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on Decentralization and Local Democracy

# CO-CREATING THE URBAN FUTURE

## THE AGENDA OF METROPOLISES, CITIES AND TERRITORIES

UCLG
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# CO-CREATING THE URBAN FUTURE

## THE AGENDA OF METROPOLISES, CITIES AND TERRITORIES

Edited by UCLG

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Regions and Provinces: **Xavier Boneta**, Office of Economic Development Strategy, Province of Barcelona (Spain), **Barbara Cannon**, Deputy Leader, Allerdale Borough Council (United Kingdom), **Camila de Epalza Azqueta**, European Union Policy Officer, Delegation of the Basque Country to the EU, External Cooperation Group, Conference of Peripheral Maritime Regions of Europe (CPMR), **Joan Vallvé,** Former President, Association of European Border Regions (AEBR), **Carles Llorens**, Secretary General, ORU-FOGAR (Spain), **Marta Macias**, Director General for Development Cooperation and of the Catalan Agency for Development Cooperation, Government of Catalonia (Spain), **Michèle Pasteur**, Expert, Association of French Departments (France), **Marta Subirà Roca**, Director General for Environmental Policy, Government of Catalonia (Spain), **Ana Tapia**, International Relations Directorate, Province of Barcelona (Spain).

### LATIN AMERICA

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Regions and Provinces: **Viviana Barberena**, Federación Nacional de Departamentos (Colombia), **María Julia Reyna**, Director External Relations, Province of Santa Fe (Argentina).

### MIDDLE EAST AND WEST ASIA

Municipalities: **Tunç Soyer**, Mayor of Seferihisar (Turkey).

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**Cecilia Tacoli**, Principal Researcher, IIED (United Kingdom), **Callum Wilkie**, Department of Geography and Environment, London School of Economics (United Kingdom).

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# FOREWORD

Over the past two years, the international community has adopted three ambitious agendas — the Sustainable Development Goals (SDGs), the Paris Agreement on Climate Change and the New Urban Agenda — to achieve long-term wellbeing, peace and sustainability. However, for these agendas to live up to their historic potential and foster the transformation they seek to achieve, strong ownership at the local level will be essential.
Local and regional governments have been actively involved in contributing our experience and priorities to these universal agendas. As President of UCLG and a former member of the High-Level Panel of Eminent Persons on the Post-2015 Agenda, convened by UN Secretary General Ban Ki-moon, I am proud to have contributed personally to this global debate, arguing for the need to include an urban and territorial perspective in the SDGs.

As part of the post-2015 process, I called for the creation of the Global Taskforce of Local and Regional Governments (GTF) to coordinate the global advocacy work of all international networks of local and regional authorities, and to provide our constituency with increased visibility and an amplified voice at the global table. The Global Taskforce has proved itself to be a key lever for our international advocacy: it played a decisive role in the inclusion of SDG 11 on sustainable cities in the post-2015 agenda; it co-led the work on the localization of the SDGs, and contributed to the visibility of cities at the COP 21 in Paris. The Global Taskforce has acted as the convener of cities, regions and local governments and their associations in the Habitat IIII process through the Second World Assembly of Local and Regional Governments.

The Fourth GOLD Report we put before you today is a contribution by UCLG to a broader international constituency of local and regional governments. It aims to provide our community, as well as partners and international institutions, with a global perspective on our realities and aspirations. This report, the fourth of a triennial series led by UCLG in the past twelve years, has been developed with the support of scholars, academics and practitioners. As always, it has built on consultations with different types of local and regional government, incorporating the hands-on experiences of metropolitan leaders, intermediary cities, and local and regional governments, large and small, from around the world.

GOLD IV reviews the diverse realities of metropolitan areas, intermediary cities, regions, small municipalities and rural areas, with a view to guiding the implementation of the New Urban Agenda. Based on concrete practices, it provides an in-depth analysis of how urban and territorial policies can contribute to the new international development agenda and, by extension, argues that local and regional governments will have to take the lead in translating the new development agenda into reality.

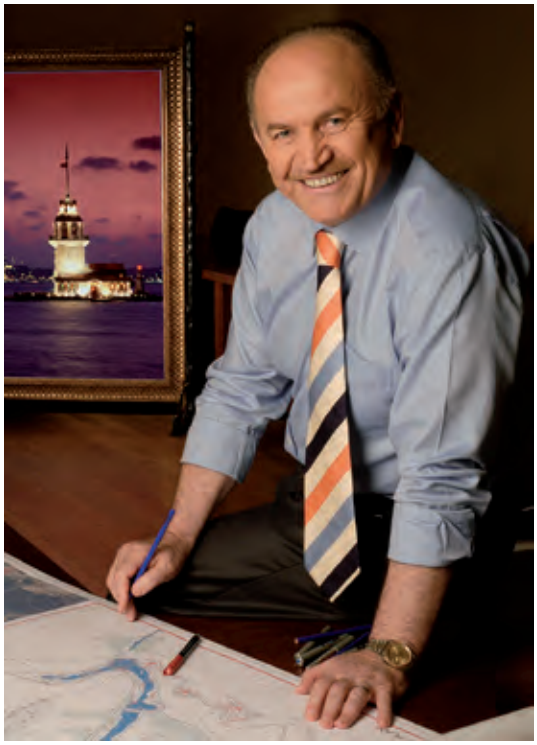
The report reaffirms a set of priorities for local and regional governments:

- a **people-centred agenda**, to ensure inclusiveness for all and the protection of essential socio-economic rights that form the basis of dignified living and links to the international ring of civilization;
- **strengthened local and regional governance and autonomy**, based on accountable local and regional governments, to renew the social contract between public institutions and citizens;
- a **territorial approach to development**, to unlock local potential, drive bottom-

up national development and create opportunities for all;
- **environmental sustainability**, through a transition towards a low carbon economy, the reduction of natural resource consumption, and the protection of the complex natural systems on which our world depends.

It analyzes the impact of the 'financialization' of the global economy and the consequences for our cities and territories in their quest to finance the SDGs and the New Urban Agenda, as well as the need for coherent and participative national urban and territorial policies.

One of the most valuable contributions of the GOLD IV report lies in the diversity of the '**urban experiments**' it covers – ranging from urban governance models to economic development practices and 'greener' policies and planning – and the evolutionary potential they have.



A clear conclusion that I draw from the GOLD IV process and my experience over the past six years as President of the world's broadest and largest organization of local governments, is that the fulfilment of the global agendas will depend on an **enhanced partnership between local and regional governments and the international community**.

In recent decades, local and regional governments have shown the positive influence we can have on the global development agenda. The nature and scale of the challenges we are facing now demand new steps and increased room for consultation and advice from this important constituency at the global table.

I am convinced that the future of humanity requires strong local and regional governments that listen to their citizens, provide basic services, and ensure livelihoods for all, in close collaboration with civil society and other spheres of government.

I am sure reading this report will inspire many of you to take the extra step, to innovate and to call on the international community to listen to its cities!

Please accept my best wishes for a prosperous, peaceful future and my kindest regards.

**Dr. Kadir Topbaş**
Mayor of Istanbul and
President of UCLG

# ABBREVIATIONS AND ACRONYMS

## A

**AAAA** – Addis Ababa Action Agenda
**AEZ** – Agriculture Export Zone
**AfDB** – African Development Bank
**AFHCO** – Affordable Housing Company
**AMB** – *Àrea Metropolitana de Barcelona* (Metropolitan Area of Barcelona)
**AMPE** – *Asociación de Municipalidades del Perú* (Association of Peruvian Municipalities)
**AMR** – Automated Meter Reading
**AMRF** – *Association des Maires Ruraux de France* (French Association of Rural Mayors)
**AFP** – Agence France-Presse
**ANGR** – *Asemblea Nacional de Gobiernos Regionales* (National Assembly of Regional Governments, Peru)
**ANRU** – National Agency for Urban Renewal (France)
**APEC** – Asia-Pacific Economic Community

## B

**BRICS** – Brazil, Russia, India, China and South Africa
**BRT** – Bus Rapid Transit

## C

**CAF** – *Corporación Andina de Fomento* (Development Bank of Latin America)
**CAPPA** – *Comitê de Acompanhamento do Plano Plurianual* (Follow-up Committee of the Multi-Annual Plan, Brazil)
**CBD** – Convention on Biological Diversity
**CBDs** – Central Business District
**CCFLA** – Cities Climate Finance Leadership Alliance
**CDS** – City Development Strategy
**CEMR** – Council of European Municipalities and Regions
**CER** – Centre for Economic Research
**CF** – Cohesion Fund
**CFL** – Compact Fluorescent Lamp
**CGET** – General Commission for Regional Equality
**CISDP** – UCLG Committee on Social Inclusion, Participatory Democracy and Human Rights
**CMM** – Montréal Metropolitan Community
**CMPU** – Municipal Council of Urban Policy
**COAG –** Council of Australian Governments
**CODETER** – Council for Sustainable Territorial Development (Brazil)
**CONPES –***Consejo Nacional de Política Económica y Social* (National Council for Economic and Social Policy, Colombia)
**COP –** Conference of the Parties
**CoR –** Committee of the Regions
**CPER –** Contrat de Plan Etat-Régions (State-Region Planning Contract, France)
**CRP –** Calgary Regional Partnership
**CTME –** Confederation of Towns and Municipalities of Europe
**C&T –** Cap and Trade
**CUDRR+R** – Centre for Urban Disaster Risk Reduction Resilience

