7
Poland	Wroclaw	608.2	601.0	597.4	6.9	7.4	25.8	17.2
Poland	Poznan	378.5	366.6	360.2	6.6	6.7	23.5	21.3
Poland	Gdansk	697.0	679.9	671.5	5.0	5.6	16.7	12.0
Poland	Lublin	486.9	487.8	487.6	4.7	5.2	23.0	18.7
Portugal	Lisbon	69.6	65.6	63.6	5.6	5.1	10.1	7.8
Portugal	Porto	68.3	67.0	66.3	5.9	4.6	15.2	10.7
Sweden	Stockholm	125.9	117.8	114.7	8.3	6.2	7.7	6.5
Sweden	Gothenburg	317.8	299.3	292.2	7.4	6.6	9.5	8.3
Sweden	Malmö	936.2	868.7	843.0	8.3	7.2	14.4	12.7
Slovenia	Ljubljana	1032.0	953.1	922.6	7.4	7.3	18.9	18.1
Slovak Republic	Bratislava	471.5	453.1	444.5	10.9	10.0	23.0	18.9
United Kingdom	London	41.6	37.0	35.2	8.9	7.9	15.9	10.3
United Kingdom	Birmingham (UK)	155.4	143.7	138.3	7.5	6.5	15.3	9.3
United Kingdom	Leeds	185.0	177.3	172.6	21.0	20.0	15.2	10.3
United Kingdom	Bradford	168.3	152.2	142.4	5.0	4.3	12.1	8.9
United Kingdom	Liverpool	63.1	62.4	60.7	6.2	5.6	15.5	13.4
United Kingdom	Manchester	154.2	141.9	135.0	6.5	5.7	15.3	11.1
United Kingdom	Cardiff	181.9	168.9	162.7	3.8	3.4	13.2	8.8
United Kingdom	Sheffield	285.9	271.9	260.1	5.7	5.1	15.9	10.2
United Kingdom	Bristol	132.8	120.1	114.2	5.1	5.5	14.6	12.5
United Kingdom	Newcastle	168.4	162.2	157.4	9.3	8.5	10.3	7.6
United Kingdom	Leicester	347.0	312.2	298.0	19.1	17.4	14.9	10.3
United Kingdom	Portsmouth	97.7	91.5	88.8	3.7	3.3	13.9	10.3
United Kingdom	Nottingham	288.7	268.7	259.9	17.5	16.5	17.4	11.3
United Kingdom	Glasgow	107.8	105.5	103.4	7.1	6.4	8.6	7.3
United Kingdom	Edinburgh	232.0	214.8	204.4	5.7	5.4	11.6	8.3
United States of America	Philadelphia	386.4	376.8	373.0	19.5	17.2	17.1	11.5
United States of America	Columbus	1941.8	1707.7	1616.8	12.4	10.2	17.6	11.7
United States of America	Denver	5.8	5.0	4.6	18.3	14.9	8.2	5.6
United States of America	Portland	500.2	433.2	408.8	14.6	12.6	5.5	3.6
United States of America	Baltimore	1036.2	990.7	971.7	16.2	14.3	18.9	12.7
United States of America	Cincinnati	3165.6	2986.0	2905.2	31.5	25.7	16.1	11.5
United States of America	Washington	1212.6	1040.7	974.0	16.2	13.0	17.6	12.1
United States of America	Kansas City	4788.1	4316.1	4133.0	25.5	22.6	14.0	10.0
United States of America	Saint Louis (US)	1938.5	1861.0	1825.2	25.3	21.5	15.8	10.9
United States of America	Sacramento/Roseville	70.2	58.7	54.6	13.3	11.2	6.7	4.1
United States of America	Minneapolis	3243.2	2936.3	2812.6	23.9	19.4	14.2	11.2
United States of America	San Francisco	24.9	23.7	23.2	14.6	13.9	6.9	4.8
United States of America	Los Angeles	5.8	5.3	5.1	17.2	15.3	11.9	8.7
United States of America	Atlanta	129.7	106.7	98.0	13.5	10.7	15.1	10.1
United States of America	Phoenix	12.5	10.1	9.2	14.2	13.4	7.4	6.6
United States of America	Dallas	265.7	216.0	196.9	15.6	13.7	13.9	8.0
United States of America	San Diego	11.8	10.8	10.4	14.0	12.6	9.2	7.4
United States of America	Houston	821.8	651.4	591.6	27.7	22.5	8.9	6.1

Table D.1 Continued

Country	Metropolitan areas	Green area per million people (square meters per million person)			CO$_2$ emissions per capita (tonnes per inhabitant)		"Estimated average exposure to air pollution* [Micrograms per cubic metre]"	
		2000	2010	2014	2000	2008	2002	2011
United States of America	San Antonio	172.2	137.6	125.6	22.7	18.5	10.9	5.9
United States of America	Orlando	601.9	463.7	416.9	16.2	14.3	8.1	5.2
United States of America	Miami	163.4	147.0	140.9	17.0	14.5	8.5	6.1
United States of America	Seattle	117.5	104.1	99.1	13.0	11.3	5.7	3.7
United States of America	Milwaukee	1649.8	1591.3	1567.8	17.4	15.1	15.8	10.5
United States of America	Detroit	518.6	542.7	551.7	17.9	16.9	15.5	10.9
United States of America	Boston	89.8	87.1	86.1	16.2	15.4	11.2	7.5
United States of America	Chicago	436.5	419.7	411.3	21.4	18.5	17.0	11.3
United States of America	Cleveland	473.3	508.2	522.7	12.8	11.8	19.5	13.3
United States of America	New York	40.9	39.8	39.4	19.9	17.7	16.1	12.0
United States of America	Harrisburg	4108.0	3805.8	3691.0	17.6	14.6	18.0	12.9
United States of America	Indianapolis	1196.7	1032.3	967.5	16.1	12.9	17.3	11.6
United States of America	Dayton	1098.6	1114.7	1120.2	11.6	10.5	18.0	11.3
United States of America	Colorado Springs	19.2	16.0	14.8	17.5	15.2	7.2	5.7
United States of America	Louisville	4613.9	4186.0	4021.0	30.9	24.7	16.2	10.2
United States of America	Wichita	45.5	41.6	40.1	14.4	12.5	10.4	8.0
United States of America	Richmond	233.3	210.0	201.1	14.0	11.7	14.7	9.5
United States of America	Fresno	94.9	81.0	76.0	12.7	11.0	13.7	6.9
United States of America	Las Vegas	2.3	1.6	1.4	21.5	17.0	7.6	6.3
United States of America	Nashville	5108.7	4324.5	4034.8	15.4	12.1	15.8	8.4
United States of America	Tulsa	2356.5	2162.9	2087.6	29.2	28.9	11.5	8.1
United States of America	Raleigh	2325.2	1639.2	1425.0	8.2	6.0	13.9	8.0
United States of America	Oklahoma city	150.3	131.4	124.4	10.8	9.9	9.9	6.9
United States of America	Charlotte	1073.5	785.3	692.0	11.7	8.6	14.8	10.0
United States of America	Albuquerque	83.3	68.5	63.2	12.0	10.1	6.7	5.5
United States of America	Memphis	3345.6	3063.8	2944.8	17.0	14.9	13.5	9.2
United States of America	Little Rock	3227.7	2806.6	2646.4	8.9	8.3	12.6	8.5
United States of America	Columbia	256.4	212.7	197.4	16.8	13.0	12.9	8.7
United States of America	Birmingham (US)	1270.6	1194.6	1160.3	30.3	25.4	15.1	8.7
United States of America	Fort Worth	29.5	23.5	21.5	12.5	10.5	12.9	7.8
United States of America	Charleston	551.7	455.7	421.3	28.4	23.9	9.9	6.9
United States of America	Tucson	1.3	1.1	1.0	13.0	11.2	6.8	5.7
United States of America	El Paso	4.4	3.7	3.5	13.5	10.8	7.8	6.0
United States of America	Baton Rouge	934.1	840.5	803.0	37.5	32.1	8.8	6.0
United States of America	Austin	221.4	161.2	141.3	12.0	10.4	10.5	5.4
United States of America	Jacksonville	193.7	161.6	149.7	20.9	18.8	9.8	6.1
United States of America	New Orleans	178.6	200.8	207.6	33.1	32.4	9.3	6.6
United States of America	Clearwater/Saint Petersburg	303.8	278.5	267.5	14.2	12.5	10.5	5.8
United States of America	Tampa	568.4	461.9	425.1	21.6	18.2	10.1	5.4
United States of America	Mcallen	190.4	139.9	123.7	10.0	8.3	11.5	5.1
United States of America	Madison	5633.2	4951.8	4702.5	27.4	21.6	13.3	10.0
United States of America	Buffalo	2257.0	2325.8	2353.8	19.7	17.6	17.3	14.4
United States of America	Grand Rapids	2940.3	2802.3	2748.9	11.8	10.3	13.5	10.0
United States of America	Albany	1939.5	1839.6	1800.9	12.4	11.6	14.4	8.2
United States of America	Providence	123.5	123.0	122.8	13.6	12.8	11.9	7.2
United States of America	Toledo (US)	556.2	572.8	579.6	22.4	19.9	15.1	9.6
United States of America	Des Moines	5888.6	5014.5	4685.5	11.3	9.6	13.5	9.6
United States of America	Omaha	832.8	738.2	702.5	26.5	21.1	13.3	9.8
United States of America	Akron	1283.5	1286.1	1287.2	15.6	14.7	17.1	9.5
United States of America	Salt Lake City	649.9	560.1	527.4	15.8	13.7	6.6	4.9
United States of America	Pittsburgh	588.5	616.6	628.1	19.5	18.0	14.8	10.9

Note: *Estimated average exposure to air pollution (PM2.5) based on imagery data

Source: Organisation for Economic Co-operation and Development (2016) OECD.Stat. online database

Table E.1: Households in Selected Urban Areas with Piped Water, Connection to Sewerage, Fixed Telephone, Mobile Telephone and Connection to National Electricity Grid

Country	Year	Piped water* (%)	Connection to sewerage (%)	Fixed telephone (%)	Mobile telephone (%)	Connection to electricity (%)
Angola	2006	31.3	15.0		45.0	66.1
	2011	32.8	19.2	79.3	91.2	82.5
Benin	1996	56.4	...	...	...	34.4
	2001	62.6	6.3	8.7	...	49.6
	2006	61.2	0.1	5.9	45.0	56.6
	2011	38.7	2.5	4.9	84.9	68.6
Burkina Faso	1992	26.0	4.7	...	…	29.4
	1999	25.0	3.9	9.5	…	39.7
	2003	32.6	8.9	17.6	…	52.4
	2010	31.4	1.7	10.0	85.1	48.5
Burundi	2010	42.2	7.6	10.9	72.5	49.0
	2012	62.2	11.3	5.4	80.7	58.5
Cameroon	1991	33.9	14.0	...	...	63.0
	1998	37.1	18.1	5.1	...	79.0
	2004	34.7	14.1	3.5	41.6	77.1
CAR	1994	4.9	2.4	2.6	...	8.0
Chad	1997	11.6	1.0	1.4	...	9.4
	2004	18.6	5.8	3.1	...	16.4
Comoros	1996	38.8	7.6	9.0	...	51.8
	2012	56.2	8.3	16.0	86.6	85.1
Congo	2005	86.8	9.1	2.1	54.1	50.8
	2009	35.3	7.1	1.3	89.2	53.6
	2011	38.7	2.4	1.6	91.9	58.9
Cote d'Ivoire	1994	50.8	29.3	...	...	69.7
	1998	59.2	24.7	10.2	...	85.9
	2005	66.6	29.2	41.1	...	86.4
	2011	61.4	13.5	4.2	92.6	88.1
DRC	2007	21.9	13.2	1.2	46.9	36.6
	2013	19.7	0.7	1.8	78.9	42.0
Egypt	1992	91.4	46.3	...	...	98.4
	1995	92.4	50.4	...	...	99.0
	2000	97.0	59.2	44.7	...	99.5
	2003	98.6	67.8	63.9	28.4	99.7
	2005	98.0	71.2	73.4	40.0	99.8
	2008	98.1	77.1	61.6	54.1	99.9
	2014	96.0	92.9	30.2	91.9	99.9
Ethiopia	2000	28.8	1.9	7.9	...	76.2
	2005	47.5	1.3	28.2	11.4	85.7
	2010	48.4	2.4	19.0	65.2	85.2
Gabon	2000	52.2	30.2	17.2	...	90.2
	2012	74.0	38.6	2.2	96.3	98.1
Gambia	2013	65.9	4.3	5.7	93.4	66.4
Ghana	1993	37.2	15.6	...	...	74.6
	1998	41.4	18.4	5.3	...	82.4
	2003	33.4	21.2	14.3	...	...
	2008	27.0	_	6.5	78.4	84.8
Guinea	1999	29.7	7.7	5.6	...	53.8
	2005	27.4	7.0	20.4	...	63.8
	2012	66.6	7.3	1.6	94.6	74.2
Kenya	1993	55.8	44.8	...	...	42.5
	1998	58.2	43.1	9.1	...	47.5
	2003	49.4	39.0	32.7	...	50.2
	2008	56.0	34.0	6.6	85.6	65.6
Lesotho	2004	68.4	7.7	44.0	...	26.2
	2009	58.9	3.5	14.0	...	43.2
Liberia	2007	7.1	8.1	...	63.0	6.9
	2009	11.5	5.4	...	69.0	3.5
	2011	3.1	1.1	...	78.4	7.2
	2013	1.9	1.8	...	81.7	16.4
Madagascar	1997	17.7	7.4	2.0	...	38.1
	2003	17.8	7.4	12.1	...	52.7
	2011	21.3	0.1	6.0	71.5	61.5
	2013	17.3	1.3	5.4	69.1	60.7
Malawi	1992	33.6	13.9	...	...	19.8
	2000	41.7	16.4	...	...	28.7
	2004	29.3	16.2	21.8	20.8	30.2
	2010	31.0	10.1	6.8	72.7	34.7
	2012	35.0	13.7	6.1	74.7	37.1
Mali	1996	15.7	2.9	2.4	...	21.5
	2001	27.0	_	9.3	...	37.0
	2006	32.7	6.1	11.8	42.4	47.4
	2012	35.4	6.6	6.9	93.9	76.0
Mauritania	2001	28.1	4.1	6.8	...	49.7
Morocco	1992	76.4	90.3	...	...	84.7
	2004	85.2	97.8	65.8	...	94.6
Mozambique	1997	46.8	12.2	5.4	...	25.8
	2003	39.6	7.5	5.5	...	25.0
	2009	35.9	4.6	2.6	54.9	43.1
	2011	51.5	...	2.3	66.8	54.5
Namibia	1992	81.8	82.8	...	...	66.0
	2000	77.0	64.5	41.4	...	73.2
	2007	79.5	74.4	33.3	...	77.6
	2013	67.5	64.2	15.0	95.0	72.2
Niger	1992	22.7	5.9	...	...	26.7
	1998	26.6	4.2	3.3	...	36.5
	2006	35.2	6.1	4.0	35.1	47.2
	2012	38.6	3.1	4.2	82.8	61.8
Nigeria	1999	24.0	30.6	5.3	...	84.3
	2003	14.4	28.7	11.8	...	84.9
	2008	7.2	10.6	3.7	76.1	84.8
	2013	5.5	9.2	3.2	88.6	83.6
Rwanda	1992	7.0	10.6	...	...	31.1
	2000	33.5	6.9	7.8	...	38.9
	2005	14.1	5.4	4.8	24.1	25.1
	2011	23.7	3.2	1.4	71.8	44.5
Senegal	1993	54.1	25.4	...	...	58.6
	1997	64.2	26.7	15.6	...	68.9
	2005	75.7	_	27.7	51.8	80.4
	2010	77.1	23.0	20.9	95.4	87.8
Sierra Leone	2008	20.4	0.2	2.3	63.5	33.1
	2013	10.9	0.7	1.0	84.7	41.4
South Africa	1998	86.6	79.6	43.3	...	84.2
Swaziland	2006	72.6	49.7	20.1	75.1	63.4
Tanzania	1992	39.6	4.5	...	...	23.9
	1996	31.5	5.0	...	...	35.5
	1999	48.2	4.1	...	...	27.3
	2004	52.0	9.1	27.9	...	38.9
	2010	46.1	_	3.5	...	46.2