## D

**DACF –** District Assemblies Common Fund (Ghana)
**DP Republic of Korea –** Democratic People's Republic of Korea
**DR Congo/DRC –** Democratic Republic of the Congo

## E

**ECOWAS** – Economic Community of West African States
**EDAA** – *Empresa de Desarrollo Agro-Industrial de Antioquia* (Antioquia Agro-Industrial Development Company, Colombia)
**EDP** – Economic Development Partnership

**EMAS** – Eco-Management and Audit Scheme
**EPCI** – Établissement *Public de Coopération Intercommunale* (Public Institution of Inter-Municipal Cooperation)
**EPSON** – European Observation Network for Territorial Development and Cohesion
**EPZ** – Export Processing Zone
**ERDF** – European Regional Development Fund
**EQC** – Earthquake Commission (New Zealand)
**ERDF** – European Regional Development Fund
**ESCI** – Emerging and Sustainable Cities Initiative
**ESF** – European Social Fund
**ESG** – Environmental Social and Governance
**ESIF** – European Structural and Investment Fund
**EU** – European Union

## F

**FAROS** – Factories of Arts and Jobs (Mexico)
**FALP** – World Forum for Peripheral Local Authorities
**FDI** – Foreign Direct Investment
**Fiplan** – Integrated System for Planning, Budgeting and Financing (Brazil)
**FTZ** – Free Trade Zone
**FUNBIO** – Brazilian Fund for Biodiversity
**FYR of Macedonia** – Former Yugoslav Republic of Macedonia

## G

**GDP** – Gross Domestic Product
**GDS** – Growth and Development Strategy
**GHG** – Greenhouse Gas
**GIZ GmbH** – *Deutsche Gesellschaft für Internationale Zusammenarbeit* (German Agency for International Cooperation)
**GLA** – Greater London Authority
**GTF** – Global Taskforce of Local and Regional Governments
**GPC** – Global Protocol for Community-Scale
**GRW** – Joint Task for the Improvement of Regional Economic Structure Greenhouse Gas Emission Inventories
**GTF** – Global Taskforce of Local and Regional Governments
**GTT** – Working Territorial Group
**GTP** – Growth and Transformation Plan
**GWL** – Municipal Waterboard Terrain (the Netherlands)

## H

**HUD** – Housing and Urban Department
**HTA** – Hometown Association

## I

**IASP** – International Association of Science Parks and Areas of Innovation
**i-city** – Intermediary City
**ICLEI** – International Council for Local Environmental Initiatives
**ICT** – Information and Communications Technology
**IFAD** – International Fund for Agricultural Development
**ILO** – International Labour Organization
**IMF** – International Monetary Fund
**IPCC** – International Panel on Climate Change
**ISWM** – Integrated Solid Waste Management Strategy
**ISWRMP** – Integrated Solid Waste and Resource Management Plan
**IT** – Information Technology
**IUDF** – Integrated Urban Development Framework

## J

**JNNURM** – Jawaharlal Nehru National Urban Renewal Mission

## K

**KOSTRA** – Norway's municipality-state reporting system
**KZN** – KwaZulu-Natal

## L

**LAC** – Latin American and the Caribbean
**LAG** – Local Action Group
**LEADER** – Links between actions for the development of the rural economy
**LED** – Local Economic Development
**LKN.SH** – Schleswig-Holstein Agency for Coastal Defence, National Park and Marine Conservation
**LSE** – London School of Economics

# ABBREVIATIONS AND ACRONYMS

## M

**MAREA** – *La Mar, una Estrategia para Asturias* (The Sea, a Strategy for Asturias)
**MEDSTAR** – Metropolitan Development Strategy for Arriyadh Region
**Mercosur** – *Mercado Común del Sur* (Southern Common Market)
**MEWA** – Middle East and Western Asia
**Mfcpole** – *Pôle de Compétitivité Monastir-El Fejja* (Competitiveness Pole of Monastir -El Fejja, Tunisia)
**MGI** – McKinsey Global Institute
**MIT** – Massachusetts Institute of Technology
**MITI** – Metropolis International Training Institute
**MIDUVI** – *Ministerio de Desarrollo Urbano y Vivienda* (Ministry of Urban Development and Housing, Ecuador)
**MIVAH** – *Ministerio de Vivienda y Asentamientos Humanos* (Ministry of Housing and Human Settlements, Costa Rica)
**MIVIVIENDA SA** – *Fondo Mivivienda* (National Fund for Housing, Peru)
**MLG** – Multilevel Governance
**MPO** – Metropolitan Planning Organization
**MTR** – Mass Transit Railway

## N

**NAFTA** – North American Free Trade Agreement
**NCG** – Nordic Consulting Group AB
**NDP** – National Development Plan
**NGO** – Non-Governmental Organization
**Nrg4SD** –Network of Regional Governments for Sustainable Development
**NITI** – National Institution for Transforming India
**NIUPLAN** – Nairobi Integrated Urban Development Master Plan
**NSDS** – National Sustainable Development Strategy
**NUDHF** – National Urban Development and Housing Framework
**NUDP** – National Urban Development Policy
**NUP** – National Urban Policy
**NUTS** – Nomenclature of Territorial Units for Statistics
**NUUP** – National Urban Upgrading Strategy and Overall Investments Plan

## O

**ODA** – Official Development Assistance
**OECD** – Organization for Economic Cooperation and Development
**OIDP** – International Observatory on Democratic Participation
**ORU/FOGAR** – Forum of Regions, the Organization of United Regions

## P

**PACA** – Région Provence-Alpes-Côte d'Azur, France
**PALMA** – Pigcwayan, Alamada, Libungan, Midsayap, Aleosan (the Philippines)
**PBOC** – People's Bank of China
**PGDP** – Provincial Growth and Development Plan
**PLAM** – Metropolitan Urban Development Plan for Lima and Callao
**POD** – *Plan de Ordenamiento Departamental* (Department Land Management Plan, Colombia)
**POT** – *Plan de Ordenamiento Territorial* (Land Management Plan, Colombia)
**PPA** – *Plano Plurianual* (Multi-Year Plan, Brazil)
**PPP** – Public-Private Partnership
**PPPP** – Public-Private-People Partnership
**PR China** – People's Republic of China
**PTD** – Territorial Plan
**PUP** – Public-Public Partnership

## R

**R&D** – Research and Development
**RDA** – Regional Development Agency
**REMURPE** – *Red de Municipalidades Urbanas y Rurales del Perú* (Network of Urban and Rural Municipalities of Peru)
**RIS3** – Research and Innovation Strategies for Smart Specialization

## S

**SACN** – South African Network of Cities
**SCIRT** – Stronger Christchurch Infrastructure Rebuild Team
**SDG** – Sustainable Development Goal
**SEZ** – Special Economic Zone
**SDI** – Shack/Slum Dwellers International
**SEBRAE** – *Serviço Brasileiro de Apoio às Micro e Pequenas Empresas* (Brazilian Service in support of Micro and Small Enterprises)
**SICA** – Central American Integration System
**SMDU** – Municipal Department of Urban Development
**SME** – Small and Medium-sized Enterprise
**SMG** – Seoul Metropolitan Government
**SMME** – Small, Medium and Micro-Sized Enterprise
**SOE** – State-Owned Enterprise
**SPARC** – Society for the Promotion of Area Resource Centres
**SPL** – *Système Productif Locale* (Local Productive System)
**SRADDET** – *Schéma Régional d'Aménagement, de Développement Durable et d'Egalité des Territoires* (Regional Plan for Land Management, Sustainable Development and Territorial Equality, France)
**SRDEII** – *Schéma Régional de Développement Économique, d'Innovation et d'Internationalisation* (Regional Plan for Economic Development, Innovation and Internationalization, France)
**SRI-SI** – *La Stratégie Régionale d'Innovation* (Regional Innovation Strategy, France)
**SWECO** – Swedish Consultants AB

## T

**TAD** – Territorial Approach to Development
**$tCO_2$** – Tonnes of CO2
**TECHO** – *Techo: un Techo para mi País* (TECHO: a roof for my country)
**TEN** – Trans-European Networks
**TEN-E** – Trans-European Networks Energy
**TEN-T** – Trans-European Networks Transport
**Tis** – Territories of Identity
**TL** – Territorial Level
**TOD** – Transit-Oriented Development

## U

**UAE** – United Arab Emirates
**UEMOA** – *Union Economique et Monétaire Ouest-Africaine* (West African Economic and Monetary Union)
**ULB** – Urban Local Body
**UN** – United Nations
**UNDP** – United Nations Development Programme
**UNASUR** – Union of South American Nations
**UNCTAD** – United Nations Conference on Trade and Development
**UN-DES**A – United Nations Department for Economic and Social Affairs
**UNECA** – United Nations Economic Commission for Africa
**UNECE** – United Nations Economic Commission for Europe
**UNEP** – United Nations Environmental Programme
**UN-ESCAP** – United Nations Economic and Social Commission for Asia and the Pacific
**UNESCO** – United Nations Educational, Scientific and Cultural Organization
**UN-Habitat** – United Nations Human Settlements Programme
**UNISDR** – United Nations Office for Disaster Risk Reduction
**UNRISD** – United Nations Research Institute for Social Development
**UNWTO** – World Tourism Organization
**URBACT** – European Territorial Cooperation Programme

## W

**WUP** – World Urbanization Prospects
**WWII** – Second World War

## Z

**ZEE** – Economic-Ecologic Zone

# INTRODUCTION

# 1.

# THE GLOBAL DEVELOPMENT AGENDAS AND LOCAL AND REGIONAL GOVERNMENTS

The ambitious agendas recently adopted by the international community – the 2030 Agenda, Paris Agreement on Climate Change and New Urban Agenda – necessitate a deep shift in our economic, cultural and political systems to achieve long-term wellbeing, prosperous societies, ecological regeneration and peace. For the first time, urbanization is being recognized as both a major challenge and opportunity for economic development, social inclusion and environmental sustainability.

Local and regional governments have been actively involved in global development debates, advocating for a truly transformative, integrated and universal agenda that builds on local experiences and is achievable and mindful of the needs of future generations. Local governments specifically have argued that the achievement of democratic, peaceful and sustainable societies will require a new, more democratic and transparent global governance, strong national ownership and solid democratic institutions and accountable and capable local and territorial governments. Local institutions must be responsive to the needs of people, work to bridge inequalities, preserve sustainability and have the public interest at heart. As a result of this global advocacy, the role of local and regional governments, cities and territories has been much more overtly acknowledged than ever before.

There have been a number of milestones in this process. First, United Cities and Local Governments (UCLG) was created in 2004, the result of many years of dialogue among local and regional leaders across the world. Local and regional governments were united in their conviction that the world needed a global advocate of democratic local self-government, promoting through joint action the values, objectives and interests of local and regional governments of all shapes and sizes.

Another decisive step was the creation, in 2013, of the Global Taskforce of Local and Regional Governments to bring together the major international networks of local governments to undertake joint advocacy in international policy processes, beginning with the High Level Panel of Eminent Persons on the Post-2015 Agenda. In the last few years, **the Global Taskforce has become the main intermediary between local and regional authorities, their associations, networks, sister organizations and partners, and the international community, in particular the United Nations**.

As a result, the Second World Assembly of Local and Regional Authorities, which builds on the experience of Habitat II, could open up a new phase of broader institutionalized dialogue between the UN system and sub-national government leaders for the achievement of the new global agendas.

**In light of these developments, local and regional governments have made extraordinary efforts to prepare for their role in a renewed system of global governance**. They have connected to share experiences internationally, committed to specific development targets, and promoted solidarity around the world.

They have done this by developing learning systems, technical capacity exchanges and consultation mechanisms capable of producing joint priorities.

**The Second World Assembly of Local and Regional Authorities, which builds on the experience of Habitat II, could open up a new phase of broader institutionalized dialogue between the UN system and sub-national government leaders for the achievement of the new global agendas**

# 2.

# THE CHANGING URBAN LANDSCAPE: METROPOLISES, CITIES, SMALL TOWNS AND TERRITORIES

**Over the next half century, a new global urban system will be set into motion. This will be one of the biggest transformations in human history**

In the twenty years since Habitat II, the world has undergone significant changes. Globalization, labour market transformations, the impact of new technologies, and extreme poverty reduction have gone hand in hand with growing inequalities, environmental and biodiversity depletion, and social unrest. At the same time, demographic growth and urbanization have reshaped our societies and urban landscape. The global economic crisis that began in 2007 marked the end of an economic cycle. Nevertheless, while in the short and medium term global economic growth is likely to be uneven, cities and their economies are expected to grow much more steadily.

Today, more than half the world resides in urban areas. In 1950, 30% of the world's population was urban, rising to 54% in 2014 and projected to reach 60% by 2030 and 66% by 2050. After a first wave of urbanization between 1750 and 1950, which urbanized about 400 million people, especially in the Global North,[1] this current process – known as the second urbanization wave – began in 1950 and has mostly affected the Global South. In less than a century, nearly 4 billion people will have been urbanized. Figure 1 shows the distribution and type of cities globally.

The pace of change will increase over the next two to three decades. According to the 2014 UN's *World Urbanization Prospects*, population growth will result in 2.4 billion more urban residents by the middle of this century (from 3.9 billion to 6.3 billion urban dwellers, out of an expected total population - urban and rural - of 9.7 billion). Those regions across the world that are still predominantly rural will transition into urban societies. Over the next half century, a new global urban system will be set into motion. This will be one of the biggest transformations in human history.

Urban areas range from small villages to growing intermediary cities (i-cities) and megacities. There are now 34 megacities (with a population of over 10 million) in the world, one of which (Tokyo) is home to over 30 million inhabitants and eight of which have populations of over 20 million (led by New Delhi with 25 million). It is expected that there will be 41 megacities by 2030. At the same time, the number of i-cities is also rising, although they are rarely accounted for in international analyses of urbanization in spite of their importance. All cities, from the smallest town to the largest megacity, are interconnected by new forms of ICT, economic specialization and transportation infrastructures in a huge global web.

However, people have felt the benefits of these changes very unequally. Global wealth is highly concentrated: the richest 1% of the population has more wealth than the rest of the world combined.[2] Inequalities can also be expressed in spatial form: 600 cities account for over 60% of global GDP, while the gaps between metropolitan areas, intermediary cities and rural areas are increasing.[3] The world's 500 metropolises form a signficant part of this group.

As emphasized in the Metropolitan Areas chapter, metropolises are home to more than 1.6 billion people (41% of the total urban population) and are expected to host more than 600 million new urban dwellers by 2030. Another 1.4 billion people live in i-cities, and 896 million people live in cities of fewer than 50,000 inhabitants (see Table 1).[4]

As illustrated in Figure 1 and Table 1, **the Asia-Pacific region (particularly East Asia) dominates the global urban system**: it is home to 47% of the world's urban population, 45% of all metropolises and 47% of all i-cities. The second biggest region based on the number of urban dwellers is Latin America and the Caribbean, which contributes 13% of the world's urban population, 14% of metropolitan cities and 11% of intermediary cities. Africa follows (and will eventually overtake) Latin America. It is home to 12% of the world's urban population, 11% of metropolitan cities and 12% of i-cities. Europe, Northern America, Middle East and West Asia (MEWA) and Eurasia together make up 28% of the world's urban population (10%, 7%, 6% and 5% respectively), and 30% of both the world's metropolitan areas and i-cities.

**Current trends will transform the balance between and within regions. The Global South, particularly Asia and Africa, will complete the transition to an urbanized economy**. Nearly 37% of projected urban population growth by 2050 is expected to come from just three countries – China, India and Nigeria – which are predicted to grow by 404 million, 292 million and 212 million urban dwellers respectively. Africa's urban population is expected to grow from 400 million in 2010 to 1.2 billion by 2050.

In this context, the rural-urban dichotomy is an inadequate axis with which to understand our world. The relationship between urban and rural areas is evolving; the borders between the two are becoming increasingly blurred and they are ever more interdependent. Rural-urban connections are strengthened by regular seasonal population flow from rural to urban environments and vice versa, as by well as the increasing dependence of many villages on remittances from those who have migrated to the city. At the same time, informal neighbourhoods in urban areas reproduce the typical rural pattern of scattered settlements. In developed countries, on the other hand, the displacement of urban dwellers to small towns and rural areas is creating a new phenomenon of 'rururbanization'.

The material, economic and social implications of this urban and rural transformation are staggering. In the three-year period between 2011 and 2013, China used more cement than the United States used during the whole of the 20th century.[5] China is halfway through its urbanization process, India is only a quarter of the way through and Africa's urban population is projected to increase by 800 million by 2050.