Table E.1 Continued

Country	Year	Piped water* (%)	Connection to sewerage (%)	Fixed telephone (%)	Mobile telephone (%)	Connection to electricity (%)
Togo	1998	51.3	21.5	...	...	41.2
	2013	12.3	0.1	5.0	90.7	83.2
Uganda	1995	12.7	9.2	2.4	...	40.2
	2001	12.1	9.1	14.5	...	43.9
	2006	20.2	8.6	3.1	52.8	41.8
	2009	20.6	9.1	6.6	79.2	45.0
	2011	27.9	11.3	4.8	86.8	55.4
Zambia	1992	55.5	47.9	...	...	39.2
	1996	46.7	45.6	...	...	44.1
	2002	43.5	42.3	10.2	...	45.1
	2007	39.7	25.2	5.9	61.7	47.8
Zimbabwe	1994	92.6	94.6	0.0	...	80.4
	1999	90.9	93.7	16.6	...	87.4
	2005	92.7	84.2	22.2	34.5	91.4
	2010	71.0	74.4	11.0	90.1	83.2
Bolivia	1994	81.9	40.6	17.6	...	93.0
	1998	93.0	45.1	36.1	7.9	96.1
	2004	90.2	49.0	28.5	34.3	94.0
	2008	91.9	58.4	30.9	77.4	97.5
Brazil	1991	76.7	78.1	...	...	94.5
	1996	84.3	62.4	...	...	98.8
Colombia	1990	97.1	89.2	41.1	...	97.9
	1995	97.5	90.0	48.9	...	99.2
	2000	97.9	90.7	66.7	...	99.4
	2005	91.6	92.0	68.7	...	99.3
	2010	91.6	91.8	51.6	...	99.4
Dominican Republic	1991	80.9	62.7	...	...	96.5
	1996	57.5	64.7	40.7	...	...
	1999	38.4	67.3	47.0	...	...
	2002	27.0	69.7	48.0	...	98.7
	2007	17.5	78.2	34.8	75.2	98.6
	2013	6.9	82.2	...	...	99.2
Guatemala	1995	65.0	64.7	23.2	...	88.9
	1998	60.1	64.5	27.1	...	91.3
Guyana	2005	43.2	9.1	59.5	66.0	81.6
	2009	28.5	11.4	77.9	87.2	90.9
Haiti	1994	28.7	11.5	...	...	76.5
	2000	22.4	8.8	11.1	...	81.9
	2006	20.9	3.3	9.2	35.0	68.9
	2012	27.1	17.5	3.2	90.9	70.6
Honduras	2005	32.5	58.9	43.1	52.6	...
	2011	27.2	62.1	33.5	91.1	...
Nicaragua	1998	88.7	37.2	16.4	...	91.1
	2001	89.6	30.8	20.2	12.2	94.5
Peru	1991	80.3	58.5	...	...	90.3
	1996	75.4	69.5	27.6	...	92.0
	2000	82.4	76.0	36.7	...	92.5
	2004	90.1	84.3	45.0	...	96.3
	2012	82.4	80.9	37.1	90.7	98.2
Armenia	2000	96.6	90.3	74.9	...	99.1
	2005	97.4	93.6	83.5	39.2	99.9
	2010	97.1	95.5	89.9	87.6	99.7
Azerbaijan	2006	77.7	74.0	75.9	64.2	99.8
Bangladesh	1994	36.8	49.4	...	...	75.2
	1996	39.2	50.8	...	...	79.5
	1999	30.7	35.1	7.5	...	81.2
	2004	31.1	29.5	15.6	...	76.6
	2007	27.3	8.5	7.0	54.7	82.1
	2011	37.2	11.0	7.6	89.2	90.2
Cambodia	2000	31.9	33.8	...	...	60.6
	2005	37.0	30.8	...	55.1	66.8
India	1992	48.1	60.1	...	...	82.8
	1998	51.6	63.9	20.1	...	91.3
	2006	50.7	27.8	26.7	36.3	93.1
Indonesia	1991	24.6	38.7	...	...	87.6
	1994	26.9	63.6	...	...	94.6
	1997	33.5	51.4	...	...	97.5
	2002	25.1	64.6	25.1	...	98.1
	2007	23.0	20.7	61.3	...	98.2
Jordan	1997	97.1	94.0	41.6	...	99.8
	2002	86.5	92.0	56.5	35.7	99.7
	2007	69.6	66.9	37.5	90.8	99.0
	2009	58.4	69.3	25.6	97.3	99.6
Kazakhstan	1995	90.5	73.1	48.9	...	99.9
	1999	86.7	80.8	54.9	...	99.4
Krygystan	1997	87.4	51.6	53.9	...	100.0
	2012	88.5	42.8	50.1	...	99.8
Maldives	2009	52.0	99.0	44.6	98.9	99.9
Moldova	2005	72.9	68.3	87.5	50.7	99.4
Nepal	1996	46.4	17.1	14.1	...	78.4
	2001	40.0	58.3	18.0	...	85.7
	2006	39.9	23.2	27.2	22.5	90.1
	2011	42.6	27.3	25.7	91.6	97.0
Pakistan	1990	67.7	73.0	...	...	95.2
	2006	62.3	67.6	65.9	...	98.3
	2012	50.4	69.8	19.5	...	99.8
Philippines	1993	44.1	62.8	...	...	83.7
	1998	54.4	87.4	28.7	...	91.1
	2003	55.7	92.6	53.6	50.9	92.0
	2008	39.6	3.6	20.0	81.3	93.7
Timor Leste	2009	38.1	18.2	1.5	73.5	83.4
Turkey	1993	74.5	85.7	68.4	...	...
	1998	67.3	89.2	80.4	17.9	...
	2004	66.6	92.7	81.5	74.1	...
Ukraine	2007	80.1	71.0	68.3	73.4	99.9
Uzebekistan	1996	87.4	47.7	50.0	...	100.0
Viet Nam	1997	66.2	67.4	27.3	...	98.6
	2002	74.0	82.1	57.4	...	99.4
	2005	61.1	80.4	67.8	...	99.6
Yemen	1991	87.2	53.7	24.8	...	91.2

Note: * Piped water into dwelling, yard or neighbours tap

Source: United Nations Human Settlement Programme (UN-Habitat), Global Urban Indicators Database 2015.

Table E.2: Households in Selected Cities with Piped Water, Connection to Sewerage, Fixed Telephone, Mobile Telephone and Connection to National Electricity Grid

Country	City	Year	Piped water* (%)	Connection to sewerage (%)	Fixed telephone (%)	Mobile telephone (%)	Connection to electricity (%)
Angola	Luanda	2006	36.6	16.4	...	40.1	75.5
Angola	Other cities/towns	2006	22.4	12.7	...	53.0	50.6
Angola	Luanda	2011	28.4	19.4	88.2	96.2	88.4
Angola	Other cities/towns	2011	39.0	18.9	64.6	84.2	74.5
Benin	Djougou	2011	12.1	...	1.4	78.8	40.8
Benin	Porto Novo	2011	35.3	2.9	4.5	88.6	73.4
Benin	Cotonou	2011	67.5	4.7	9.5	95.0	90.8
Benin	Other cities/towns	2011	23.0	1.2	2.3	78.0	54.9
Burkina Faso	Ouagadougou	2010	46.8	2.7	15.3	90.4	53.7
Burkina Faso	Other cities/towns	2010	19.6	1.0	5.9	81.1	44.6
Burundi	Bunjumbura	2012	69.7	18.0	8.4	87.1	69.5
Burundi	Other cities/towns	2012	50.5	0.8	0.9	70.9	41.4
Cameroon	Younde	2004	46.8	20.6	5.6	60.9	96.2
Cameroon	Douala	2004	45.8	24.2	5.6	63.1	95.9
Cameroon	Other cities/towns	2004	27.9	9.2	2.3	29.7	66.1
CAR	Bangui	1994	9.9	5.5	5.8	...	15.3
CAR	Other cities/towns	1994	1.0	0.1	0.1	...	2.3
Chad	Ndjamena	2004	27.6	10.3	6.5	...	29.2
Chad	Other cities/towns	2004	12.5	2.7	0.8	...	7.8
Comoros	Moroni	2012	33.8	9.1	15.2	91.4	84.7
Comoros	Other cities/towns	2012	66.9	7.9	16.3	84.3	85.2
Congo	Brazaville	2009	37.5	7.1	1.2	88.2	63.1
Congo	Other cities/towns	2009	32.5	7.1	1.4	90.5	41.7
Cote d'Ivoire	Abidjan	2011	87.3	24.5	6.8	96.1	96.1
Cote d'Ivoire	Other cities/towns	2011	43.5	5.9	2.4	90.2	82.6
DRC	Kinshasa	2013	49.2	0.8	2.1	94.6	90.0
Egypt	Cairo	2014	99.0	99.7	31.1	90.9	100.0
Egypt	Alexandria	2014	97.0	96.1	39.4	94.2	100.0
Egypt	Port Said	2014	96.2	93.4	43.6	93.8	100.0
Ethiopia	Addis Ababa	2010	68.3	4.9	37.4	86.2	98.6
Ethiopia	Other cities/towns	2010	43.2	1.8	14.2	59.8	81.7
Gabon	Libreville	2012	81.5	44.5	2.8	97.6	99.4
Gabon	Other cities/towns	2012	57.7	25.8	1.0	93.7	95.3
Gambia	Banjul	2013	95.4	71.9	11.3	94.4	84.4
Gambia	Other cities/towns	2013	64.3	0.7	5.4	93.3	65.4
Ghana	Accra	2008	37.3	...	11.1	89.5	90.8
Ghana	Other cities/towns	2008	22.3	...	4.4	73.4	82.1
Guinea	Conakry	2012	82.5	7.4	1.4	96.2	93.0
Guinea	Other cities/towns	2012	48.0	7.2	2.0	92.8	52.2
Kenya	Nairobi	2008	78.2	66.6	9.4	92.5	88.6
Kenya	Mombasa	2008	36.4	10.1	6.9	80.6	57.9
Kenya	Other cities/towns	2008	46.3	18.8	4.7	82.4	52.8
Lesotho	Maseru	2009	55.3	3.8	13.1	...	41.3
Lesotho	Other cities/towns	2009	61.7	3.2	14.6	...	44.6
Liberia	Monrovia	2011	5.0	1.4	...	83.5	11.0
Liberia	Other cities/towns	2011	...	0.2	...	58.4	0.8
Madagascar	Antananarivo	2013	26.6	0.5	0.7	71.7	63.1
Madagascar	Other cities/towns	2013	17.0	1.4	5.6	69.0	60.6
Malawi	Lilongwe	2013	34.2	10.9	3.5	77.2	25.1
Malawi	Other cities/towns	2013	35.4	15.0	7.3	73.6	42.6
Mali	Bamako	2013	34.9	9.7	9.7	95.3	83.1
Mali	Other cities/towns	2013	35.9	3.4	4.1	92.4	68.6
Mauritania	Nouakchott	2001	27.8	4.8	7.2	...	47.2
Mauritania	Other cities/towns	2001	28.7	2.8	6.0	...	53.9
Morocco	Casablanca	2004	83.4	98.9	77.0	...	99.2
Morocco	Rabat	2004	89.7	99.7	69.7	...	99.0

Table E.2 Continued

Country	City	Year	Piped water* (%)	Connection to sewerage (%)	Fixed telephone (%)	Mobile telephone (%)	Connection to electricity (%)
Morocco	Fes	2004	93.8	99.4	57.9	...	97.7
Morocco	Marrakech	2004	88.8	99.7	17.7	...	98.3
Morocco	Tangier	2004	84.5	100.0	77.4	...	89.4
Morocco	Maknes	2004	85.6	97.0	68.4	...	97.3
Morocco	Other cities/towns	2004	83.6	96.3	64.0	...	91.4
Mozambique	Maputo	2011	81.3	...	5.7	93.9	87.9
Mozambique	Other cities/towns	2011	46.1	...	1.7	61.9	48.5
Namibia	Windhoek	2013	67.8	75.3	20.1	95.9	72.5
Namibia	Other cities/towns	2013	67.3	57.2	11.8	94.5	71.9
Niger	Niamey	2012	48.4	6.2	6.8	88.6	74.4
Niger	Other cities/towns	2012	31.7	0.9	2.3	78.7	52.9
Nigeria	Lagos:Lagos	2013	4.5	7.6	2.2	96.5	99.3
Nigeria	Oyo:Ibadan	2013	0.4	1.7	1.1	93.3	76.2
Nigeria	Kaduna:Zaria	2013	19.8	12.8	0.9	93.1	91.6
Nigeria	Ondo:Akure	2013	1.2	11.3	...	95.9	93.8
Nigeria	Ekiti:Effon Alaiye	2013	2.7	7.4	1.2	90.6	92.2
Nigeria	Yobe:Damaturu	2013	4.7	0.9	0.7	80.5	82.0
Nigeria	Kano	2013	1.7	0.5	23.8	79.1	79.8
Nigeria	Abuja	2013	33.3	39.8	3.6	97.3	94.5
Nigeria	Other cities/towns	2013	5.1	10.7	1.8	86.4	79.7
Rwanda	kigali	2011	34.1	5.5	2.2	87.3	65.6
Rwanda	Other cities/towns	2011	10.0	0.1	0.4	51.5	17.0
Senegal	Dakar	2010	85.6	39.9	26.2	96.7	95.0
Senegal	Other cities/towns	2010	67.3	3.7	14.9	93.9	79.5
Sierra Leone	Freetown	2008	36.0	0.3	3.7	75.2	51.8
Sierra Leone	Other cities/towns	2008	6.1	0.2	1.1	52.8	15.9
South Africa	CapeTown	1998	79.7	73.8	49.6	...	88.0
South Africa	Durban	1998	87.7	86.9	46.3	...	84.3
South Africa	Pretoria	1998	62.5	62.5	18.8	...	56.3
South Africa	Port Elizabeth	1998	66.8	55.7	27.0	...	63.3
South Africa	West Rand	1998	84.2	84.8	47.6	...	75.0
South Africa	Other cities/towns	1998	89.0	77.8	40.9	...	85.6
Swaziland	Mbabane	2006	65.3	41.7	29.1	78.3	59.9
Swaziland	Manzini	2006	68.6	39.8	17.7	76.6	60.5
Swaziland	Other cities/towns	2006	84.1	69.9	15.9	70.4	70.3
Tanzania	Dar es Salaam	2010	48.3	...	4.6	...	66.5
Tanzania	Arusha	2010	59.6	...	1.5	...	34.7
Tanzania	Other cities/towns	2010	44.2	...	3.2	...	39.0
Togo	Lome	2013	13.8	0.2	6.1	92.9	86.8
Togo	Other cities/towns	2013	9.6	...	3.1	86.8	76.6
Uganda	Kampala	2011	21.5	2.6	1.2	86.4	38.6
Uganda	Other cities/towns	2011	28.7	12.5	5.2	86.8	57.6
Zambia	Other cities/towns	2013	44.9	28.8	2.5	88.0	52.3
Zambia	Lusaka	2013	34.3	15.2	3.7	91.5	76.3
Zimbabwe	Harare	2010	61.2	68.3	7.5	90.8	80.7
Zimbabwe	Other cities/towns	2010	79.9	80.0	14.2	89.4	85.6
Bolivia	La Paz	2008	95.0	76.3	29.7	77.0	98.3
Bolivia	Sucre	2008	88.6	76.6	31.5	66.5	97.2
Bolivia	Cochabamba	2008	83.0	66.7	42.6	74.0	98.2
Bolivia	Oruro	2008	92.4	66.1	43.1	70.6	96.4
Bolivia	Potosi	2008	95.1	81.0	23.7	74.9	97.8
Bolivia	Tarija	2008	94.5	75.1	31.7	81.8	94.9
Bolivia	Santa Cruz	2008	98.1	25.5	25.8	84.5	97.7
Bolivia	Trinidad	2008	60.7	21.0	14.9	65.8	91.5
Bolivia	Cobija	2008	85.2	32.8	23.4	85.0	96.2
Brazil	Capilal, large city	1991	89.2	92.7	...	...	98.1
Brazil	Other cities/towns	1991	73.0	73.8	...	...	93.4
Brazil	Sao Paulo	1996	93.8	87.6	...	...	99.6
Brazil	Rio de Janeiro	1996	88.5	79.4	...	...	99.6
Brazil	Belo Horizonte	1996	84.4	87.6	...	...	100.0