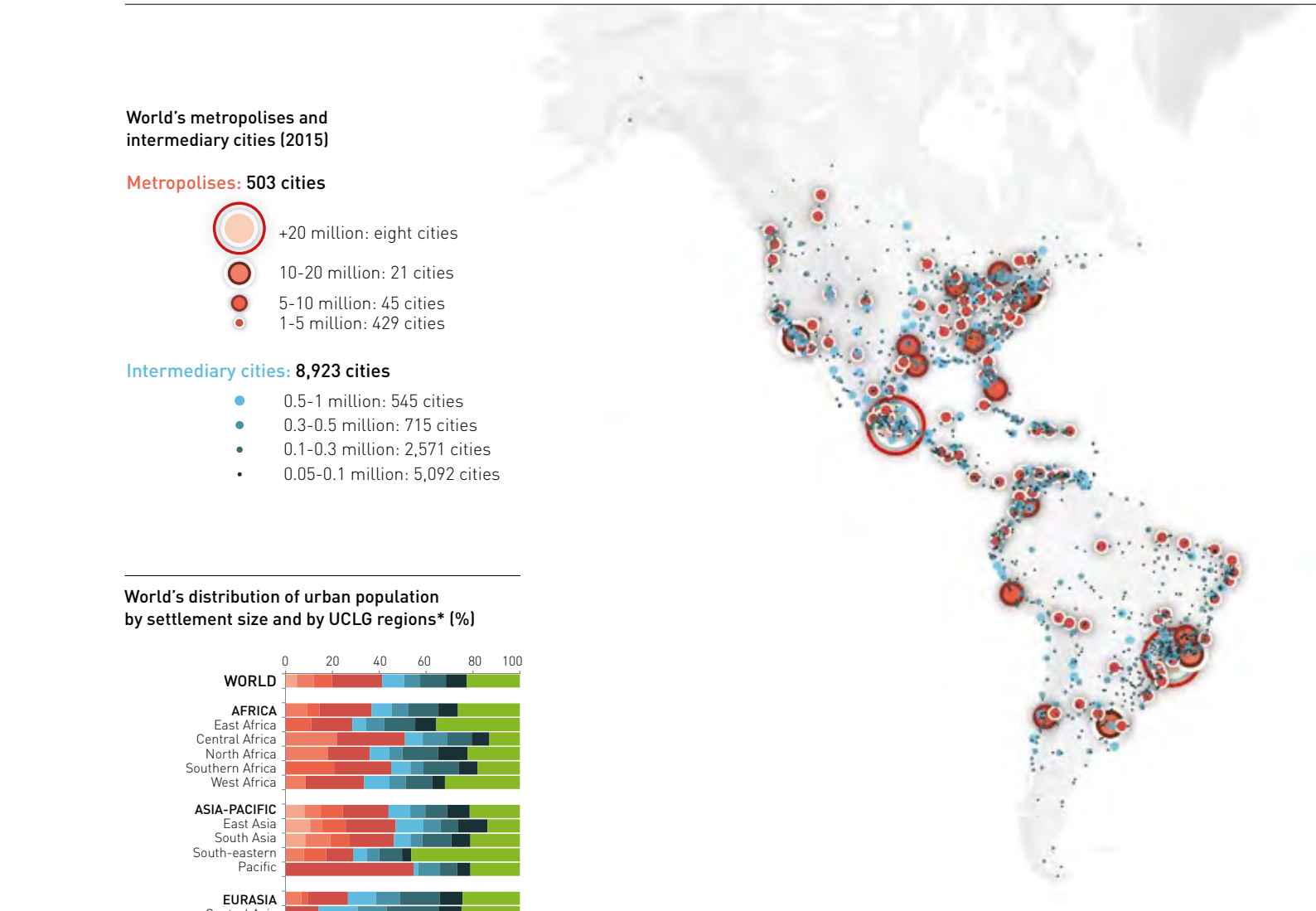
Thus, it is clear that the resources required by urbanization, and all its related social and environmental implications, will be hugely significant and are not yet fully understood.

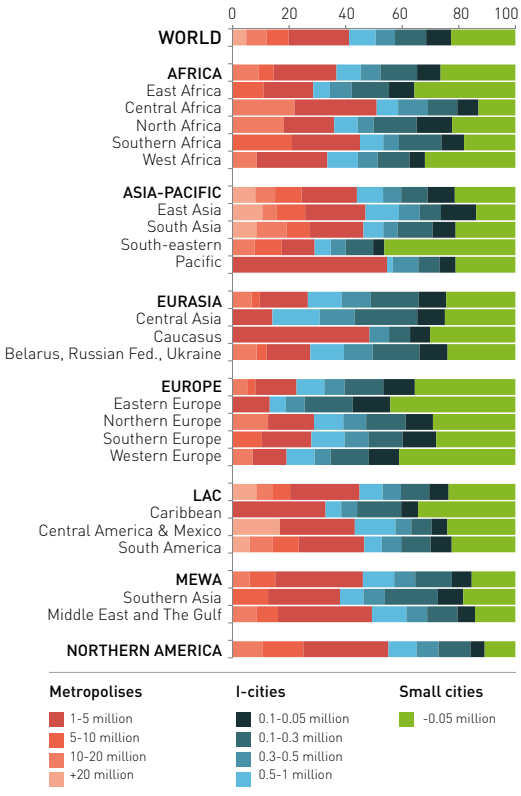
**In the three-year period between 2011 and 2013, China used more cement than the United States used during the whole of the 20th century**

The current model of development is generating both new opportunities and new social and political threats. Urbanization is positively correlated with growing incomes and human development indicators.[6] However, this model also has dramatic consequences for the environment, including natural resource depletion, impoverishment of biodiversity, climate change, and the increasing impact of natural disasters on cities and territories. **New patterns of production and consumption are essential for sustainable development, and the time available to make these changes and prevent irreparable damage to our planet is fast running out**. The costs of failing to deal with urban growth now will be excessive. The next twenty years will be critical. We need urgently to bring about a structural change to the way in which we approach development.

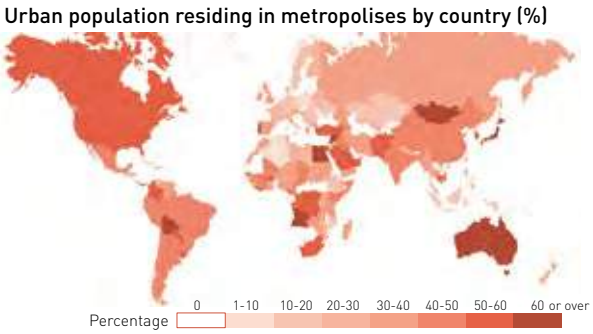
The implications of urbanization on the spatial distribution of the population and the shape and function of cities and territories is further explored in each of the chapters of this report. They provide quantitative and qualitative insights, complementing UN-DESA figures and giving an overview of the global urban system of all cities.[7]

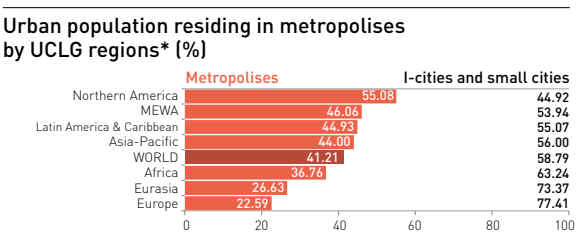
## Figure 1 World map of metropolitan areas, intermediary cities and % of population living in small towns Source: UCLG-UNESCO CIMES