Table E.2 Continued

Country	City	Year	Piped water* (%)	Connection to sewerage (%)	Fixed telephone (%)	Mobile telephone (%)	Connection to electricity (%)
Brazil	Fortaleza	1996	76.8	35.9	…	…	97.2
Brazil	Curitiba	1996	84.2	78.7	…	…	100.0
Brazil	Brasilia	1996	89.8	71.2	…	…	99.6
Brazil	Goiana	1996	93.4	75.7	…	…	98.3
Brazil	Victoria	1996	90.4	87.5	…	…	99.2
Brazil	Other cities/towns	1996	79.4	42.2	…	…	98.7
Colombia	Bogota	2010	98.3	99.4	73.4	…	99.6
Colombia	Medellin	2010	95.7	94.4	77.8	…	99.7
Colombia	Barranquilla	2010	94.5	81.7	36.1	…	99.6
Colombia	Cartagena	2010	81.8	69.1	25.6	…	99.2
Colombia	Cali	2010	95.9	96.2	51.7	…	99.3
Colombia	Arauca	2010	96.2	88.9	30.0	…	99.1
Colombia	Yopali	2010	81.5	97.7	11.6	…	99.0
Dominican Republic	Santo Domingo	2013	2.4	88.2	…	…	99.9
Guatemala	Guatemala city	1995	58.0	71.7	34.1	…	90.8
Haiti	Port-Au-Prince	2012	28.5	26.9	3.7	92.7	86.1
Haiti	Other cities/towns	2012	25.7	7.8	2.8	89.0	54.6
Honduras	Tegucigalpa	2005	32.7	71.1	54.9	53.0	…
Honduras	La ceiba	2011	32.4	37.6	28.5	92.5	…
Honduras	Trujillo	2011	24.5	19.2	22.6	91.3	…
Honduras	Comayagua	2011	27.3	55.4	32.6	91.0	…
Nicaragua	Managua	2001	97.1	51.9	29.1	21.9	99.6
Nicaragua	Jinotega	2001	62.4	28.4	10.1	1.8	90.8
Peru	Lima	2012	84.1	89.5	54.5	92.3	99.3
Armenia	Yerevan	2010	98.7	99.1	95.4	88.4	99.7
Azerbaijan	Baku	2006	89.6	90.0	85.8	75.4	99.6
Bangladesh	Dhaka	2007	63.2	21.7	9.7	64.0	96.9
Bangladesh	Rajshahi	2007	20.1	3.4	6.2	46.7	71.9
Bangladesh	Other cities/towns	2007	7.0	1.3	5.6	50.0	74.3
Cambodia	Phnom penh	2005	86.0	86.5	…	86.1	96.1
Cambodia	Siem Reap	2005	5.4	20.0	…	60.5	70.5
India	Mumbai	2006	87.4	77.2	38.2	50.7	98.8
India	Kolkota	2006	45.0	38.1	34.5	42.6	96.8
India	New Delhi	2006	74.9	74.6	38.8	59.3	99.4
India	Hyberabad	2006	65.0	49.2	23.2	34.6	90.1
India	Pune	2006	74.0	42.5	23.3	35.5	97.0
India	Kanpur	2006	37.4	38.3	19.1	39.1	92.6
India	Jaipur	2006	88.8	52.5	49.6	54.7	100.0
India	Coimbatore	2006	48.7	32.3	36.2	52.1	96.6
India	Vijayawada	2006	98.4	45.9	18.0	32.8	100.0
India	Amritsar	2006	79.0	92.1	26.6	40.3	97.0
India	Srinagar	2006	83.5	14.1	41.6	55.2	99.4
India	Jodhpur	2006	84.7	14.5	34.7	38.4	94.7
Indonesia	Jakarta	2007	29.7	23.1	74.7	…	99.8
Indonesia	Bandung	2007	14.3	33.7	58.4	…	98.6
Indonesia	Surabaja	2007	16.2	16.3	56.8	…	99.3
Indonesia	Medan	2007	48.6	20.7	67.0	…	99.6
Indonesia	Palembang	2007	16.8	22.4	57.8	…	95.6
Jordan	Amman	2009	54.2	82.3	34.3	97.9	99.8
Jordan	Aqaba	2009	95.2	88.6	18.2	98.5	98.6
Kazakhstan	Shimkent	1999	100.0	100.0	73.7	…	100.0
Kazakhstan	Zhezkazgan	1999	100.0	100.0	75.5	…	100.0
Kazakhstan	Almaty	1999	94.3	77.9	78.1	…	99.7
Kazakhstan	Other cities/towns	1999	84.9	80.0	50.6	…	99.3
Krygystan	Bishikea	2012	95.7	11.0	68.0	…	100.0
Krygystan	Other cities/towns	2012	87.9	45.6	48.5	…	99.7
Maldives	Male	2009	52.0	99.0	44.6	98.9	99.9
Moldova	Chisinau	2005	89.1	91.4	93.6	60.6	99.7
Moldova	Other cities/towns	2005	55.5	43.6	81.0	40.0	99.1
Nepal	Kathmandu	2006	55.5	66.9	36.9	37.8	100.0

Table E.2 Continued

Country	City	Year	Piped water* (%)	Connection to sewerage (%)	Fixed telephone (%)	Mobile telephone (%)	Connection to electricity (%)
Nepal	Other cities/towns	2006	34.3	7.5	23.7	17.0	86.5
Pakistan	Faisalabad:Punjab	2012	42.9	63.5	16.9	…	99.7
Pakistan	Islamabad	2012	65.3	91.5	23.0	…	99.9
Pakistan	Balochistan	2012	62.3	16.5	13.7	…	99.1
Pakistan	Other cities/towns	2012	35.3	34.2	24.2	…	99.6
Philippines	Metro Manila	2008	45.3	4.4	32.2	87.1	98.0
Philippines	Cebu	2008	21.9	…	22.4	80.6	93.4
Philippines	Cagayan	2008	16.1	…	14.9	78.5	93.3
Philippines	Bacolod	2008	43.3	3.9	15.2	77.5	86.6
Philippines	Other cities/towns	2008	38.6	3.6	14.2	78.7	92.0
Timor Leste	Dili	2009	43.7	17.7	1.9	87.0	98.7
Timor Leste	Other cities/towns	2009	28.7	19.0	0.9	50.9	58.0
Turkey	Instabul	2004	39.7	95.9	83.3	79.9	…
Turkey	Anakara	2004	80.2	98.5	87.2	76.8	…
Turkey	Izmir	2004	56.1	99.7	84.5	79.0	…
Ukraine	Kyiv	2007	67.6	67.4	63.9	78.6	100.0
Uzebekistan	Tashkent	1996	98.7	81.0	64.5	…	100.0
Uzebekistan	Other cities/towns	1996	83.8	37.3	45.5	…	100.0
Viet Nam	Ho Chi Minh	2005	52.4	99.3	74.2	…	100.0
Viet Nam	Ha Noi	2005	84.8	97.6	90.5	…	100.0
Viet Nam	Hai Phong	2005	86.7	92.3	75.7	…	100.0
Viet Nam	Da Nang	2005	90.9	90.9	81.8	…	100.0
Viet Nam	Other cities/towns	2005	58.3	69.6	61.0	…	99.4
Yemen	Sana'a	1991	93.5	58.5	38.6	…	98.8
Yemen	Aden	1991	97.0	88.2	28.7	…	95.6
Yemen	Taiz	1991	85.6	48.9	26.1	…	95.2
Yemen	Other cities/towns	1991	81.1	40.3	16.4	…	85.1

Note: * Piped water into dwelling, yard or neighbours tap

Source: United Nations Human Settlement Programme (UN-Habitat), Global Urban Indicators Database 2015.

Table F.1: Gross Domestic Product (GDP) of Selected Metropolitan Areas

Country	Metropolitan area	"GDP (millions US$) [US Dollar, 2010]"				GDP of the metropolitan area as a share of national value (%)				"GDP per capita (US$) [US Dollar, 2010]"			
		2000	2010	2012	2013	2000	2010	2012	2013	2000	2010	2012	2013
Australia	Sydney	156,651	187,519	199,970	203,686	22.7	20.0	20.1	20.0	38,566	41,163	42,764	42,824
Australia	Melbourne	125,678	155,780	167,012	170,998	18.2	16.7	16.8	16.8	36,336	37,941	39,274	39,358
Australia	Brisbane	53,957	85,380	90,573	91,773	7.8	9.1	9.1	9.0	32,510	40,496	41,295	41,043
Australia	Perth	56,533	114,649	124,117	133,487	8.2	12.3	12.5	13.1	39,505	64,369	65,158	67,662
Australia	Adelaide	36,250	45,942	47,479	48,300	5.2	4.9	4.8	4.7	31,831	36,663	37,133	37,402
Australia	Gold Coast-Tweed Heads	12,372	21,043	22,321	22,620	1.8	2.3	2.2	2.2	32,510	40,496	41,295	41,043
Austria	Vienna	110,421	126,319	129,516	...	36.7	36.1	35.6	...	45,434	47,077	47,307	...
Austria	Graz	21,384	25,256	26,749	...	7.1	7.2	7.4	...	38,662	41,511	43,102	...
Austria	Linz	23,293	27,364	28,422	...	7.7	7.8	7.8	...	39,992	45,117	46,469	...
Belgium	Brussels	113,625	135,785	134,940	135,288	30.8	31.7	31.0	31.0	50,468	54,631	53,208	52,807
Belgium	Antwerp	41,747	47,673	49,312	49,377	11.3	11.1	11.3	11.3	42,273	45,242	46,185	45,942
Belgium	Ghent	16,782	20,382	20,983	21,133	4.6	4.8	4.8	4.8	31,115	35,360	35,918	35,932
Belgium	Liege	18,678	21,061	21,519	21,491	5.1	4.9	4.9	4.9	26,892	28,993	29,355	29,183
Canada	Vancouver	70,893	89,948	93,175	95,127	6.3	6.6	6.5	6.5	35,954	38,897	38,852	39,010
Canada	Montreal	123,986	144,223	149,360	149,839	11.0	10.6	10.5	10.3	33,577	34,588	34,885	34,546
Canada	Toronto	221,800	261,063	271,449	275,677	19.7	19.2	19.0	18.9	41,385	40,673	40,690	40,501
Canada	Edmonton	49,139	72,472	80,876	85,418	4.4	5.3	5.7	5.9	52,272	61,958	65,926	68,086
Canada	Calgary	50,988	78,794	88,521	93,933	4.5	5.8	6.2	6.4	52,272	61,958	65,926	68,086
Canada	Winnipeg	23,969	29,205	31,070	31,773	2.1	2.1	2.2	2.2	32,566	36,342	37,839	38,340
Canada	Quebec	24,511	28,381	29,465	29,543	2.2	2.1	2.1	2.0	33,577	34,588	34,885	34,546
Canada	Ottawa-Gatineau	47,456	54,338	56,323	56,838	4.2	4.0	3.9	3.9	39,537	39,190	39,271	39,041
Canada	Hamilton	23,041	24,392	24,807	24,881	2.0	1.8	1.7	1.7	41,385	40,673	40,690	40,501
Switzerland	Zurich	...	74,184	77,011	...	...	18.5	18.6	...	...	61,496	62,798	...
Switzerland	Geneva	...	42,807	43,897	...	...	10.7	10.6	...	...	54,530	54,352	...
Switzerland	Basel	...	40,298	41,375	...	...	10.0	10.0	...	...	52,566	53,502	...
Chile	Valparaíso	10,118	15,073	17,070	18,076	4.9	4.9	4.9	5.0	12,097	15,795	17,416	18,197
Chile	Santiago	92,498	139,483	164,436	173,833	44.7	44.9	47.5	48.1	15,859	21,815	25,176	26,322
Chile	Concepción	7,438	10,261	11,411	11,728	3.6	3.3	3.3	3.3	8,946	11,575	12,677	12,926
Czech Republic	Prague	57,286	87,400	86,434	87,076	27.6	30.9	30.1	30.3	34,351	47,764	46,255	46,094
Czech Republic	Brno	11,496	16,326	17,127	17,579	5.6	5.8	6.0	6.1	18,425	25,549	26,652	27,276
Czech Republic	Ostrava	8,965	12,489	13,002	12,589	4.3	4.4	4.5	4.4	15,642	22,129	23,103	22,400
Germany	Berlin	142,876	159,819	165,377	...	4.8	4.9	4.9	...	32,990	36,532	37,701	...
Germany	Hamburg	144,766	155,826	158,074	...	4.9	4.8	4.7	...	49,404	52,204	52,749	...
Germany	Munich	157,660	173,444	184,701	...	5.3	5.4	5.5	...	61,366	60,970	63,592	...
Germany	Cologne	82,900	89,221	`	...	2.8	2.8	2.7	...	44,826	46,881	47,730	...
Germany	Frankfurt	137,484	142,081	143,516	...	4.7	4.4	4.3	...	55,382	56,431	56,828	...
Germany	Stuttgart	95,209	102,480	108,877	...	3.2	3.2	3.2	...	49,355	52,426	55,541	...
Germany	Essen	24,161	27,843	28,891	...	0.8	0.9	0.9	...	30,283	36,780	38,566	...
Germany	Leipzig	22,297	26,127	27,933	...	0.8	0.8	0.8	...	25,900	31,192	33,500	...
Germany	Dresden	22,094	26,400	26,969	...	0.8	0.8	0.8	...	27,100	31,541	32,024	...
Germany	Dortmund	25,586	29,599	31,130	...	0.9	0.9	0.9	...	29,324	35,959	38,251	...
Germany	Düsseldorf	63,314	69,882	71,531	...	2.1	2.2	2.1	...	44,249	48,932	50,093	...
Germany	Bremen	40,742	43,146	44,594	...	1.4	1.3	1.3	...	39,854	42,070	43,448	...
Germany	Hanover	47,165	52,895	55,136	...	1.6	1.6	1.6	...	38,123	43,259	45,189	...
Germany	Nuremberg	48,040	53,144	56,100	...	1.6	1.6	1.7	...	41,345	45,540	48,025	...
Germany	Bochum	22,012	22,567	23,294	...	0.7	0.7	0.7	...	31,037	34,932	36,734	...
Germany	Freiburg im Breisgau	18,658	20,931	22,103	...	0.6	0.7	0.7	...	36,864	39,673	41,543	...
Germany	Augsburg	20,667	23,838	25,205	...	0.7	0.7	0.8	...	35,713	39,858	41,860	...
Germany	Bonn	29,008	34,513	35,904	...	1.0	1.1	1.1	...	39,425	46,263	47,988	...
Germany	Karlsruhe	28,701	33,060	34,568	...	1.0	1.0	1.0	...	42,988	48,127	50,027	...
Germany	Saarbrücken	20,722	21,926	22,752	...	0.7	0.7	0.7	...	32,496	37,243	39,260	...
Germany	Duisburg	27,558	31,592	32,929	...	0.9	1.0	1.0	...	32,232	38,977	41,061	...
Germany	Mannheim	50,122	53,359	55,014	...	1.7	1.7	1.6	...	39,480	42,998	44,525	...
Germany	Münster	17,763	21,187	22,475	...	0.6	0.7	0.7	...	34,744	38,877	40,705	...
Germany	Aachen	17,618	18,866	19,497	...	0.6	0.6	0.6	...	29,825	32,557	33,754	...

Table F.1 Continued

Country	Metropolitan area	"GDP (millions US$) [US Dollar, 2010]"				GDP of the metropolitan area as a share of national value (%)				"GDP per capita (US$) [US Dollar, 2010]"			
		2000	2010	2012	2013	2000	2010	2012	2013	2000	2010	2012	2013
Denmark	Copenhagen	87,175	98,292	98,432	98,832	40.3	42.4	42.2	42.6	45,703	49,396	49,036	49,019
Estonia	Tallinn	11,558	16,805	19,515	...	57.3	59.9	61.4	...	21,746	31,662	36,776	...
Spain	Madrid	216,301	281,318	281,714	...	17.9	18.7	19.2	...	39,729	43,230	41,554	...
Spain	Barcelona	120,326	140,513	135,803	...	10.0	9.3	9.3	...	36,465	38,233	36,125	...
Spain	Valencia	39,634	47,809	45,866	...	3.3	3.2	3.1	...	29,041	30,442	28,346	...
Spain	Seville	29,306	37,580	37,141	...	2.4	2.5	2.5	...	23,267	26,445	25,446	...
Spain	Zaragoza	23,079	29,858	28,594	...	1.9	2.0	2.0	...	31,781	36,155	33,587	...
Spain	Málaga	14,977	20,733	19,594	...	1.2	1.4	1.3	...	21,129	24,859	22,653	...
Spain	Las Palmas	17,022	17,957	17,318	...	1.4	1.2	1.2	...	28,234	27,250	25,812	...
Spain	Bilbao	33,255	39,786	38,249	...	2.8	2.6	2.6	...	34,475	39,893	38,047	...
Finland	Helsinki	61,747	77,376	75,981	...	35.6	37.7	36.6	...	45,520	53,154	51,454	...
France	Paris	583,195	706,857	707,134	...	29.1	31.5	30.8	...	53,385	60,450	59,611	...
France	Lyon	72,085	84,704	87,804	...	3.6	3.8	3.8	...	41,315	44,700	45,555	...
France	Marseille	53,304	63,749	65,518	...	2.7	2.8	2.9	...	33,207	37,015	37,492	...
France	Toulouse	36,994	47,904	51,906	...	1.9	2.1	2.3	...	36,023	39,353	41,131	...
France	Strasbourg	25,628	27,133	27,757	...	1.3	1.2	1.2	...	35,701	35,762	36,164	...
France	Bordeaux	34,091	40,234	42,194	...	1.7	1.8	1.8	...	33,918	35,860	36,745	...
France	Nantes	26,466	30,696	32,996	...	1.3	1.4	1.4	...	33,805	35,281	37,082	...
France	Lille	37,439	41,855	43,118	...	1.9	1.9	1.9	...	28,423	31,023	31,793	...
France	Montpellier	15,628	20,399	21,107	...	0.8	0.9	0.9	...	28,181	32,079	32,274	...
France	Saint-Étienne	13,844	14,966	15,620	...	0.7	0.7	0.7	...	27,025	28,744	29,869	...
France	Rennes	19,537	23,449	24,769	...	1.0	1.0	1.1	...	33,411	34,898	35,778	...
France	Grenoble	21,139	22,621	22,931	...	1.1	1.0	1.0	...	34,167	34,840	34,952	...
France	Toulon	14,001	14,907	15,205	...	0.7	0.7	0.7	...	27,071	27,217	27,427	...
France	Nice	26,992	31,218	31,754	...	1.4	1.4	1.4	...	33,733	36,936	37,137	...
France	Rouen	21,587	22,688	23,619	...	1.1	1.0	1.0	...	32,195	32,487	33,491	...
Greece	Athens	116,035	147,274	125,724	117,890	42.9	45.7	45.8	44.7	31,470	41,327	35,438	33,293
Greece	Thessalonica	19,124	22,180	18,851	18,190	7.1	6.9	6.9	6.9	20,168	23,154	19,522	18,747
Hungary	Budapest	74,999	103,563	102,940	...	42.6	48.2	47.8	...	26,918	36,383	35,964	...
Ireland	Dublin	72,817	94,513	95,903	...	47.5	48.3	47.9	...	53,107	57,274	55,270	...
Italy	Rome	177,100	193,925	189,919	...	8.9	9.4	9.4	...	47,836	48,383	46,581	...
Italy	Milan	205,867	238,951	234,524	...	10.3	11.6	11.7	...	53,500	58,846	57,074	...
Italy	Naples	78,701	80,621	77,675	...	4.0	3.9	3.9	...	22,359	22,694	21,806	...
Italy	Turin	70,548	68,190	67,329	...	3.5	3.3	3.4	...	41,819	39,019	38,237	...
Italy	Palermo	19,081	22,447	20,795	...	1.0	1.1	1.0	...	20,491	23,983	22,172	...
Italy	Genova	30,198	30,596	29,223	...	1.5	1.5	1.5	...	40,856	42,722	41,061	...
Italy	Florence	32,583	32,409	32,022	...	1.6	1.6	1.6	...	46,484	44,815	43,992	...
Italy	Bari	15,236	14,748	14,349	...	0.8	0.7	0.7	...	27,006	25,520	24,706	...
Italy	Bologna	35,418	35,855	35,961	...	1.8	1.7	1.8	...	50,336	48,110	47,670	...
Italy	Catania	14,415	14,210	13,419	...	0.7	0.7	0.7	...	23,590	22,787	21,401	...
Italy	Venice	21,605	21,052	20,562	...	1.1	1.0	1.0	...	40,382	38,843	37,818	...
Japan	Sendai	...	47,343	52,094	...	...	1.1	1.1	...	...	30,027	32,806	...
Japan	Sapporo	...	65,247	67,192	...	...	1.5	1.5	...	...	29,867	30,484	...
Japan	Tokyo	...	1,431,862	1,475,630	...	...	32.1	32.0	...	...	40,945	41,636	...
Japan	Nagoya	...	233,321	255,787	...	...	5.2	5.6	...	...	36,426	39,643	...
Japan	Osaka	...	581,136	596,941	...	...	13.0	13.0	...	...	33,693	34,517	...
Japan	Fukuoka	...	79,798	83,021	...	...	1.8	1.8	...	...	31,620	32,413	...
Japan	Niigata	...	34,061	35,269	...	...	0.8	0.8	...	...	32,760	33,980	...
Japan	Toyama	...	19,410	20,172	...	...	0.4	0.4	...	...	35,735	37,118	...
Japan	Nagano	...	17,311	17,717	...	...	0.4	0.4	...	...	32,145	33,069	...
Japan	Kanazawa	...	24,847	26,092	...	...	0.6	0.6	...	...	33,412	34,905	...
Japan	Utsunomiya	...	28,283	28,611	...	...	0.6	0.6	...	...	35,352	35,481	...
Japan	Maebashi	...	32,991	34,246	...	...	0.7	0.7	...	...	33,513	34,739	...
Japan	Mito	...	20,147	21,387	...	...	0.5	0.5	...	...	34,133	36,130	...
Japan	Kofu	...	17,018	17,337	...	...	0.4	0.4	...	...	33,122	33,718	...
Japan	Numazu	...	19,445	19,952	...	...	0.4	0.4	...	...	36,716	37,677	...
Japan	Shizuoka	...	27,074	27,678	...	...	0.6	0.6	...	...	36,716	37,677	...
Japan	Anjo	...	28,778	32,366	...	...	0.7	0.7	...	...	38,330	42,268	...
Japan	Yokkaichi	...	20,368	21,024	...	...	0.5	0.5	...	...	35,691	36,489	...

Table F.1 Continued

Country	Metropolitan area	"GDP (millions US$) [US Dollar, 2010]"				GDP of the metropolitan area as a share of national value (%)				"GDP per capita (US$) [US Dollar, 2010]"			
		2000	2010	2012	2013	2000	2010	2012	2013	2000	2010	2012	2013
Japan	Himeji	…	21,199	21,439	…	…	0.5	0.5	…	…	29,723	30,070	…
Japan	Toyohashi	…	23,322	25,836	…	…	0.5	0.6	…	…	38,330	42,268	…
Japan	Hamamatsu	…	36,215	37,292	…	…	0.8	0.8	…	…	36,716	37,677	…
Japan	Okayama	…	28,620	29,519	…	…	0.6	0.6	…	…	32,544	33,346	…
Japan	Kurashiki	…	18,805	19,578	…	…	0.4	0.4	…	…	32,544	33,346	…
Japan	Fukuyama	…	18,732	19,399	…	…	0.4	0.4	…	…	33,561	34,820	…
Japan	Hiroshima	…	47,235	49,351	…	…	1.1	1.1	…	…	33,671	34,976	…
Japan	Takamatsu	…	18,269	19,828	…	…	0.4	0.4	…	…	30,234	31,849	…
Japan	Wakayama	…	16,657	17,474	…	…	0.4	0.4	…	…	31,490	33,258	…
Japan	Tokushima	…	18,298	18,782	…	…	0.4	0.4	…	…	32,632	33,594	…
Japan	Kitakyushu	…	37,041	37,728	…	…	0.8	0.8	…	…	31,637	32,438	…
Japan	Matsuyama	…	19,557	19,711	…	…	0.4	0.4	…	…	30,423	30,594	…
Japan	Kochi	…	12,562	12,904	…	…	0.3	0.3	…	…	25,539	26,348	…
Japan	Oita	…	17,340	17,956	…	…	0.4	0.4	…	…	31,512	32,445	…
Japan	Kumamoto	…	26,557	28,136	…	…	0.6	0.6	…	…	27,284	28,695	…
Japan	Nagasaki	…	14,141	14,733	…	…	0.3	0.3	…	…	27,383	28,765	…
Japan	Kagoshima	…	20,137	20,472	…	…	0.5	0.4	…	…	28,680	29,122	…
Japan	Naha	…	27,702	28,893	…	…	0.6	0.6	…	…	24,179	24,897	…
Korea	Seoul Incheon	449,175	695,470	730,727	760,365	45.8	46.2	45.8	46.3	22,249	30,869	30,999	31,403
Korea	Daegu	38,863	53,740	58,349	60,466	4.0	3.6	3.7	3.7	14,788	20,363	21,796	22,380
Korea	Busan	55,311	76,937	80,057	82,145	5.6	5.1	5.0	5.0	15,020	22,319	23,316	23,938
Korea	Cheongju	14,127	22,965	25,099	27,230	1.4	1.5	1.6	1.7	21,325	31,052	32,756	34,847
Korea	Daejeon	23,530	35,978	39,332	39,832	2.4	2.4	2.5	2.4	16,560	22,982	24,337	24,216
Korea	Pohang	12,501	18,947	19,602	20,331	1.3	1.3	1.2	1.2	24,230	36,989	37,886	39,036
Korea	Jeonju	11,139	17,093	18,729	19,703	1.1	1.1	1.2	1.2	16,721	24,522	26,253	27,241
Korea	Ulsan	44,415	70,010	76,936	73,789	4.5	4.7	4.8	4.5	46,611	68,569	73,341	69,271
Korea	Changwon	18,380	24,747	24,975	24,989	1.9	1.6	1.6	1.5	22,172	32,910	33,728	33,988
Korea	Gwangju	21,976	33,920	36,120	36,674	2.2	2.3	2.3	2.2	15,453	22,084	22,661	22,513
Mexico	Mexicali	…	14,338	15,054	15,051	…	0.9	0.8	0.8	…	15,305	15,237	14,835
Mexico	Tijuana	…	23,871	25,483	25,691	…	1.4	1.4	1.4	…	15,305	15,237	14,835
Mexico	Juárez	…	17,906	19,591	20,249	…	1.1	1.1	1.1	…	13,442	14,255	14,506
Mexico	Hermosillo	…	13,655	15,857	16,579	…	0.8	0.9	0.9	…	17,410	19,200	19,563
Mexico	Chihuahua	…	11,160	12,356	12,848	…	0.7	0.7	0.7	…	13,442	14,255	14,506
Mexico	Reynosa	…	11,611	12,307	12,557	…	0.7	0.7	0.7	…	15,967	15,800	15,572
Mexico	Monterrey	…	105,813	116,041	117,123	…	6.4	6.4	6.4	…	25,484	26,088	25,327
Mexico	Torreón	…	20,849	23,697	23,698	…	1.3	1.3	1.3	…	16,709	18,268	17,917
Mexico	Saltillo	…	14,115	16,327	16,212	…	0.9	0.9	0.9	…	19,466	21,471	20,819
Mexico	Culiacán	…	11,101	11,762	12,044	…	0.7	0.7	0.7	…	12,928	13,299	13,418
Mexico	Durango	…	7,159	7,938	8,166	…	0.4	0.4	0.5	…	12,295	13,149	13,284
Mexico	Tampico	…	11,931	12,305	12,354	…	0.7	0.7	0.7	…	15,655	15,564	15,331
Mexico	San Luis Potosí	…	14,589	16,477	16,632	…	0.9	0.9	0.9	…	12,304	13,332	13,179
Mexico	Aguascalientes	…	14,741	15,768	16,588	…	0.9	0.9	0.9	…	15,498	15,740	16,132
Mexico	Benito Juárez	…	12,326	13,491	14,034	…	0.7	0.7	0.8	…	18,643	18,578	18,439
Mexico	León	…	18,473	20,902	21,801	…	1.1	1.2	1.2	…	11,478	12,364	12,583
Mexico	Mérida	…	16,800	17,819	18,272	…	1.0	1.0	1.0	…	12,759	13,026	13,101
Mexico	Guadalajara	…	62,424	68,579	70,872	…	3.8	3.8	3.9	…	14,193	14,810	14,882
Mexico	Irapuato	…	6,077	6,808	7,067	…	0.4	0.4	0.4	…	11,478	12,364	12,583
Mexico	Querétaro	…	19,906	22,609	23,488	…	1.2	1.3	1.3	…	17,779	18,941	19,051
Mexico	Celaya	…	6,910	7,758	8,060	…	0.4	0.4	0.4	…	11,478	12,364	12,583
Mexico	Pachuca de Soto	…	5,482	6,453	6,465	…	0.3	0.4	0.4	…	10,031	10,895	10,454
Mexico	Morelia	…	7,544	8,328	8,561	…	0.5	0.5	0.5	…	8,916	9,421	9,472
Mexico	Mexico City	…	389,271	410,908	421,213	…	23.5	22.7	23.1	…	20,216	20,751	20,960
Mexico	Xalapa	…	8,514	9,490	9,418	…	0.5	0.5	0.5	…	11,668	12,505	12,168
Mexico	Toluca	…	19,814	21,558	22,138	…	1.2	1.2	1.2	…	10,234	10,526	10,509
Mexico	Veracruz	…	9,128	10,163	10,082	…	0.6	0.6	0.6	…	11,668	12,505	12,168
Mexico	Puebla	…	19,268	21,825	22,001	…	1.2	1.2	1.2	…	9,023	9,762	9,614
Mexico	Cuernavaca	…	9,595	10,554	10,793	…	0.6	0.6	0.6	…	10,952	11,583	11,614
Mexico	Centro	…	19,957	24,818	22,900	…	1.2	1.4	1.3	…	22,804	27,077	24,412
Mexico	Oaxaca de Juárez	…	4,995	5,804	5,741	…	0.3	0.3	0.3	…	6,848	7,582	7,315