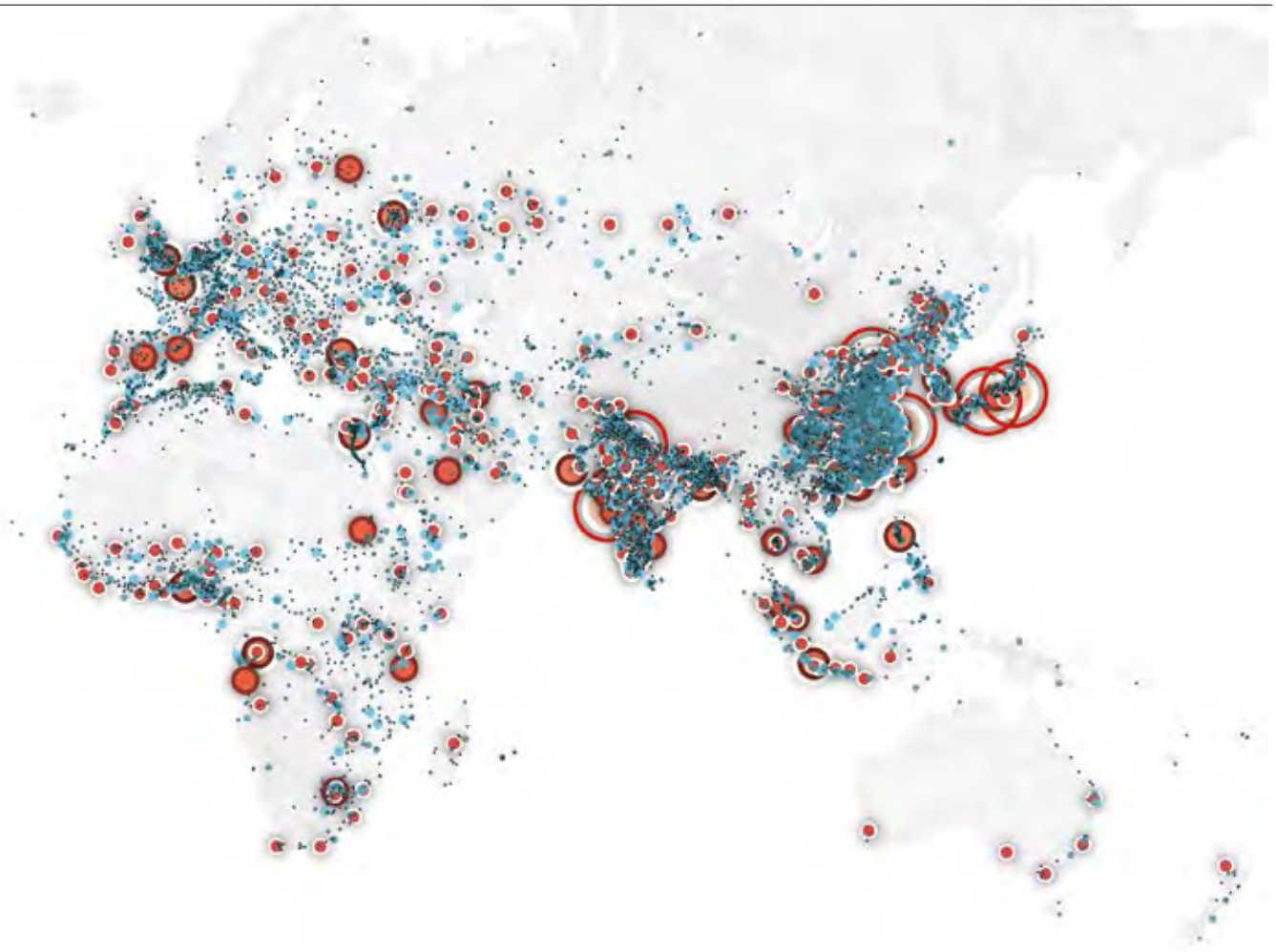


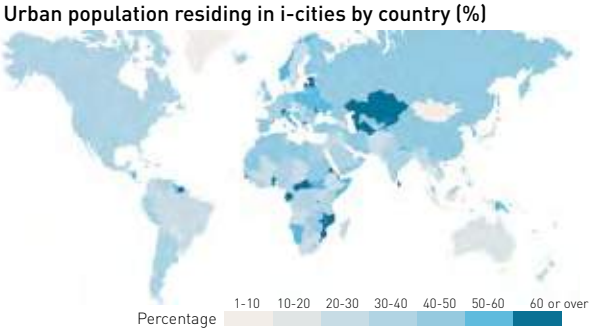

* For the UCLG definition of world regions and the countries they comprise, please refer to the Methodological Annex at the end of the report.



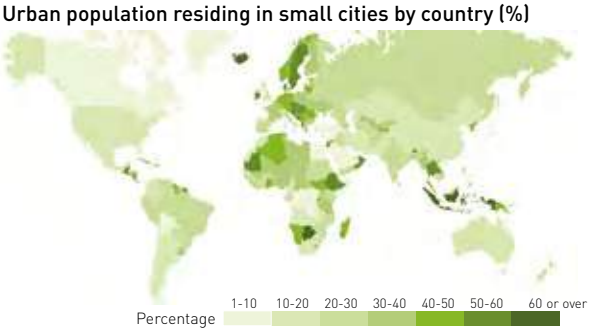





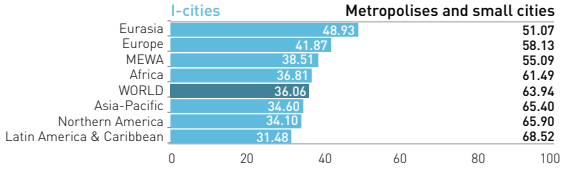
### Urban population residing in i-cities by country (%)



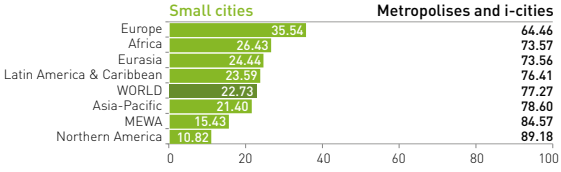

### Urban population residing in small cities by country (%)




### Urban population residing in i-cities by UCLG regions* (%)




### Urban population residing in small cities by UCLG regions* (%)



## Table 1 Urban population of metropolitan, intermediary and small cities by region

(number of units, inhabitants, % inhabitants by type of settlement/total urban population by region, % inhabitants of type of settlement/ world population of this type of settlement) - (% total population and % of world urban population)

| | METROPOLITAN AREAS TOTAL: >1 million | | | | INTERMEDIARY CITIES TOTAL: 0.05 million - 1 million | | | |
|---|---|---|---|---|---|---|---|---|
| | Nº | POP | % URBAN | % REGION | Nº | POP | % URBAN | % REGION |
| **WORLD** | 503 | 1,626,455,969 | 41.2 | 100 | 8,923 | 1,423,282,594 | 36.1 | 100 |
| **AFRICA** | **56** | **174,542,526** | **36.8** | **10.7** | **1,086** | **174,780,249** | **36.8** | **12.3** |
| East Africa | 9 | 26,406,855 | 28.5 | 15.1 | 227 | 33,167,268 | 35.8 | 19.0 |
| Central Africa | 9 | 26,973,726 | 51.0 | 15.5 | 112 | 19,048,707 | 36.0 | 10.9 |
| North Africa | 9 | 37,050,671 | 35.9 | 21.2 | 311 | 43,060,544 | 41.7 | 24.6 |
| Southern Africa | 11 | 31,995,988 | 45.1 | 18.3 | 165 | 26,077,191 | 36.7 | 14.9 |
| West Africa | 18 | 52,115,286 | 33.6 | 29.9 | 271 | 53,426,539 | 34.4 | 30.6 |
| **ASIA-PACIFIC** | **228** | **816,690,744** | **44.0** | **50.2** | **4,222** | **642,118,740** | **34.6** | **45.1** |
| East Asia | 125 | 456,085,052 | 47.0 | 55.8 | 2.538 | 379,768,911 | 39.1 | 59.1 |
| South Asia | 72 | 258,020,116 | 46.3 | 31.6 | 1.232 | 181,362,974 | 32.6 | 28.2 |
| South-eastern Asia | 25 | 87,213,961 | 29.0 | 10.7 | 407 | 74,146,549 | 24.7 | 11.5 |
| Pacific | 6 | 15,371,615 | 54.6 | 1.9 | 45 | 6,840,306 | 24.3 | 1.1 |
| **EURASIA** | **24** | **47,996,875** | **26.6** | **3.0** | **515** | **88,190,658** | **48.9** | **6.2** |
| Central Asia | 2 | 3,773,793 | 14.1 | 7.9 | 88 | 16,332,914 | 61.0 | 18.5 |
| Caucasus | 3 | 4,565,562 | 48.4 | 9.5 | 17 | 2,024,884 | 21.5 | 2.3 |
| Belarus, Russian Fed., Ukraine | 19 | 39,657,520 | 27.5 | 82.6 | 410 | 69,832,860 | 48.5 | 79.2 |
| **EUROPE** | **36** | **91,301,788** | **22.6** | **5.6** | **1,136** | **169,249,369** | **41.9** | **11.9** |
| Eastern Europe | 5 | 7,843,649 | 13.2 | 8.6 | 192 | 25,373,002 | 42.6 | 15.0 |
| Northern Europe | 9 | 23,711,968 | 28.8 | 26.0 | 214 | 34,610,407 | 42.1 | 20.4 |
| Southern Europe | 10 | 30,658,603 | 27.9 | 33.6 | 325 | 48,616,049 | 44.2 | 28.7 |
| Western Europe | 12 | 29,087,568 | 19.1 | 31.9 | 405 | 60,649,911 | 39.8 | 35.8 |
| **LATIN AMERICA& CARIBBEAN** | **68** | **225,398,998** | **44.9** | **13.9** | **961** | **157,919,149** | **31.5** | **11.1** |
| Caribbean | 4 | 9,985,468 | 32.9 | 4.4 | 65 | 9,931,491 | 32.7 | 6.3 |
| Central America and Mexico | 19 | 54,401,324 | 43.3 | 24.1 | 203 | 41,103,031 | 32.7 | 26.0 |
| South America | 45 | 161,012,206 | 46.6 | 71.4 | 693 | 106,884,627 | 30.9 | 67.7 |
| **MEWA** | **40** | **108,679,404** | **46.1** | **6.7** | **502** | **90,863,612** | **38.5** | **6.4** |
| Southern Asia | 9 | 25,420,383 | 38.0 | 23.4 | 182 | 29,229,625 | 43.6 | 32.2 |
| Middle East and The Gulf | 31 | 83,259,021 | 49.3 | 76.6 | 320 | 61,633,988 | 36.5 | 67.8 |
| **NORTHERN AMERICA** | **51** | **161,845,634** | **55.1** | **10.0** | **501** | **100,160,817** | **34.1** | **7.0** |

Source: Adapted from UN-DESA, World Urbanization Prospects, and additional sources. See the Methodological Annex at the end of the full report for more details.