Table F.1 Continued

Country	Metropolitan area	"GDP (millions US$) [US Dollar, 2010]"				GDP of the metropolitan area as a share of national value (%)				"GDP per capita (US$) [US Dollar, 2010]"			
		2000	2010	2012	2013	2000	2010	2012	2013	2000	2010	2012	2013
Mexico	Acapulco de Juárez	...	5,993	6,126	6,250	...	0.4	0.3	0.3	...	7,586	7,575	7,638
Mexico	Tuxtla Gutiérrez	...	4,701	5,081	5,008	...	0.3	0.3	0.3	...	6,368	6,505	6,234
Netherlands	Amsterdam	103,110	121,978	121,289	120,671	15.9	16.4	16.3	16.3	47,817	51,665	50,410	49,676
Netherlands	The Hague	38,832	39,843	39,518	39,126	6.0	5.4	5.3	5.3	48,701	45,676	44,440	43,571
Netherlands	Rotterdam	70,025	67,821	66,510	65,482	10.8	9.1	8.9	8.9	48,701	45,676	44,440	43,571
Netherlands	Utrecht	32,203	37,930	38,118	37,811	5.0	5.1	5.1	5.1	50,691	52,927	51,847	50,766
Netherlands	Eindhoven	27,147	30,857	31,087	30,975	4.2	4.2	4.2	4.2	40,981	44,784	44,755	44,412
Norway	Oslo	...	74,261	75,595	...	...	25.8	25.4	...	...	60,611	59,902	...
Poland	Warsaw	82,272	128,849	138,449	...	15.3	16.3	16.5	...	28,773	43,221	46,013	...
Poland	Katowice	43,654	61,879	64,791	...	8.1	7.8	7.7	...	15,991	23,544	24,837	...
Poland	Lódz	15,016	22,387	23,110	...	2.8	2.8	2.8	...	15,002	23,413	24,384	...
Poland	Kraków	21,439	32,765	35,283	...	4.0	4.2	4.2	...	16,153	24,238	25,997	...
Poland	Wroclaw	15,078	23,892	25,968	...	2.8	3.0	3.1	...	18,318	28,682	31,085	...
Poland	Poznan	21,254	31,496	33,815	...	4.0	4.0	4.0	...	23,497	33,722	35,900	...
Poland	Gdansk	18,412	26,911	30,061	...	3.4	3.4	3.6	...	17,288	24,647	27,367	...
Poland	Lublin	8,385	12,231	13,433	...	1.6	1.6	1.6	...	12,472	18,225	20,013	...
Portugal	Lisbon	97,556	107,171	100,538	98,711	36.9	37.7	37.5	37.4	36,979	38,308	35,400	34,480
Portugal	Porto	32,195	32,897	30,923	30,400	12.2	11.6	11.5	11.5	25,227	25,300	23,663	23,202
Sweden	Stockholm	91,234	117,832	124,385	...	28.7	30.1	31.1	...	49,628	59,971	62,464	...
Sweden	Gothenburg	28,943	36,064	36,713	...	9.1	9.2	9.2	...	35,035	41,115	41,354	...
Sweden	Malmö	19,667	24,321	24,757	...	6.2	6.2	6.2	...	32,272	37,028	37,130	...
Slovenia	Ljubljana	15,655	21,925	21,567	21,449	36.0	38.8	39.0	39.2	29,889	38,662	37,419	36,912
Slovak Republic	Bratislava	21,822	39,266	40,168	41,463	26.6	29.8	29.2	29.7	31,746	54,882	55,626	57,144
United Kingdom	London	504,038	616,070	652,583	665,857	26.5	27.3	28.3	28.4	48,044	52,238	53,976	54,383
United Kingdom	Birmingham (UK)	54,053	59,456	61,257	62,780	2.9	2.6	2.7	2.7	31,021	31,555	31,916	32,396
United Kingdom	Leeds	35,563	42,644	43,221	44,173	1.9	1.9	1.9	1.9	31,824	36,564	36,590	37,140
United Kingdom	Bradford	12,644	13,873	14,162	14,149	0.7	0.6	0.6	0.6	25,887	25,683	25,406	24,949
United Kingdom	Liverpool	25,840	30,427	29,244	29,387	1.4	1.4	1.3	1.3	28,111	32,752	31,115	31,045
United Kingdom	Manchester	55,213	68,665	68,332	70,683	2.9	3.1	3.0	3.0	32,585	37,290	36,240	37,011
United Kingdom	Cardiff	16,809	19,560	20,213	20,722	0.9	0.9	0.9	0.9	28,256	30,532	30,988	31,470
United Kingdom	Sheffield	19,450	24,545	24,605	24,846	1.0	1.1	1.1	1.1	23,229	27,884	27,390	27,340
United Kingdom	Bristol	26,299	34,526	34,072	34,556	1.4	1.5	1.5	1.5	36,574	43,403	41,800	41,854
United Kingdom	Newcastle	22,920	28,331	29,347	29,859	1.2	1.3	1.3	1.3	22,647	26,968	27,547	27,809
United Kingdom	Leicester	17,708	20,452	20,684	21,033	0.9	0.9	0.9	0.9	29,789	30,950	30,592	30,747
United Kingdom	Portsmouth	18,524	22,658	22,443	22,638	1.0	1.0	1.0	1.0	34,260	39,256	38,325	38,371
United Kingdom	Nottingham	22,331	25,920	26,303	26,233	1.2	1.2	1.1	1.1	28,716	31,019	30,968	30,627
United Kingdom	Glasgow	31,212	36,769	37,521	37,953	1.6	1.6	1.6	1.6	33,635	38,794	39,224	39,468
United Kingdom	Edinburgh	25,989	32,659	34,233	34,690	1.4	1.5	1.5	1.5	38,575	44,885	45,963	45,989
United States of America	Philadelphia	...	233,603	237,781	238,558	...	1.6	1.5	1.5	...	58,040	58,779	58,821
United States of America	Columbus	...	96,855	104,678	108,353	...	0.7	0.7	0.7	...	51,907	54,601	55,747
United States of America	Denver	...	154,629	162,418	169,624	...	1.0	1.1	1.1	...	60,607	61,541	63,173
United States of America	Portland	...	140,787	151,202	155,239	...	1.0	1.0	1.0	...	63,246	65,986	66,772
United States of America	Baltimore	...	112,069	114,729	114,475	...	0.8	0.7	0.7	...	57,239	58,039	57,629
United States of America	Cincinnati	...	104,538	110,806	112,940	...	0.7	0.7	0.7	...	49,613	51,887	52,521
United States of America	Washington	...	435,995	442,759	439,969	...	2.9	2.9	2.8	...	77,356	76,027	74,299
United States of America	Kansas City	...	107,417	109,691	111,263	...	0.7	0.7	0.7	...	53,459	53,427	53,607
United States of America	Saint Louis (US)	...	129,811	133,120	132,811	...	0.9	0.9	0.8	...	50,709	51,510	51,138
United States of America	Sacramento/Roseville	...	95,816	99,660	102,580	...	0.6	0.6	0.7	...	44,584	44,716	45,194
United States of America	Minneapolis	...	200,702	211,466	216,030	...	1.4	1.4	1.4	...	59,931	61,817	62,472
United States of America	San Francisco	...	524,319	568,072	580,666	...	3.5	3.7	3.7	...	76,565	82,112	83,504
United States of America	Los Angeles	...	870,651	891,794	904,346	...	5.9	5.8	5.7	...	51,053	51,315	51,538
United States of America	Atlanta	...	256,555	263,712	269,186	...	1.7	1.7	1.7	...	58,612	57,787	57,750
United States of America	Phoenix	...	178,290	190,462	193,021	...	1.2	1.2	1.2	...	46,708	47,777	47,379
United States of America	Dallas	...	275,364	304,270	310,414	...	1.9	2.0	2.0	...	66,431	70,134	69,901
United States of America	San Diego	...	175,201	183,779	187,668	...	1.2	1.2	1.2	...	56,602	58,252	58,920
United States of America	Houston	...	402,383	470,838	490,651	...	2.7	3.1	3.1	...	67,964	75,806	77,111
United States of America	San Antonio	...	81,529	88,498	91,071	...	0.6	0.6	0.6	...	38,053	39,479	39,716
United States of America	Orlando	...	101,196	102,403	104,740	...	0.7	0.7	0.7	...	47,412	45,497	45,312
United States of America	Miami	...	250,720	259,444	266,562	...	1.7	1.7	1.7	...	45,056	45,646	46,403

Table F.1 Continued

Country	Metropolitan area	"GDP (millions US$) [US Dollar, 2010]"				GDP of the metropolitan area as a share of national value (%)				"GDP per capita (US$) [US Dollar, 2010]"			
		2000	2010	2012	2013	2000	2010	2012	2013	2000	2010	2012	2013
United States of America	Seattle	...	216,371	231,514	237,864	...	1.5	1.5	1.5	...	81,820	85,447	86,730
United States of America	Milwaukee	...	87,251	88,722	89,501	...	0.6	0.6	0.6	...	56,077	56,602	56,887
United States of America	Detroit	...	188,802	199,259	201,900	...	1.3	1.3	1.3	...	48,863	52,000	52,903
United States of America	Boston	...	292,756	305,833	311,214	...	2.0	2.0	2.0	...	80,446	83,524	84,732
United States of America	Chicago	...	534,001	554,231	559,769	...	3.6	3.6	3.5	...	56,442	58,010	58,288
United States of America	Cleveland	...	93,668	98,247	98,878	...	0.6	0.6	0.6	...	62,025	65,980	66,872
United States of America	New York	...	1,176,116	1,215,234	1,222,358	...	7.9	7.9	7.7	...	71,110	73,091	73,327
United States of America	Harrisburg	...	29,710	30,216	30,680	...	0.2	0.2	0.2	...	51,749	51,829	52,225
United States of America	Indianapolis	...	106,055	110,045	114,088	...	0.7	0.7	0.7	...	63,942	64,261	65,546
United States of America	Dayton	...	31,230	32,494	32,321	...	0.2	0.2	0.2	...	44,824	46,757	46,565
United States of America	Colorado Springs	...	26,179	26,781	26,792	...	0.2	0.2	0.2	...	40,548	39,987	39,276
United States of America	Louisville	...	58,207	61,161	61,221	...	0.4	0.4	0.4	...	47,104	48,514	48,075
United States of America	Wichita	...	26,284	28,090	28,111	...	0.2	0.2	0.2	...	44,672	46,894	46,509
United States of America	Richmond	...	36,666	36,614	37,891	...	0.3	0.2	0.2	...	71,733	70,108	71,772
United States of America	Fresno	...	35,418	37,762	40,026	...	0.2	0.2	0.3	...	32,742	33,814	35,273
United States of America	Las Vegas	...	86,578	87,261	89,595	...	0.6	0.6	0.6	...	43,393	40,791	40,448
United States of America	Nashville	...	71,041	77,671	79,307	...	0.5	0.5	0.5	...	57,311	60,537	60,746
United States of America	Tulsa	...	47,543	50,461	52,310	...	0.3	0.3	0.3	...	50,150	52,298	53,735
United States of America	Raleigh	...	59,377	60,754	63,425	...	0.4	0.4	0.4	...	52,516	50,100	50,503
United States of America	Oklahoma city	...	60,343	65,467	68,236	...	0.4	0.4	0.4	...	48,159	50,834	52,258
United States of America	Charlotte	...	90,396	98,959	103,346	...	0.6	0.6	0.7	...	69,593	71,522	72,364
United States of America	Albuquerque	...	38,801	39,752	39,803	...	0.3	0.3	0.3	...	43,740	43,063	42,265
United States of America	Memphis	...	62,415	64,249	64,428	...	0.4	0.4	0.4	...	47,112	47,562	47,220
United States of America	Little Rock	...	37,579	38,057	38,306	...	0.3	0.3	0.2	...	55,966	55,048	54,597
United States of America	Columbia	...	28,562	29,581	30,004	...	0.2	0.2	0.2	...	44,154	44,053	43,856
United States of America	Birmingham (US)	...	49,223	53,517	52,614	...	0.3	0.4	0.3	...	54,040	57,924	56,529
United States of America	Fort Worth	...	92,121	100,681	102,722	...	0.6	0.7	0.7	...	47,854	49,982	49,852
United States of America	Charleston	...	28,495	30,467	30,989	...	0.2	0.2	0.2	...	42,875	44,084	43,965
United States of America	Tucson	...	32,983	33,460	33,583	...	0.2	0.2	0.2	...	33,647	33,125	32,752
United States of America	El Paso	...	24,915	26,091	26,040	...	0.2	0.2	0.2	...	30,984	31,404	30,835
United States of America	Baton Rouge	...	35,990	37,220	38,308	...	0.2	0.2	0.2	...	55,743	56,361	57,346
United States of America	Austin	...	87,649	96,379	98,527	...	0.6	0.6	0.6	...	51,069	52,594	52,018
United States of America	Jacksonville	...	57,423	57,881	58,897	...	0.4	0.4	0.4	...	42,675	41,413	41,338
United States of America	New Orleans	...	78,393	79,327	77,617	...	0.5	0.5	0.5	...	65,884	67,857	66,936
United States of America	Clearwater/Saint Petersburg	...	44,007	44,872	45,554	...	0.3	0.3	0.3	...	31,861	31,851	32,006
United States of America	Tampa	...	63,551	65,903	68,086	...	0.4	0.4	0.4	...	51,700	51,435	52,047
United States of America	Mcallen	...	14,672	15,618	16,156	...	0.1	0.1	0.1	...	18,937	18,955	19,013
United States of America	Madison	...	35,521	37,094	38,466	...	0.2	0.2	0.2	...	65,187	66,338	67,909
United States of America	Buffalo	...	47,620	48,686	48,964	...	0.3	0.3	0.3	...	41,937	43,134	43,510
United States of America	Grand Rapids	...	30,004	32,145	33,532	...	0.2	0.2	0.2	...	49,789	52,832	54,847
United States of America	Albany	...	42,969	43,630	44,134	...	0.3	0.3	0.3	...	49,349	49,578	49,885
United States of America	Providence	...	39,508	39,870	40,573	...	0.3	0.3	0.3	...	46,883	47,275	48,088
United States of America	Toledo (US)	...	20,560	22,993	22,552	...	0.1	0.2	0.1	...	46,535	52,350	51,498
United States of America	Des Moines	...	37,804	40,569	41,778	...	0.3	0.3	0.3	...	62,699	65,059	65,866
United States of America	Omaha	...	47,672	50,773	52,003	...	0.3	0.3	0.3	...	55,090	57,242	57,904
United States of America	Akron	...	24,065	24,969	24,994	...	0.2	0.2	0.2	...	44,418	46,106	46,162
United States of America	Salt Lake City	...	67,515	74,116	75,811	...	0.5	0.5	0.5	...	59,997	63,915	64,400
United States of America	Pittsburgh	...	80,246	83,563	85,556	...	0.5	0.5	0.5	...	65,591	68,941	70,914

Notes:Estimates of GDP and GDP per capita for metropolitan areas are expressed in US$, constant prices and constant PPPs, OECD base year (2010); Share of metropolitan area GDP (at constant prices and constant PPPs, OECD base year (2010)) over national GDP

Source: Organisation for Economic Co-operation and Development (2016) OECD.Stat. online database.

Table F.2: Employment and Unemployment in Selected Metropolitan Areas

Country	Metropolitan areas	Labour force of the metropolitan area as a share of national value (%)				Employment of the metropolitan area as a share of national value (%)				Unemployment of the metropolitan area as a share of national value (%)				Unemployment as a share of the labour force (%)			
		2000	2010	2013	2014	2000	2010	2013	2014	2000	2010	2013	2014	2000	2010	2013	2014
Australia	Sydney	21.7	20.7	20.9	20.6	22.2	20.8	20.9	...	15.1	19.9	19.8	...	4.4	5.0	5.4	...
Australia	Melbourne	18.6	19.2	19.3	19.0	18.7	19.3	19.2	...	17.0	18.7	20.5	...	5.7	5.1	6.0	...
Australia	Brisbane	9.1	10.0	9.9	9.8	9.0	10.0	9.9	...	10.2	9.7	9.9	...	7.1	5.1	5.7	...
Australia	Perth	7.8	8.5	9.0	8.9	7.8	8.6	9.1	...	7.5	7.5	6.9	...	6.1	4.6	4.3	...
Australia	Adelaide	5.9	5.7	5.6	5.5	5.9	5.7	5.5	...	7.2	5.9	6.2	...	7.6	5.4	6.3	...
Australia	Gold Coast-Tweed Heads	2.0	2.4	2.4	2.4	2.0	2.4	2.4	...	2.6	2.9	2.4	...	8.1	6.1	5.7	...
Austria	Vienna	31.8	32.2	32.0	...	31.8	31.8	31.4	...	32.4	40.2	42.2	...	4.8	6.0	7.0	...
Austria	Graz	6.9	7.0	7.1	...	7.0	7.0	7.1	...	4.5	6.5	6.0	...	3.1	4.5	4.6	...
Austria	Linz	7.4	7.5	7.6	...	7.5	7.6	7.6	...	4.9	6.3	6.2	...	3.1	4.1	4.4	...
Belgium	Brussels	22.4	23.1	23.4	23.7	21.8	22.4	22.5	22.8	30.4	31.3	33.6	32.8	8.9	11.2	12.1	11.8
Belgium	Antwerp	9.7	9.9	9.8	9.8	9.9	10.1	10.1	10.0	6.2	7.1	7.1	6.9	4.2	6.0	6.1	6.0
Belgium	Ghent	5.5	5.6	5.6	5.6	5.7	5.8	5.8	5.8	2.6	3.5	2.6	2.8	3.1	5.3	4.0	4.3
Belgium	Liege	6.4	6.3	6.4	6.2	6.3	6.1	6.1	6.0	8.1	8.8	8.8	9.0	8.4	11.5	11.7	12.3
Canada	Vancouver	6.9	7.1	7.1	7.1	7.0	7.1	7.1	7.2	6.2	6.6	6.7	6.1	6.1	7.5	6.7	6.0
Canada	Montreal	12.5	12.7	12.7	12.6	12.3	12.6	12.6	12.5	15.0	13.6	14.5	15.0	8.2	8.7	8.1	8.2
Canada	Toronto	18.7	19.6	20.0	20.0	19.0	19.4	19.8	19.8	15.0	22.3	22.8	22.8	5.5	9.2	8.1	7.9
Canada	Edmonton	3.4	3.8	4.1	4.2	3.4	3.9	4.2	4.3	2.7	3.3	2.8	3.0	5.5	6.9	4.8	5.0
Canada	Calgary	3.8	4.3	4.6	4.7	3.9	4.4	4.7	4.8	2.5	3.7	3.1	3.3	4.6	6.8	4.8	4.9
Canada	Winnipeg	2.6	2.5	2.5	2.5	2.7	2.6	2.6	2.5	2.0	1.8	2.1	2.1	5.2	5.8	5.8	5.8
Canada	Quebec	2.4	2.5	2.5	2.6	2.4	2.6	2.6	2.6	2.9	1.7	1.9	2.0	8.2	5.3	5.2	5.5
Canada	Ottawa-Gatineau	4.2	4.4	4.3	4.4	4.2	4.5	4.3	4.4	3.8	3.8	4.0	4.3	6.1	7.0	6.5	6.8
Canada	Hamilton	2.2	2.1	2.0	2.0	2.2	2.1	2.0	2.0	1.8	2.1	2.0	1.9	5.8	8.4	7.2	6.6
Switzerland	Zurich	...	15.7	15.7	...	...	15.9	15.7	...	...	12.1	15.0	...	...	3.5	4.2	...
Switzerland	Geneva	...	8.6	8.5	...	...	8.2	8.1	...	...	16.1	16.8	...	...	8.5	8.7	...
Switzerland	Basel	...	8.8	8.8	...	...	8.8	8.8	...	...	9.9	10.6	...	...	5.1	5.2	...
Chile	Valparaíso	5.7	5.8	5.7	5.8	5.5	5.7	5.6	5.7	7.2	6.9	6.7	6.5	12.3	9.7	7.0	7.3
Chile	Santiago	42.5	41.2	40.5	40.3	42.2	41.2	40.6	40.2	44.9	41.2	39.2	40.5	10.3	8.2	5.7	6.4
Chile	Concepción	5.2	5.1	5.0	5.0	5.1	5.0	4.9	4.9	5.6	5.7	6.5	6.3	10.5	9.2	7.6	8.1
Czech Republic	Prague	17.5	18.8	18.8	...	18.2	19.4	19.5	...	10.3	10.9	10.3	...	5.2	4.2	3.8	...
Czech Republic	Brno	6.1	6.1	6.3	...	6.2	6.1	6.3	...	5.8	6.5	6.2	...	8.3	7.7	6.8	...
Czech Republic	Ostrava	5.5	5.2	5.1	...	5.1	5.0	5.0	...	8.9	7.2	7.3	...	14.3	10.2	9.9	...
Germany	Berlin	...	5.7	5.7	5.9	...	5.3	5.6	5.6	...	9.9	10.7	10.4	...	12.4	9.9	8.8
Germany	Hamburg	...	3.8	3.8	3.9	...	3.8	3.9	3.9	...	3.4	3.2	3.4	...	6.4	4.5	4.3
Germany	Munich	...	3.5	3.6	3.7	...	3.6	3.7	3.8	...	2.2	2.2	2.3	...	4.4	3.3	3.0
Germany	Cologne	...	2.3	2.2	2.3	...	2.2	2.3	2.3	...	2.3	2.5	2.5	...	7.3	6.0	5.5
Germany	Frankfurt	...	3.1	3.1	3.2	...	3.1	3.2	3.2	...	2.6	2.6	2.9	...	6.0	4.5	4.5
Germany	Stuttgart	...	2.5	2.5	2.5	...	2.5	2.6	2.6	...	1.8	1.7	1.6	...	5.0	3.7	3.2
Germany	Essen	...	0.9	0.9	0.9	...	0.9	0.9	0.9	...	1.1	1.3	1.3	...	9.1	7.7	7.1
Germany	Leipzig	...	1.1	1.1	1.1	...	1.0	1.1	1.0	...	1.9	1.7	1.7	...	12.4	8.6	7.8
Germany	Dresden	...	1.1	1.1	1.1	...	1.0	1.1	1.0	...	1.6	1.5	1.5	...	10.5	7.5	7.0
Germany	Dortmund	...	1.0	1.0	1.0	...	0.9	0.9	0.9	...	1.4	1.5	1.5	...	10.0	8.4	7.5
Germany	Düsseldorf	...	1.7	1.7	1.7	...	1.7	1.7	1.7	...	1.9	2.1	2.0	...	7.7	6.4	5.8
Germany	Bremen	...	1.2	1.2	1.3	...	1.2	1.3	1.3	...	1.1	1.3	1.3	...	6.6	5.6	5.2
Germany	Hanover	...	1.5	1.5	1.5	...	1.5	1.5	1.5	...	1.6	1.7	1.7	...	7.7	6.0	5.6
Germany	Nuremberg	...	1.5	1.5	1.5	...	1.5	1.5	1.6	...	1.2	1.2	1.2	...	5.6	4.3	3.9
Germany	Bochum	...	0.8	0.8	0.8	...	0.8	0.8	0.8	...	0.9	1.0	0.9	...	8.3	6.8	6.1
Germany	Freiburg im Breisgau	...	0.7	0.7	0.7	...	0.7	0.7	0.7	...	0.4	0.4	0.4	...	4.6	3.5	3.1
Germany	Augsburg	...	0.8	0.8	0.8	...	0.8	0.8	0.8	...	0.5	0.4	0.5	...	4.7	3.1	3.0
Germany	Bonn	...	0.9	0.9	0.9	...	0.9	0.9	0.9	...	0.7	0.8	0.8	...	5.4	4.6	4.3
Germany	Karlsruhe	...	0.9	0.9	0.9	...	0.9	0.9	0.9	...	0.6	0.6	0.6	...	4.9	3.7	3.4
Germany	Saarbrücken	...	0.7	0.7	0.7	...	0.7	0.7	0.7	...	0.7	0.8	0.8	...	7.2	6.7	6.0
Germany	Duisburg	...	1.0	0.9	1.0	...	0.9	0.9	0.9	...	1.2	1.3	1.3	...	8.8	7.5	6.9
Germany	Mannheim	...	1.5	1.5	1.5	...	1.6	1.6	1.6	...	1.2	1.2	1.2	...	5.5	4.2	4.0
Germany	Münster	...	0.7	0.7	0.7	...	0.7	0.7	0.7	...	0.4	0.5	0.5	...	4.6	3.6	3.3
Germany	Aachen	...	0.7	0.7	0.7	...	0.7	0.7	0.7	...	0.7	0.8	0.8	...	7.2	5.9	5.4
Denmark	Copenhagen	...	37.6	38.3	38.5	...	37.5	38.2	38.3	...	38.8	39.6	40.2	...	7.7	7.2	6.9

Table F.2 Continued

Country	Metropolitan areas	Labour force of the metropolitan area as a share of national value (%)				Employment of the metropolitan area as a share of national value (%)				Unemployment of the metropolitan area as a share of national value (%)				Unemployment as a share of the labour force (%)			
		2000	2010	2013	2014	2000	2010	2013	2014	2000	2010	2013	2014	2000	2010	2013	2014
Estonia	Tallinn	41.7	46.2	47.3	47.6	42.8	46.6	47.7	47.9	35.8	44.3	44.1	43.1	12.5	16.0	8.0	6.7
Spain	Madrid	14.2	15.1	15.1	15.1	14.6	15.8	16.4	16.2	12.0	12.3	11.6	11.7	11.6	16.2	20.1	19.0
Spain	Barcelona	8.9	8.1	8.2	8.1	9.4	8.3	8.5	8.6	6.1	7.2	7.2	6.6	9.4	17.8	23.1	20.0
Spain	Valencia	3.5	3.4	3.4	3.4	3.6	3.3	3.3	3.3	2.9	3.9	3.6	3.5	11.4	22.3	27.7	25.4
Spain	Seville	3.0	2.9	3.0	3.1	2.6	2.7	2.7	2.7	5.8	3.7	3.9	4.1	26.6	25.4	34.0	32.8
Spain	Zaragoza	1.8	1.7	1.8	1.8	1.9	1.8	1.9	1.9	1.0	1.4	1.6	1.5	7.5	15.6	22.5	20.8
Spain	Málaga	1.6	1.8	1.8	1.8	1.5	1.6	1.5	1.6	2.2	2.7	2.4	2.4	18.9	29.7	35.7	32.6
Spain	Las Palmas	1.5	1.5	1.5	1.5	1.5	1.3	1.3	1.3	1.5	2.2	2.0	2.1	13.3	30.2	35.5	34.1
Spain	Bilbao	2.5	2.0	2.1	2.1	2.5	2.2	2.3	2.3	2.5	1.2	1.4	1.5	14.1	12.0	17.9	17.4
Finland	Helsinki	29.0	30.6	31.2	31.4	30.1	31.3	31.7	31.9	18.8	23.5	25.5	26.4	6.3	6.5	6.7	7.3
France	Paris	21.5	19.9	20.1	20.1	21.7	19.9	20.2	20.1	19.3	19.2	18.3	19.7	8.8	9.0	9.0	9.7
France	Lyon	3.1	3.2	3.3	3.3	3.1	3.2	3.3	3.3	2.5	2.9	2.8	3.0	8.0	8.5	8.6	9.0
France	Marseille	2.5	2.7	2.7	2.8	2.4	2.6	2.7	2.7	4.2	3.2	3.1	2.9	16.1	11.2	11.4	10.4
France	Toulouse	2.0	2.2	2.2	2.2	1.9	2.2	2.2	2.2	2.3	2.0	1.9	2.1	11.3	8.3	8.6	9.2
France	Strasbourg	1.3	1.3	1.3	1.3	1.4	1.3	1.3	1.3	0.9	1.1	1.2	1.2	6.6	8.0	9.1	9.6
France	Bordeaux	1.8	1.9	1.9	1.9	1.8	1.9	1.9	1.9	2.2	1.8	1.7	1.8	11.8	8.7	9.0	9.2
France	Nantes	1.4	1.5	1.5	1.5	1.4	1.5	1.5	1.5	1.6	1.4	1.3	1.3	11.0	9.1	8.6	8.4
France	Lille	2.2	2.1	2.1	2.1	2.1	2.0	2.0	2.0	3.8	2.9	3.1	2.8	16.7	13.2	14.6	13.7
France	Montpellier	0.9	1.0	1.0	1.0	0.8	0.9	0.9	1.0	1.6	1.6	1.3	1.3	17.8	14.9	13.3	12.5
France	Saint-Étienne	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	9.5	9.2	9.4	9.7
France	Rennes	1.1	1.1	1.2	1.2	1.1	1.1	1.2	1.2	0.7	0.8	0.9	0.8	6.5	6.6	7.3	6.8
France	Grenoble	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	0.9	0.9	0.8	0.9	8.4	8.1	7.9	8.2
France	Toulon	0.8	0.8	0.8	0.8	0.7	0.8	0.8	0.8	1.2	0.8	0.8	0.8	15.4	9.9	10.5	9.8
France	Nice	1.3	1.3	1.4	1.4	1.2	1.4	1.4	1.4	1.5	1.2	1.3	1.3	11.6	8.5	9.7	9.2
France	Rouen	1.2	1.1	1.1	1.1	1.2	1.1	1.1	1.1	1.5	1.2	1.3	1.3	11.7	10.2	11.7	12.0
Greece	Athens	33.4	35.7	35.6	35.5	33.0	35.7	35.0	35.1	36.7	35.3	37.1	36.6	12.3	12.6	28.7	27.3
Greece	Thessalonica	8.6	8.4	8.4	8.4	8.6	8.3	8.1	8.2	8.3	9.0	9.2	9.2	10.9	13.7	30.2	28.7
Hungary	Budapest	29.9	30.3	30.9	30.7	30.3	31.1	31.4	31.2	24.0	24.3	26.6	24.6	5.3	9.0	8.8	6.2
Ireland	Dublin	39.4	38.3	38.4	39.1	39.8	39.1	39.0	39.6	32.0	33.7	34.3	34.6	3.5	12.2	11.7	10.0
Italy	Rome	6.8	7.4	7.6	7.9	6.7	7.4	7.7	8.0	7.0	7.9	7.0	7.1	11.1	8.9	11.2	11.4
Italy	Milan	7.4	7.7	7.9	7.9	7.8	7.9	8.3	8.3	3.5	5.4	5.1	5.1	5.1	5.9	7.9	8.2
Italy	Naples	5.2	4.4	4.9	4.8	4.2	4.1	4.2	4.2	13.1	7.9	9.7	9.0	26.7	15.0	24.3	23.7
Italy	Turin	3.2	3.2	3.2	3.2	3.3	3.2	3.2	3.1	2.4	3.6	2.9	3.2	7.9	9.3	11.3	12.9
Italy	Palermo	1.3	1.3	1.2	1.2	1.1	1.2	1.1	1.1	3.6	2.9	2.0	2.2	28.6	18.4	20.5	23.2
Italy	Genova	1.2	1.3	1.2	1.2	1.2	1.3	1.2	1.2	1.2	1.0	0.9	0.9	10.1	6.5	9.2	10.1
Italy	Florence	1.2	1.3	1.4	1.4	1.3	1.4	1.4	1.5	0.7	0.8	0.9	0.9	5.6	4.7	8.1	7.8
Italy	Bari	0.9	0.9	0.9	0.9	0.9	0.9	0.8	0.8	1.3	1.2	1.4	1.4	14.7	11.1	19.7	20.4
Italy	Bologna	1.4	1.4	1.5	1.4	1.5	1.5	1.5	1.5	0.4	0.8	1.0	0.8	3.2	4.9	8.2	7.0
Italy	Catania	1.0	0.8	0.8	0.8	0.8	0.8	0.8	0.8	2.3	1.2	1.3	1.3	24.8	11.9	19.5	19.2
Italy	Venice	1.0	1.0	0.9	0.9	1.0	1.0	1.0	1.0	0.5	0.8	0.7	0.7	4.9	6.4	8.8	9.4
Japan	Sendai	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.3	1.4	1.3	1.3	5.0	5.8	4.2	3.7
Japan	Sapporo	1.6	1.6	1.7	1.6	1.6	1.6	1.6	1.6	1.8	1.7	1.9	1.9	5.5	5.2	4.6	4.1
Japan	Tokyo	26.3	28.6	28.9	29.1	26.3	28.5	28.9	29.1	26.7	29.3	28.7	28.9	4.8	5.2	4.0	3.6
Japan	Nagoya	5.1	5.1	5.2	5.2	5.1	5.2	5.2	5.3	4.2	4.3	4.1	3.8	3.9	4.2	3.2	2.6
Japan	Osaka	13.0	12.9	13.0	13.0	12.8	12.7	12.9	12.9	16.7	15.6	14.0	14.9	6.1	6.1	4.3	4.1
Japan	Fukuoka	1.8	1.9	2.0	2.0	1.7	1.9	1.9	2.0	2.3	2.3	2.4	2.5	6.2	6.0	5.0	4.5
Japan	Niigata	0.8	0.8	0.8	0.8	0.9	0.8	0.8	0.8	0.7	0.7	0.7	0.7	3.8	4.4	3.5	3.2
Japan	Toyama	0.5	0.4	0.4	0.4	0.5	0.4	0.4	0.4	0.3	0.3	0.3	0.3	3.3	3.8	2.8	2.7
Japan	Nagano	0.5	0.4	0.4	0.4	0.5	0.4	0.4	0.4	0.3	0.3	0.4	0.3	2.7	3.9	3.4	2.9
Japan	Kanazawa	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.5	0.5	0.5	0.5	3.7	4.3	3.3	3.0
Japan	Utsunomiya	0.6	0.6	0.6	0.6	0.6	0.6	0.7	0.6	0.5	0.6	0.6	0.6	3.9	4.7	3.7	3.4
Japan	Maebashi	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.6	0.7	0.7	0.6	3.8	4.7	3.5	3.0
Japan	Mito	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.4	0.4	0.5	0.5	3.9	4.8	3.9	3.5
Japan	Kofu	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.3	0.4	0.3	0.3	3.4	4.4	3.1	2.9
Japan	Numazu	0.4	0.4	0.4	0.4	0.5	0.4	0.4	0.4	0.3	0.3	0.3	0.3	3.6	3.9	3.2	2.7
Japan	Shizuoka	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.5	0.5	0.5	0.5	3.6	3.9	3.2	2.7
Japan	Anjo	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.5	0.5	0.5	0.5	4.2	4.3	3.2	2.6
Japan	Yokkaichi	0.4	0.4	0.5	0.5	0.4	0.4	0.5	0.5	0.3	0.4	0.3	0.3	3.6	4.0	2.9	2.3