| SMALL TOWNS TOTAL: <0.05 million | | | | TOTAL URBAN POPULATION | | | |
|---|---|---|---|---|---|---|---|
| Nº | POP | % URBAN | % REGION | POP | % REGION | % GLOBAL | |
| - | 896,875,227 | 22.7 | 100 | 3,945,834,361 | 54.1 | 100 | WORLD |
| - | 125,441,341 | 26.4 | 14.0 | 474,764,116 | 40.6 | 12.0 | AFRICA |
| - | 33,017,360 | 35.7 | 26.3 | 92,591,482 | 25.8 | 19.5 | East Africa |
| - | 6,878,471 | 13.0 | 5.5 | 52,900,904 | 43.9 | 11.1 | Central Africa |
| - | 23,029,318 | 22.3 | 18.4 | 103,140,533 | 55.8 | 21.7 | North Africa |
| - | 12,888,827 | 18.2 | 10.3 | 70,962,006 | 44.6 | 14.9 | Southern Africa |
| - | 49,627,365 | 32.0 | 39.6 | 155,169,190 | 44.9 | 32.7 | West Africa |
| - | 397,189,134 | 21.4 | 44.3 | 1,855,998,618 | 46.8 | 47.0 | ASIA-PACIFIC |
| - | 134,472,127 | 13.9 | 33.9 | 970,326,090 | 60.1 | 52.3 | East Asia |
| - | 117,532,505 | 21.1 | 29.6 | 556,915,595 | 33.1 | 30.0 | South Asia |
| - | 139,235,824 | 46.3 | 35.1 | 300,596,334 | 47.5 | 16.2 | South-eastern Asia |
| - | 5,948,679 | 21.1 | 1.5 | 28,160,599 | 71.5 | 1.5 | Pacific |
| - | 44,060,175 | 24.4 | 4.9 | 180,247,708 | 64.6 | 4.6 | EURASIA |
| - | 6,659,873 | 24.9 | 15.1 | 26,766,580 | 40.5 | 14.8 | Central Asia |
| - | 2,842,504 | 30.1 | 6.5 | 9,432,950 | 55.8 | 5.2 | Caucasus |
| - | 34,557,798 | 24.0 | 78.4 | 144,048,178 | 73.5 | 79.9 | Belarus, Russian Fed., Ukraine |
| - | 143,628,331 | 35.5 | 16.0 | 403,400,059 | 73.8 | 10.2 | EUROPE |
| - | 26,354,120 | 44.2 | 18.3 | 59,570,771 | 61.7 | 14.8 | Eastern Europe |
| - | 23,966,044 | 29.1 | 16.7 | 82,288,420 | 81.3 | 20.4 | Northern Europe |
| - | 30,789,450 | 28.0 | 21.4 | 109,284,672 | 70.0 | 27.1 | Southern Europe |
| - | 62,518,717 | 41.1 | 43.5 | 152,256,196 | 78.9 | 37.7 | Western Europe |
| - | 118,350,166 | 23.6 | 13.2 | 501,668,313 | 79.7 | 12.7 | LATIN AMERICA& CARIBBEAN |
| - | 10,427,631 | 34.4 | 8.8 | 30,344,590 | 71.0 | 6.0 | Caribbean |
| - | 30,204,410 | 24.0 | 25.5 | 125,708,765 | 73.1 | 25.1 | Central America and Mexico |
| - | 77,718,125 | 22.5 | 65.7 | 345,614,958 | 83.3 | 68.9 | South America |
| - | 36,410,273 | 15.4 | 4.1 | 235,953,289 | 67.8 | 6.0 | MEWA |
| - | 12,316,193 | 18.4 | 33.8 | 66,966,201 | 60.1 | 28.4 | Southern Asia |
| - | 24,094,079 | 14.3 | 66.2 | 168,987,088 | 71.5 | 71.6 | Middle East and The Gulf |
| - | 31,795,807 | 10.8 | 3.5 | 293,802,258 | 82.0 | 7.4 | NORTHERN AMERICA |

# 3.

# PRINCIPLES OF OUR AGENDA

GOLD IV builds on a set of principles and observations, based on the experience of local and regional governments since Habitat II. The recognition of current development challenges and the acknowledgement of local and regional governments in global agendas are an opportunity to begin a new era in global governance, enhancing existing partnerships, and exploring new mechanisms that will foster the participation of all actors. Within this, the responsibility of local and regional governments for many common and public goods essential to the achievement of the SDGs should be recognized.

This new era should build, however, on past *acquis* and on a clear picture of the results, achievements and unfinished business of the Habitat II Agenda (see Box 3.1). The main weakness of Habitat II has been a lack of clarity about the means of implementation. There has clearly been some progress on the Agenda's commitments to support local governments and strengthen local capacities to develop sustainable human settlements in an urbanizing world. But overall the Agenda failed to give adequate support to urban settlements and territories.

UCLG and the Global Taskforce agreed on seven priorities for the New Urban Agenda:

1. **Make local and regional governments stronger and more accountable** and give them far-reaching competences to drive inclusive and sustainable development.
2. **Harness strategic planning** to ensure a shared vision for the development of cities and human settlements.
3. **Renew the social contract,** putting the Right to the City at the heart of the New Urban Agenda (see Box 3.2).
4. **Unlock the potential of local and regional governments** to promote sustainable local economic and environmental policies, and to protect our planet.
5. **Rethink local financing systems** to make cities (and their management) sustainable.
6. **Improve local and regional governments' risk and crisis-management capacities.**

## BOX 3.1 HABITAT II AGENDA-THE RECOGNITION OF LOCAL GOVERNMENTS AND DECENTRALIZATION

In Istanbul in 1996, the UN and its member states recognized local authorities as the **'closest partner'for the implementation of the Habitat Agenda and the 'effective decentralization of responsibilities'** to local governments, as necessary to achieve sustainable human settlements.[8] In 2007, a step forward was made with the adoption – by the UN Habitat's Governing Council – of the *International Guidelines on Decentralization and Strengthening of Local Authorities*. In 2009, the *International Guidelines on Access to Basic Services for All* was adopted.[9]

Within the framework of this report, **decentralization is understood as the existence of local authorities, distinct from the state's administrative authorities, that have a degree of self-government within the framework of the law.** These decentralized authorities have their own powers, resources and capacities to meet responsibilities, and a legitimacy underpinned by representative, elected local democratic structures that determine how power is exercised and make them accountable to citizens in their jurisdiction.[10]

7. **Give local and regional governments a seat at the global table** and cooperate in a spirit of solidarity.

The New Urban Agenda needs to enable the implementation of sustainable urban policies, while **promoting an urban perspective on the 2030 Agenda and fostering its localization.** To be truly transformative, the Agenda should enable local and regional governments to realize their full potential by creating an adequate environment for further decentralization. Multilevel and multi-stakeholder governance is essential to ensure that skills and resources at all levels are harnessed.

At the same time, the Agenda should guarantee the respect for social and human rights and promote shared governance to **allow inhabitants to directly participate in the 'co-creation' of the city and territories** that they aspire to live in. In 2011 UCLG adopted the Global Global Charter-Agenda for Human Rights in the City as the foundation of this new social contract between people and local and regional authorities (see Box 3.2).

Development agendas should align resources with the needs of the people to deal with the massive backlogs in housing, basic services and urban infrastructure. Local financing has been a concern in both developed and developing countries;[11] it has been calculated that USD 57 trillion in financing will be needed to meet the need for basic infrastructure globally. With business-as-usual investment rates, the world should invest over USD 1 trillion more per year to meet these needs.[12] These figures translate to 3.8% of the Global North's GDP, and 6.6% of the Global South's.[13] **These gaps require an international initiative to address the financing of urban areas and basic service provision.**

## BOX 3.2 THE GLOBAL CHARTER-AGENDA FOR HUMAN RIGHTS IN THE CITY

The **Right to the City** has become a touchstone for social movements, NGOs and government officials, bringing together numerous demands and hopes for urban settlements to be more inclusive, harmonious and united. This approach (adopted, for example, by many Brazilian cities and in the constitution of Mexico City) offers a comprehensive framework to integrate recognized social rights for all urban inhabitants, acknowledging the different expectations and goals set by the SDGs and the New Urban Agenda.

The **General Provisions** of the **Charter**, developed by the UCLG Committee on Social Inclusion, Participatory Democracy and Human Rights, are: i) Right to the city for all inhabitants with adequate living conditions, ii) Right to participatory democracy, iii) Right to civic peace and safety in the city, iv) Right of women and men to equality, v) Right of children, vi) Rights to accessible public services, vii) Freedom of conscience and religion, opinion and information, viii) Right to peaceful meeting, association and to form a trade union, ix) Cultural rights, x) Right to housing and domicile, xi) Right to clean water and food, xii) Right to sustainable urban development.

To access the full document, see: http://www.uclg-cisdp.org/en/right-to-the-city/world-charter-agenda/1.

Photo: Juan Antonio F. Segal - India Gate. New Delhi (India).