Table F.2 Continued

Country	Metropolitan areas	Labour force of the metropolitan area as a share of national value (%)				Employment of the metropolitan area as a share of national value (%)				Unemployment of the metropolitan area as a share of national value (%)				Unemployment as a share of the labour force (%)			
		2000	2010	2013	2014	2000	2010	2013	2014	2000	2010	2013	2014	2000	2010	2013	2014
Japan	Himeji	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.7	0.6	0.5	0.6	5.9	5.3	4.0	3.8
Japan	Toyohashi	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.4	0.4	0.4	0.4	4.2	4.3	3.2	2.6
Japan	Hamamatsu	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.6	0.6	0.6	0.6	3.6	3.9	3.2	2.7
Japan	Okayama	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.6	0.6	0.6	0.6	4.1	4.3	3.8	3.3
Japan	Kurashiki	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	4.1	4.3	3.8	3.3
Japan	Fukuyama	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	4.1	4.1	3.6	3.1
Japan	Hiroshima	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	0.9	0.9	1.0	0.9	4.1	4.1	3.6	3.1
Japan	Takamatsu	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.3	0.3	0.4	0.4	3.8	3.9	3.2	3.0
Japan	Wakayama	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.3	0.3	0.3	0.3	3.9	4.3	3.2	2.5
Japan	Tokushima	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	4.4	4.7	3.5	3.3
Japan	Kitakyushu	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	1.2	1.1	1.1	1.1	6.2	6.0	5.0	4.6
Japan	Matsuyama	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.4	0.4	0.4	0.4	4.2	4.6	3.6	3.3
Japan	Kochi	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.3	0.3	4.7	5.0	3.3	3.3
Japan	Oita	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	4.2	4.6	3.8	3.3
Japan	Kumamoto	0.7	0.7	0.7	0.8	0.7	0.7	0.7	0.7	0.7	0.7	0.8	0.8	4.6	5.0	4.3	3.9
Japan	Nagasaki	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	4.8	5.0	4.1	3.7
Japan	Kagoshima	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.4	0.5	0.6	0.6	3.6	5.1	4.4	4.1
Japan	Naha	0.8	0.8	0.9	0.9	0.7	0.8	0.8	0.8	1.3	1.2	1.2	1.3	8.0	7.5	5.7	5.4
Korea	Seoul Incheon	43.9	47.5	47.5	47.7	43.8	47.2	47.3	47.5	46.4	57.0	54.0	54.0	4.7	4.5	3.5	4.0
Korea	Daegu	5.6	5.4	5.2	5.2	5.5	5.3	5.2	5.2	6.0	5.6	5.6	5.6	4.8	3.9	3.3	3.8
Korea	Busan	8.0	6.7	6.7	6.6	7.8	6.7	6.6	6.6	12.8	6.4	8.2	7.1	7.1	3.6	3.8	3.8
Korea	Cheongju	1.4	1.5	1.5	1.6	1.4	1.5	1.6	1.6	1.2	0.9	1.0	1.4	3.6	2.2	2.1	3.0
Korea	Daejeon	2.9	3.1	3.1	3.1	2.9	3.1	3.1	3.1	3.0	3.0	3.0	3.0	4.7	3.6	3.0	3.4
Korea	Pohang	1.2	1.1	1.1	1.1	1.2	1.1	1.1	1.1	0.9	0.8	1.1	0.9	3.4	2.8	3.1	2.9
Korea	Jeonju	1.4	1.3	1.4	1.4	1.4	1.3	1.4	1.4	1.0	0.8	0.9	1.0	3.1	2.2	2.0	2.5
Korea	Ulsan	1.9	2.1	2.0	2.0	2.0	2.1	2.1	2.0	1.8	2.1	1.4	1.5	4.2	3.6	2.1	2.7
Korea	Changwon	1.8	1.5	1.4	1.3	1.8	1.5	1.4	1.3	1.4	1.1	0.9	0.9	3.5	2.8	2.1	2.5
Korea	Gwangju	2.8	2.9	2.9	3.0	2.8	2.9	3.0	3.0	4.1	2.7	2.7	2.4	6.4	3.4	2.8	2.8
Mexico	Mexicali	0.8	0.9	0.9	0.9	0.8	0.9	0.9	0.9	0.8	0.9	0.9	1.0	2.4	5.3	5.3	5.7
Mexico	Tijuana	1.3	1.4	1.5	1.5	1.3	1.4	1.5	1.5	1.2	1.5	1.6	1.8	2.4	5.3	5.3	5.7
Mexico	Juárez	1.2	1.2	1.2	1.2	1.2	1.1	1.2	1.2	0.8	1.5	1.4	0.8	1.7	6.8	5.9	3.2
Mexico	Hermosillo	0.6	0.7	0.8	0.8	0.6	0.7	0.8	0.8	0.7	0.8	0.8	0.8	2.7	6.3	5.5	5.0
Mexico	Chihuahua	0.7	0.7	0.8	0.7	0.7	0.7	0.7	0.8	0.5	0.9	0.9	0.5	1.7	6.8	5.9	3.2
Mexico	Reynosa	0.6	0.7	0.7	0.7	0.6	0.7	0.7	0.7	0.6	0.9	0.9	0.8	2.7	6.7	6.3	5.2
Mexico	Monterrey	3.7	4.0	4.0	4.0	3.7	4.0	4.0	4.0	4.2	5.2	4.6	4.6	2.9	6.7	5.7	5.6
Mexico	Torreón	1.1	1.1	1.1	1.1	1.1	1.0	1.1	1.1	1.1	1.4	1.3	1.3	2.8	6.7	5.6	5.5
Mexico	Saltillo	0.6	0.6	0.7	0.7	0.6	0.6	0.7	0.7	0.7	1.0	0.8	0.7	2.9	7.9	5.9	5.3
Mexico	Culiacán	0.8	0.8	0.8	0.8	0.7	0.8	0.8	0.8	1.0	0.7	0.8	0.9	3.5	4.5	5.1	5.8
Mexico	Durango	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.4	0.5	0.6	2.5	4.6	5.1	6.0
Mexico	Tampico	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.9	0.9	0.7	2.6	6.4	6.2	5.1
Mexico	San Luis Potosí	0.9	1.0	1.0	1.0	0.9	1.0	1.0	1.1	0.6	0.8	0.8	0.7	1.6	4.2	3.8	3.2
Mexico	Aguascalientes	0.7	0.8	0.8	0.8	0.7	0.8	0.8	0.8	0.8	1.0	0.8	1.0	2.7	6.4	4.7	5.8
Mexico	Benito Juárez	0.5	0.7	0.7	0.7	0.5	0.7	0.7	0.7	0.2	0.7	0.7	0.7	1.2	5.3	4.8	4.5
Mexico	León	1.2	1.4	1.4	1.4	1.2	1.3	1.4	1.4	1.2	1.5	1.7	1.4	2.6	5.8	5.9	4.7
Mexico	Mérida	1.2	1.3	1.3	1.3	1.2	1.3	1.3	1.3	0.7	0.7	0.8	0.6	1.5	2.8	3.2	2.4
Mexico	Guadalajara	4.0	4.1	4.1	4.1	4.0	4.1	4.2	4.1	3.9	3.9	3.7	4.2	2.5	4.9	4.5	5.0
Mexico	Irapuato	0.4	0.4	0.5	0.5	0.4	0.4	0.5	0.5	0.4	0.5	0.6	0.5	2.6	5.8	5.9	4.7
Mexico	Querétaro	0.9	1.0	0.9	0.9	0.9	0.9	0.9	0.9	0.8	1.3	1.0	1.1	2.5	7.0	5.7	5.9
Mexico	Celaya	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.6	0.6	0.5	2.6	5.8	5.9	4.7
Mexico	Pachuca de Soto	0.4	0.5	0.5	0.5	0.4	0.5	0.5	0.5	0.3	0.4	0.5	0.4	2.1	4.4	4.6	4.1
Mexico	Morelia	0.7	0.7	0.8	0.8	0.7	0.7	0.8	0.8	0.7	0.6	0.6	0.5	2.6	4.0	4.3	3.2
Mexico	Mexico City	19.2	18.2	18.0	18.1	18.9	17.9	17.7	17.7	27.2	24.0	22.9	24.7	3.6	6.8	6.4	6.7
Mexico	Xalapa	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.5	0.3	0.4	0.4	2.2	2.7	3.6	3.7
Mexico	Toluca	1.6	1.8	1.8	1.9	1.5	1.7	1.8	1.8	2.0	2.1	2.1	2.5	3.3	6.3	5.9	6.6
Mexico	Veracruz	0.7	0.7	0.7	0.6	0.7	0.7	0.7	0.6	0.6	0.3	0.5	0.5	2.2	2.7	3.6	3.7
Mexico	Puebla	1.7	1.8	1.9	1.9	1.7	1.9	1.9	1.9	1.4	1.4	1.6	1.6	2.0	4.1	4.2	4.2
Mexico	Cuernavaca	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.7	0.7	0.6	0.7	2.3	4.5	3.9	4.1
Mexico	Centro	0.7	0.7	0.7	0.8	0.7	0.7	0.7	0.7	0.8	1.0	1.0	1.0	3.0	7.0	6.9	6.6

Table F.2 Continued

Country	Metropolitan areas	Labour force of the metropolitan area as a share of national value (%)				Employment of the metropolitan area as a share of national value (%)				Unemployment of the metropolitan area as a share of national value (%)				Unemployment as a share of the labour force (%)			
		2000	2010	2013	2014	2000	2010	2013	2014	2000	2010	2013	2014	2000	2010	2013	2014
Mexico	Oaxaca de Juárez	0.6	0.6	0.6	0.6	0.6	0.7	0.6	0.7	0.2	0.3	0.3	0.3	0.9	2.1	2.6	2.6
Mexico	Acapulco de Juárez	0.7	0.7	0.6	0.7	0.7	0.7	0.7	0.7	0.3	0.2	0.3	0.2	1.0	1.6	2.3	1.5
Mexico	Tuxtla Gutiérrez	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.4	0.3	0.4	0.4	1.7	2.6	3.1	3.4
Netherlands	Amsterdam	13.8	14.4	14.8	14.8	13.8	14.5	14.7	14.8	14.5	14.1	15.4	14.9	2.9	4.4	7.6	7.5
Netherlands	The Hague	5.1	5.2	5.3	5.3	5.1	5.2	5.3	5.3	5.0	5.9	5.8	6.1	2.7	5.1	8.0	8.4
Netherlands	Rotterdam	9.2	8.9	8.9	8.9	9.2	8.8	8.8	8.8	8.9	10.1	9.7	10.1	2.7	5.1	8.0	8.4
Netherlands	Utrecht	4.1	4.5	4.5	4.5	4.2	4.5	4.6	4.6	3.2	3.7	4.0	3.9	2.1	3.7	6.4	6.4
Netherlands	Eindhoven	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	3.2	4.0	3.8	4.0	2.1	4.2	6.7	7.0
Norway	Oslo	24.9	26.3	26.6	27.0	25.3	26.4	26.7	27.1	14.5	23.2	22.0	23.2	2.0	3.1	2.8	3.0
Poland	Warsaw	7.9	8.4	8.7	9.4	8.1	8.6	8.9	9.6	6.4	6.5	6.7	7.5	13.3	7.5	8.0	7.2
Poland	Katowice	5.4	6.5	6.8	6.6	5.3	6.6	6.9	6.6	6.2	6.2	6.5	6.3	18.7	9.2	9.7	8.6
Poland	Lódz	3.2	2.9	3.0	3.0	3.2	3.0	3.0	3.0	3.1	2.8	3.3	3.0	16.2	9.3	11.1	8.9
Poland	Kraków	3.6	3.3	3.5	3.4	3.8	3.4	3.5	3.4	2.6	3.2	3.7	3.5	11.7	9.1	10.9	9.2
Poland	Wroclaw	2.1	2.2	2.0	2.0	1.9	2.1	2.0	2.0	2.8	2.5	2.2	2.1	22.6	11.3	11.3	9.1
Poland	Poznan	2.6	2.4	2.4	2.3	2.7	2.4	2.4	2.3	2.3	2.2	2.0	2.0	14.1	8.8	8.8	7.7
Poland	Gdansk	2.3	2.6	2.8	2.8	2.3	2.6	2.8	2.8	2.4	2.5	2.8	2.7	17.1	9.3	10.1	8.6
Poland	Lublin	2.0	2.0	1.9	2.0	2.1	2.0	1.9	2.0	1.7	2.0	1.9	2.2	13.6	9.8	10.3	9.9
Portugal	Lisbon	25.9	25.5	26.3	26.5	25.5	25.4	25.7	26.2	35.8	26.5	29.7	28.2	5.3	11.2	18.2	14.8
Portugal	Porto	12.2	12.5	12.5	12.5	12.2	12.2	12.4	12.3	12.4	14.6	13.2	13.3	3.9	12.6	17.1	14.8
Sweden	Stockholm	22.3	23.3	23.9	24.1	22.8	23.6	24.2	24.3	13.3	19.5	20.4	21.4	3.3	7.2	6.9	7.1
Sweden	Gothenburg	9.2	9.6	9.7	9.7	9.3	9.6	9.7	9.8	8.6	9.8	9.8	9.5	5.1	8.8	8.1	7.8
Sweden	Malmö	6.5	7.2	7.2	7.2	6.3	7.2	7.1	7.0	8.8	7.2	8.9	9.1	7.4	8.6	9.9	10.1
Slovenia	Ljubljana	...	28.7	...	...	...	28.9	...	...	...	25.9	...	...	...	6.5	...	...
Slovak Republic	Bratislava	14.7	14.6	14.3	14.2	16.7	15.8	15.5	15.3	6.5	7.0	7.2	7.4	8.4	6.9	7.1	6.8
United Kingdom	London	18.9	19.3	19.9	20.0	18.9	19.2	19.8	19.9	20.4	19.7	20.7	21.1	6.0	8.0	7.8	6.5
United Kingdom	Birmingham (UK)	2.8	2.7	2.8	2.8	2.7	2.6	2.7	2.7	4.2	4.0	4.4	4.2	8.4	11.4	11.8	9.2
United Kingdom	Leeds	2.0	1.9	1.9	1.8	2.0	1.9	1.8	1.8	1.9	2.2	2.2	2.3	5.4	9.0	9.1	7.6
United Kingdom	Bradford	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	1.2	1.0	1.2	1.1	8.0	10.5	10.7	8.2
United Kingdom	Liverpool	1.5	1.5	1.5	1.4	1.4	1.5	1.5	1.4	2.2	2.0	2.0	2.3	8.2	10.5	10.2	9.6
United Kingdom	Manchester	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.8	3.2	3.3	3.5	5.5	8.6	8.6	7.3
United Kingdom	Cardiff	0.9	1.0	1.0	1.0	0.9	1.0	1.0	1.0	1.0	1.3	1.3	1.2	5.9	9.8	9.4	7.4
United Kingdom	Sheffield	1.4	1.3	1.4	1.4	1.3	1.3	1.4	1.4	1.6	1.4	1.8	2.0	6.6	8.3	9.9	8.9
United Kingdom	Bristol	1.3	1.4	1.3	1.3	1.4	1.4	1.3	1.3	0.9	1.0	1.1	1.4	3.7	5.5	6.5	6.4
United Kingdom	Newcastle	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	2.5	1.9	1.8	2.1	8.6	9.3	8.7	8.0
United Kingdom	Leicester	1.0	1.0	1.1	1.0	1.0	1.0	1.0	1.0	1.0	1.2	1.5	1.0	5.5	8.7	10.4	6.0
United Kingdom	Portsmouth	1.0	1.0	0.9	0.9	1.0	1.0	1.0	1.0	0.6	0.8	0.7	0.7	3.6	6.4	5.3	4.3
United Kingdom	Nottingham	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.4	1.5	1.4	1.6	5.9	9.0	8.3	7.7
United Kingdom	Glasgow	1.4	1.5	1.5	1.4	1.3	1.4	1.4	1.4	2.3	2.0	1.7	2.0	9.3	10.7	9.0	8.6
United Kingdom	Edinburgh	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.0	1.1	0.9	5.4	6.4	6.8	4.7
United States of America	Philadelphia	1.4	1.3	1.3	1.3	1.4	1.3	1.3	1.3	1.4	1.2	1.4	1.3	4.2	9.1	8.2	6.4
United States of America	Columbus	0.6	0.6	0.6	0.7	0.6	0.6	0.7	0.7	0.5	0.6	0.6	0.5	3.2	8.7	6.3	4.8
United States of America	Denver	0.9	0.9	0.9	1.0	0.9	0.9	0.9	1.0	0.6	0.9	0.8	0.8	2.6	9.1	6.6	4.8
United States of America	Portland	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.7	0.8	4.4	10.6	7.3	6.3
United States of America	Baltimore	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.6	0.7	0.7	4.1	8.7	7.2	6.6
United States of America	Cincinnati	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.6	3.6	9.7	7.1	5.4
United States of America	Washington	1.9	2.0	2.1	2.1	1.9	2.1	2.1	2.1	1.3	1.4	1.5	1.7	2.7	6.5	5.4	5.0
United States of America	Kansas City	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.6	0.6	0.6	0.6	3.3	8.9	6.4	5.6
United States of America	Saint Louis (US)	0.9	0.9	0.8	0.9	0.9	0.9	0.8	0.9	0.8	0.9	0.8	0.9	3.5	9.7	7.2	6.3
United States of America	Sacramento/Roseville	0.7	0.7	0.7	0.7	0.6	0.7	0.7	0.7	0.7	0.9	0.8	0.8	4.3	12.5	8.6	7.2
United States of America	Minneapolis	1.3	1.2	1.2	1.2	1.3	1.3	1.3	1.3	0.9	0.9	0.8	0.8	2.7	7.4	4.9	3.9
United States of America	San Francisco	2.6	2.3	2.4	2.5	2.6	2.3	2.4	2.5	2.2	2.6	2.2	2.2	3.5	10.7	6.9	5.5
United States of America	Los Angeles	5.4	5.4	5.4	5.5	5.3	5.2	5.3	5.4	6.7	6.9	6.8	6.9	5.0	12.4	9.2	7.7
United States of America	Atlanta	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.1	1.5	1.6	1.7	3.0	10.0	7.9	6.8
United States of America	Phoenix	1.1	1.3	1.2	1.3	1.1	1.3	1.2	1.3	0.9	1.3	1.1	1.2	3.3	9.6	6.7	5.9
United States of America	Dallas	1.3	1.4	1.4	1.5	1.3	1.4	1.5	1.5	1.2	1.2	1.2	1.2	3.6	8.2	6.3	5.0
United States of America	San Diego	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.1	1.1	1.0	3.9	10.6	7.6	6.4
United States of America	Houston	1.7	1.9	2.0	2.1	1.7	1.9	2.0	2.1	1.8	1.7	1.7	1.7	4.3	8.5	6.2	4.9
United States of America	San Antonio	0.6	0.7	0.7	0.7	0.6	0.7	0.7	0.7	0.6	0.5	0.6	0.5	4.0	7.4	6.0	4.6