## BOX 3.3 SYSTEMS OF CITIES[15]

The study of urban systems focuses on the relational aspects, interactions and interdependencies between cities in a territory – at the regional, national and even the global level. Cities, when organized in systems, tend to include different types of relationships: i) functional relationships (the physical exchange of information, goods, or people), ii) hierarchical relationships (as cities are nested in regional or national institutional frameworks and serve territorial management functions), and iii) both competitive/synergic relationships. Economic theories of systems of cities try to explain why production and consumption activities are concentrated in a number of urban areas of different sizes and industrial composition, rather than uniformly distributed in space. The variables analyzed in this regard usually include functions, income, connectivity, productivity and quality of life, specialization versus diversification, among others. Systems of cities are deeply rooted in the history of countries and territories. These long-standing characteristics make their arrangements recognizable and classifiable. A few keywords identify most city systems studied and analyzed in this report: the concept of monocentric, bicentric, and polycentric systems of cities, for instance.

Through an in-depth analysis, this report reviews these priorities in the context of the three main levels of sub-national governments, namely, i) metropolitan areas; ii) i-cities; and iii) territories – including regions, small towns and rural areas.

It introduces the concept of a **territorial approach to development** (TAD) to promote a paradigm shift in national development strategies, revising top-down approaches in favour of more 'territorialized' and partnership-based approaches.[14] The report calls for better coordination between national, regional and local policies to strengthen the value of interconnectedness and cooperation – rather than competition – between territories, metropolitan areas, and i-cities. As argued throughout the report, more cooperative relationships between levels of government and territories – as the basis of a more integrated and balanced urban system and territorial cohesion – can only be achieved through a radical transformation of our governance culture (see Box 3.3 on Systems of Cities).

Photo: Francesco Veronesi - Antananarivo (Madagascar)

# 4.

# THE GOLD IV REPORT

Since the publication of its first report in 2008, the *Global Report on Local Democracy and Decentralization* (GOLD) has become an international benchmark in the analysis of local governments worldwide. The three previous report contributed to a better understanding of the evolution of decentralization, local finance and the role of local governments in basic service delivery across the world.

**GOLD IV calls for the acknowledgement of the essential role of local and regional governments in addressing the challenges of urbanization and achieving the key global development agendas**. It makes a unique contribution to the global debate by moving away from traditional sectoral approaches and favouring, instead, a broader, territorial model.

Over the three years of its preparation, GOLD IV has drawn on the expertise of elected representatives, academics, as well as regional and local practitioners, through both direct collaboration and a series of consultations organized in collaboration with intermediary, metropolitan and peripheral cities and territories (including regions, small towns and rural municipalities). This constituency-based approach has provided a more integrated vision of development, based on the reality of local and regional government and their experiences on the ground.

Experts and academics with extensive knowledge of urbanization and its challenges, as well as the different territorial units analyzed in this report, have compiled each chapter, drawing on the results of the international workshops and consultations.

**Chapter 1 on Metropolitan Areas** addresses the complexity of the metropolitan age that is reshaping the urban landscape and the future of our societies. It emphasizes the rapid pace of change in metropolitan areas and aims to provide clarity about their role as engines of growth, as well as describe the positive and negative externalities that result from the race for competitiveness and attractiveness. Building on the evidence and practices of metropolitan cities, the chapter seeks answers to critical questions: what models of governance and financing do the metropolises of the 21st century need? What is the basis of a buoyant metropolitan democracy? Which strategies for economic development and new forms of collaborative and social economy should be employed? What are the costs and benefits of inclusive and integrated planning versus splintered urbanism? How can social inclusion be fostered and spatial fragmentation avoided? What is the role of metropolitan areas in building and scaling new patterns of production and consumption to reduce their ecological footprint?

As argued throughout the report, **it is in metropolitan areas that the battle for human rights, and for many of the principles enshrined in the Global Charter-Agenda for Human Rights in the City, is being fought**. These principles include combatting inequalities and marginalization, universal access to decent housing, basic services and culture, and the protection of human rights, gender equality and equal opportunities for all.

Despite their limits and constraints, metropolitan areas are where new alternatives for a more inclusive and sustainable future can be generated. If well-organized, financed and empowered, they can be prosperous, inclusive, safe and sustainable. Through analyses and examples, this chapter aims to contribute to a metropolitan narrative for a Global Agenda of Local and Regional Governments.

**Chapter 2 on Intermediary Cities,** examines the issues, concerns and opportunities that affect the development

**GOLD IV has drawn on the expertise of elected representatives, academics, as well as regional and local practitioners**

of these cities, as the vital nexus between the local and the global, and as an essential part of the national systems of cities that contribute to more balanced and inclusive territorial development.

Historically, i-cities have contributed significantly to territorial cohesion and the integration of their hinterlands, both as regional centres and as providers of administrative and social services conventionally linked to local economic activities. This chapter analyzes the functions of i-cities, their economic and physical development, and how structural changes affect their ability to maintain their identity and reach their full potential. The analysis emphasizes, on the one hand, their 'human scale' and proximity as the source of potential competitive advantage and, on the other hand, the challenge they face in adjusting to rural-urban migration and the changes in national economies and global markets. The chapter analyzes the contrast between the many prosperous i-cities that have been able to innovate and optimize their role and the quality of life of their citizens, and those that have fallen behind, struggling to ensure sustainable development and better lives for all.

**Many of the key components of the New Urban Agenda require a wider territorial approach**

The chapter also looks at the place of i-cities in the broader landscape of urbanization, examining them in different regional contexts across the world. Despite their demographic and territorial relevance within national urban systems, i-cities are still neglected by global development agendas and many national development strategies. The chapter explains why these cities play a critical role in the achievement of 'inclusive, safe, and resilient' cities (Goal 11 of the SDGs) and in strengthening rural-urban ties while promoting more balanced urban systems.

**Chapter 3 on Territories** provides a multifaceted exploration of the potential of regions, small towns and rural municipalities to support a paradigm shift in national and regional development strategies and rural-urban interdependence. This chapter explains the recent evolution of regional governments across the world in the framework of decentralization and regionalization processes. It shows how efforts to harness the endogenous economic potential of territories are paving the way for a broader, territorial approach to development. This analysis explores the growing role of regional governments in shaping regional development strategies and their links with national development plans and polices. These regional strategies are supported by innovative economic initiatives that foster local development and many diverse environmentally-sustainable experiences that range from climate change adaptation and mitigation to regional food security. Small towns and rural municipalities also have the potential to make important contributions to socio-economic development, social inclusiveness and welfare, and the protection of natural resources at a very local level. The chapter analyzes different typologies of rural-urban partnerships as a way to overcome institutional barriers and promote a rural-urban continuum.

All these factors suggest that regions, small towns and rural municipalities warrant considerably more attention than they have received thus far, and that they should figure more prominently in the economic, social and environmental development agendas of both developed and developing countries. As acknowledged in the Habitat III process, many of the key components of the New Urban Agenda require a wider territorial approach. The involvement of regions, small towns and rural municipalities is therefore just as critical as that of metropolitan areas and i-cities.

The report closes with a **Conclusion** that addresses the current global situation and the development challenges faced by the New Urban Agenda, linking them to the 2030

Photo: Jean-François Gornet / Sucre (Bolivia)

Agenda and the Paris Agreement on Climate Change. While the previous chapters describe the challenges facing different types of urban settlements and the solutions required, the concluding chapter frames these within a larger development landscape, redefined by recent international agreements.

The conclusion explores key inter-locking trends that threaten a sustainable future and suggests putting territorial governance at the heart of sustainable and integrated development strategies. These should promote democratic governance, an inclusive economy, sustainable infrastructures, equitable urbanism and respect for the environment.

To strengthen this territorial perspective in global agendas, the chapter reviews the interdependent 'operating systems' – governance, infrastructure, land use, economic and socio-cultural systems – that must be aligned to support a transformative shift in urban and territorial development. It calls on national development policies to integrate different sectoral policies (urban, rural and infrastructure) into coherent national strategies, in order to to create a truly multilevel governance system. Finally, it calls for the identification of flagship projects with disruptive potential to avoid a business as usual outcome.

In terms of the challenges of financing the New Urban Agenda, the conclusion points out that, while sufficient resources may be available, the necessary reallocation of capital and funds is a public policy choice. It makes the case for thorough reform of the financial sector, from the international to the national level, in order to make the transformative goals of today's development agendas viable and achievable.

**At the centre of its analysis is the idea of a new social contract between citizens and local public institutions. This should be founded on two central pillars: the Right to the City and the 'co-production' of the city**. Co-production refers to collaborative processes between social movements and local institutions to systematically construct a shared understanding of the scope and scale of problems, and to jointly devise a response. Co-production is part of the much larger canvas of shared governance; with this in mind, the report's conclusion proposes a set of building blocks to foster co-governance at the local level.

The final part of GOLD IV presents the foundation of the Global Agenda of Local and Regional Governments for the coming decade, a set of policy recommendations for all actors and stakeholders in the local and regional governance system. This agenda for metropolises, cities and territories is UCLG's contribution to the global debate, and an invitation for others to take the next step**: fostering alliances based on strong policies and actions to achieve prosperous, inclusive, safe, resilient and sustainable cities and territories**.