Table F.2 Continued

Country	Metropolitan areas	Labour force of the metropolitan area as a share of national value (%)				Employment of the metropolitan area as a share of national value (%)				Unemployment of the metropolitan area as a share of national value (%)				Unemployment as a share of the labour force (%)			
		2000	2010	2013	2014	2000	2010	2013	2014	2000	2010	2013	2014	2000	2010	2013	2014
United States of America	Orlando	0.6	0.7	0.8	0.8	0.6	0.7	0.8	0.8	0.5	0.9	0.7	0.8	3.1	11.3	6.9	5.9
United States of America	Miami	1.8	1.9	1.9	1.9	1.8	1.8	1.9	1.9	2.0	2.2	1.9	2.0	4.4	11.3	7.4	6.3
United States of America	Seattle	0.9	1.0	1.0	1.0	0.9	1.0	1.0	1.0	1.0	1.0	0.7	0.8	4.2	9.5	5.4	4.7
United States of America	Milwaukee	0.6	0.5	0.5	0.5	0.6	0.5	0.5	0.5	0.5	0.5	0.5	0.5	3.6	8.9	7.3	6.0
United States of America	Detroit	1.5	1.2	1.2	1.2	1.5	1.1	1.2	1.1	1.4	1.7	1.5	1.6	3.7	13.8	9.4	8.5
United States of America	Boston	1.4	1.3	1.3	1.3	1.4	1.3	1.3	1.3	0.8	1.0	1.1	1.1	2.5	7.5	6.3	5.1
United States of America	Chicago	3.4	3.2	3.2	3.2	3.4	3.1	3.1	3.1	3.7	3.4	3.9	3.6	4.3	10.4	9.1	7.1
United States of America	Cleveland	0.6	0.5	0.5	0.5	0.6	0.5	0.5	0.5	0.6	0.5	0.5	0.5	4.0	9.0	7.6	6.3
United States of America	New York	5.5	5.4	5.4	5.4	5.5	5.4	5.3	5.4	6.4	5.0	5.8	5.7	4.7	9.1	7.9	6.5
United States of America	Harrisburg	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	3.4	7.7	6.6	4.9
United States of America	Indianapolis	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.3	0.5	0.5	0.5	2.4	9.0	6.9	5.6
United States of America	Dayton	0.3	0.2	0.2	0.2	0.3	0.2	0.2	0.2	0.3	0.3	0.2	0.2	3.9	10.8	7.8	5.8
United States of America	Colorado Springs	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.2	0.2	0.2	2.9	9.8	8.0	6.0
United States of America	Louisville	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	3.6	10.1	7.7	5.9
United States of America	Wichita	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	4.2	8.8	6.3	5.3
United States of America	Richmond	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.2	0.2	0.2	2.1	8.2	6.0	5.5
United States of America	Fresno	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.8	0.6	0.6	0.6	10.2	16.6	12.7	11.5
United States of America	Las Vegas	0.5	0.7	0.7	0.7	0.5	0.6	0.6	0.7	0.6	1.0	0.9	0.8	4.7	14.2	10.0	7.8
United States of America	Nashville	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.3	0.4	0.4	0.4	3.2	8.7	6.4	5.1
United States of America	Tulsa	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.2	0.2	0.2	0.2	2.9	7.7	5.7	4.5
United States of America	Raleigh	0.3	0.4	0.4	0.4	0.3	0.4	0.4	0.4	0.2	0.3	0.3	0.3	2.5	8.9	6.4	4.9
United States of America	Oklahoma city	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.3	0.3	0.3	0.3	2.7	6.5	5.1	4.0
United States of America	Charlotte	0.4	0.4	0.5	0.5	0.4	0.4	0.5	0.5	0.3	0.5	0.5	0.4	3.0	11.0	7.8	5.7
United States of America	Albuquerque	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.2	0.3	0.3	4.1	8.3	7.2	6.4
United States of America	Memphis	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.5	0.5	3.9	10.1	9.3	7.6
United States of America	Little Rock	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	3.6	7.0	6.7	5.5
United States of America	Columbia	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	3.0	9.0	6.6	5.6
United States of America	Birmingham (US)	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.2	0.3	3.3	8.5	5.6	5.9
United States of America	Fort Worth	0.6	0.6	0.7	0.7	0.6	0.7	0.7	0.7	0.5	0.5	0.6	0.6	3.6	8.2	6.1	5.0
United States of America	Charleston	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	3.1	9.2	6.3	5.5
United States of America	Tucson	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	3.7	9.4	7.0	6.2
United States of America	El Paso	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.2	0.3	0.2	6.8	9.8	8.8	6.5
United States of America	Baton Rouge	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	4.6	7.3	5.9	5.8
United States of America	Austin	0.5	0.6	0.7	0.7	0.5	0.6	0.7	0.7	0.4	0.4	0.5	0.5	3.0	7.1	5.3	4.2
United States of America	Jacksonville	0.4	0.5	0.5	0.5	0.4	0.4	0.5	0.5	0.3	0.5	0.4	0.5	3.2	10.9	6.9	6.2
United States of America	New Orleans	0.5	0.4	0.4	0.4	0.5	0.4	0.4	0.4	0.5	0.3	0.3	0.4	4.7	7.3	6.2	6.4
United States of America	Clearwater/Saint Petersburg	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.5	0.4	0.4	3.4	12.0	7.4	6.1
United States of America	Tampa	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.3	0.5	0.4	0.4	3.3	11.5	7.0	5.8
United States of America	Mcallen	0.2	0.2	0.2	0.2	0.1	0.2	0.2	0.2	0.3	0.3	0.3	0.3	9.2	12.1	10.8	8.7
United States of America	Madison	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.1	2.4	5.9	4.8	3.9
United States of America	Buffalo	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.3	0.4	0.4	4.3	8.5	7.5	6.3
United States of America	Grand Rapids	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	3.1	10.4	6.5	4.9
United States of America	Albany	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.2	0.3	0.2	3.4	7.4	6.4	5.1
United States of America	Providence	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.4	0.4	0.4	4.3	12.2	9.8	7.9
United States of America	Toledo (US)	0.2	0.1	0.1	0.1	0.2	0.1	0.1	0.1	0.2	0.2	0.2	0.1	4.5	11.3	8.5	6.3
United States of America	Des Moines	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.2	2.4	6.2	4.6	4.2
United States of America	Omaha	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.2	0.2	0.2	0.2	2.8	5.2	4.3	3.7
United States of America	Akron	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	4.2	10.0	7.2	5.8
United States of America	Salt Lake City	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.3	0.3	0.2	0.2	3.2	7.9	4.2	3.7
United States of America	Pittsburgh	0.5	0.4	0.4	0.4	0.5	0.4	0.4	0.4	0.5	0.3	0.4	0.4	4.1	7.5	6.5	5.3

Source: Organisation for Economic Co-operation and Development (2016) OECD.Stat. online database

Table F.3: Unemployment in Selected Urban Areas/Cities Disaggregated by Sex

Region/Country	City/Urban	Unemployment rate (%)				Region/Country	City/Urban	Unemployment rate (%)			
		Year	Male	Female	Total			Year	Male	Female	Total
AFRICA						Philippines	Manila-Capital Region	2011	…	…	10.9
Algeria	Urban	2010	8.6	18.8	10.6	Timor - Leste	Urban	2009	…	…	6.9
Botswana	Francistown	2006	18.2	19.9	19.0	Singapore	Singapore	2012	…	…	2.8
Botswana	Gaborone	2006	13.2	15.9	14.5	Sri Lanka	Colombo	2010	…	…	3.3
Egypt	Urban	2011	11.9	30.3	16.0	Sri Lanka	Urban	2012	2.5	6.1	3.7
Egypt	Cairo	2010	9.0	24.5	12.2	Sri Lanka	Colombo	2011	…	…	2.9
Egypt	Alexandria	2010	8.3	28.0	12.1	Vietnam	Urban	2011	…	…	3.4
Ethiopia	Addis Ababa	2005	23.4	44.5	33.6	Vietnam	Hanoi	2011	3.1	3.7	3.3
Liberia	Urban	2010	4.6	6.3	5.5	Vietnam	Ho Chi Minh	2011	3.6	5.9	4.7
Malawi	Blantyre Urban	2004	12.1	38.0	21.3	**EUROPE**					
Malawi	Lilongwe Urban	2004	11.7	27.6	18.6	Moldova	Urban	2012	8.7	5.8	7.3
Malawi	Urban	2004	11.6	30.6	19.4	**LATIN AMERICA AND CARIBBEAN**					
Morocco	Urban	2011	11.3	21.2	13.4	Argentina	Urban	2012	6.1	8.8	7.2
Mozambique	Urban	2005	…	…	21.0	Bolivia	Urban	2012	2.9	4.5	3.6
Namibia	Urban	2012	14.0	23.7	20.4	Brazil	Urban	2012	5.1	8.7	6.7
Nigeria	Urban	2011	16.9	17.2	17.1	Brazil	Belo Horizonte	2011	…	…	4.8
South Africa	Johannesburg	2007	24.5	35.5	29.7	Brazil	Porto Alegre	2011	…	…	5.2
South Africa	Capetown	2007	21.7	27.6	24.5	Brazil	Recife	2011	…	…	6.7
Tanzania	Dar es Salaam	2006	…	…	21.2	Brazil	Rio de Janeiro	2011	…	…	5.1
Tanzania	Other Urban	2006	…	…	6.5	Brazil	Salvador	2011	…	…	8.9
Uganda	Urban	2010	…	…	9.5	Brazil	Sao Paulo	2011	…	…	6.3
Uganda	Kampala	2010	…	…	11.4	Chile	Urban	2011	6.6	9.6	7.8
Zambia	Lusaka	2008	28.0	44.0	35.0	Columbia	Urban	2012	9.2	14.1	11.5
Zambia	Urban	2008	25.0	41.0	33.0	Costa Rica	Urban	2012	6.5	9.6	7.8
Zimbabwe	Harare	2011	17.1	38.2	27.6	Columbia	Bogota	2007	…	…	10.4
Zimbabwe	Bulawayo	2011	23.1	46.1	35.5	Dominican Rep	Urban	2012	6.5	9.3	7.7
Zimbabwe	Urban	2011	17.0	38.9	28.2	Ecuador	Urban	2012	4.7	5.4	5.0
ASIA AND PACIFIC						El Salvador	Urban	2012	7.9	4.2	6.2
Armenia	Urban	2011	…	…	26.9	Honduras	Urban	2010	5.9	7.2	6.5
Bangladesh	Urban	2010	5.7	8.3	6.5	Mexico	Urban	2012	5.8	3.2	4.7
Fiji	Urban	2007	8.1	14.8	10.5	Nicaragua	Urban	2011	9.2	7.3	8.4
Fiji	Suva	2007	…	…	11.6	Nicaragua	Managua	2010	11.4	10.5	11.0
Fiji	Nandi	2007	…	…	9.8	Nicaragua	Other Urban	2010	9.4	9.0	9.2
Hong Kong SAR	Hong Kong	2010	5.1	3.6	4.4	Panama	Urban	2012	4.2	5.5	4.8
India	Urban	2012	3.8	6.7	4.4	Paraguay	Urban	2011	4.9	8.3	6.4
India	Delhi Urban	2012	4.0	4.6	4.0	Peru	Urban	2012	3.7	5.1	4.4
Indonesia	Jakarta	2010	…	…	11.3	Peru	Lima	2010	3.6	7.1	5.1
Macau -SAR	Macau	2012	…	…	0.8	Uruguay	Urban	2011	4.9	7.8	6.3
Malaysia	Kuala Lumpur	2010	2.8	2.5	2.7	Venezuela	Urban	2012	6.7	8.4	7.4
Malaysia	Urban	2011	2.9	2.9	2.9						
Mongolia	Ulaanbaatar	2010	…	…	8.7						
Nepal	Urban	2008	4.7	5.4	5.0						
Pakistan	Urban	2013	5.4	9.0	6.2						

Source: United Nations Human Settlement Programme (UN-Habitat), Global Urban Indicators Database 2015 [Compiled from Labour Force Surveys by National Statistical Offices]

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URBANIZATION AND DEVELOPMENT: EMERGING FUTURES

WORLD CITIES REPORT 2016

The world has changed remarkably since the Habitat II Conference took place in Istanbul in 1996. The way cities are shaped, their form and functionality have also been transformed over these years. The growth of the world's cities, from the north to the south, and from the east to the west, is ingrained in a culture of short-term economic benefit and often unbridled consumption and production practices that compromise the sustainability of the environment. Urbanization is at the same time a positive force underpinning profound social, political and economic transformation. Urbanization and growth go hand in hand, and no one can deny that urbanization is essential for socio-economic transformation, wealth generation, prosperity and development.

The analysis of urban development of the past twenty years presented in this maiden edition of the World Cities Report shows, with compelling evidence, that there are new forms of collaboration and cooperation, planning, governance, finance and learning that can sustain positive change. The Report unequivocally demonstrates that the current urbanization model is unsustainable in many respects. It conveys a clear message that the pattern of urbanization needs to change in order to better respond to the challenges of our time, to address issues such as inequality, climate change, informality, insecurity, and the unsustainable forms of urban expansion.

The Report advocates that the New Urban Agenda— which is expected to be adopted at the Habitat III Conference— should embrace a city-wide approach to development with concrete actions, setting out clear funding mechanisms and effective means of implementation and monitoring. Habitat III and the New Urban Agenda should establish critical connections to the 2030 Agenda for Sustainable Development and other international agreements. The Report is very explicit on the need to ensure a strong convergence among these agendas as a way of complementing and improving the implementation of the Sustainable Development Goals, particularly those with an urban component.

Cover picture: Aerial view of the city of Cairo along the Nile river ©Dereje/ Shutterstock.com

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