Photo: Davide Gorla - Mykines (Faroe Islands)

## NOTES

1 Satterthwaite, *The Transition to a Predominantly Urban World and Its Underpinnings*.

2 Hardoon, Ayele, and Fuentes Nieva, *An Economy for the 1%*. See also, Piketty, *Capital in the Twenty First Century*.

3 Dobbs et al., *Urban World*.

4 Metropolitan areas are defined as urban agglomerations of more than 1 million inhabitants, taking into account the physical contiguous urban area and the pattern of its labour market. Intermediary cities correspond to urban agglomeration with a population of between 50,000 and one million people (see Chapters 2 and 3 for more detailed definitions). Definitions of urban areas, as well as of different territorial units, often vary across world regions, and depend on factors such as the unit of analysis (e.g. administrative boundaries, economic functions or built-up areas) or population thresholds. For example, whereas in Ethiopia an urban area consists of a locality of more than 2,000 inhabitants, in Japan it must have 50,000 or more inhabitants with 60% or more of the houses located in the main built-up area and 60% or more of the population engaged in manufacturing, trade or another type of urban activity.

5 WBGU - German Advisory Council on Global Change, *Humanity on the Move*.

6 World Bank, 'System of Cities'.

7 For more information on the methodology used in building the databases, please refer to the methodological appendix.

8 Habitat II, *Istanbul Declaration*, paragraph 12; Habitat Agenda, art. 177.

9 UN Habitat Governing council, Resolution 21/3, 20 April 2007, and Resolution 22/8, 3 April 2009.

10 UCLG, *Decentralization and Local Democracy in the World*, 309–17.

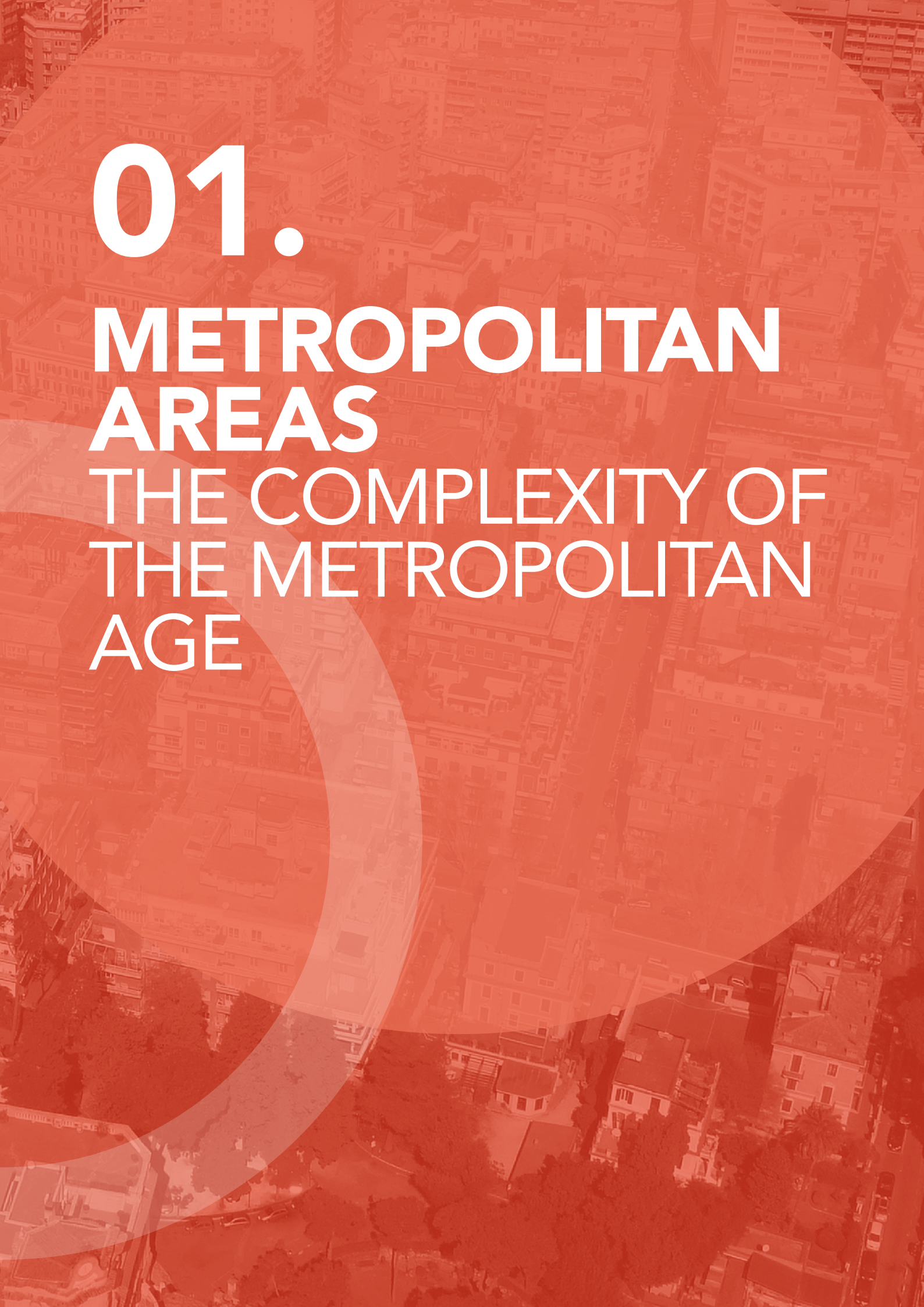
11 UCLG, *Local Government Finance*.

12 Dobbs et al., *Infrastructure Productivity*.

13 Gorelick, 'Funding Capital-Intensive Urban Projects'.

14 See Chapter 4, Section 3.1.

15 http://www.geoconfluences.ens-lyon.fr/glossaire/systemes-devilles-systemes-urbains.



# 01.

# METROPOLITAN AREAS

## THE COMPLEXITY OF THE METROPOLITAN AGE

# 1. INTRODUCTION

The reality of the 21st century shows that the world has not yet adequately prepared nor adapted to meet the challenges of the 'metropolitan age'. An ever more integrated global system of cities, megacities, urban regions and corridors is reshaping the urban landscape and the future of our societies. Certain trends present critical questions for metropolitan areas worldwide. These include urbanization, globalization, regional conflicts, increasing inequalities, as well as the threat to environmental sustainability, the impact of new technologies and rising citizen demands for democracy. The most urgent of these questions is: 'How can metropolitan cities contribute to prosperity, equality, safety and a higher quality of life in an increasingly urbanized world, without jeopardizing our planet's natural resources?'

The pace and pattern of urban growth have triggered the rise of a 'metropolitan scale'. As a result, most growing cities now span several municipal territories and other political boundaries. At the same time, urbanized areas are converging into integrated or functional labour markets and communities of shared assets and potential common interests. Now more than ever, residents of metropolitan areas adopt an 'urban mindset'.[1] Yet higher tiers of government have been slow to revise and upgrade the boundaries in response to this rapid settlement growth and population movement and change. It is essential for governments to foster leadership, strategies and governance that – in line with the principles enshrined in the global development agendas adopted by the international community – can manage this growth in an inclusive, equitable and effective way.

Metropolitan areas are where many of the world's most pressing problems can be resolved. As this chapter illustrates, these areas account for the majority of global economic output and offer real opportunities to address poverty, and socio-economic vulnerabilities and imbalances.[2] Their capacity for density, connectivity and efficiency also raises the prospect of de-coupling growth from wasteful energy use, land consumption and environmental damage. Meanwhile their spatial forms can enable a more integrated systems-led approach to smarter and fairer

## BOX 1.1 METROPOLITAN AREAS SINCE HABITAT I: KEY FIGURES[3]

- There were 503 metropolitan areas with more than one million inhabitants in 2015: this number is growing, in absolute terms, by approximately ten metropolitan areas per year. In 1995, the year before Habitat II took place, there were 305; 20 years earlier in 1975, at the time of Habitat I, there were just 162.
- The 500 most populous metropolitan areas today are home to over 1.6 billion people. Just nine of them have lost population since Habitat I. Glasgow and Budapest have lost the biggest share, while the planned cities of Nay Phi Taw and Shenzhen are among the fastest growers.
- There were just five megacities of more than ten million inhabitants at the time of Habitat I – Tokyo, Osaka, Mexico City, New York and São Paulo. Today there are over 30, three quarters of them in the Global South.[4] Nearly half of these had populations of fewer than five million inhabitants 40 years ago.

## BOX 1.2 DEFINING METROPOLITAN AREAS

The definition of 'metropolitan areas' is complex and much debated, because such areas are still evolving and encompass diverse forms and processes. Two general definitions prevail. The first describes an area that is being continuously built-up and reaches a certain level of density outside the political boundary of the city. The second defines the wider urban settlement system, including those towns and villages that are highly dependent on the main urban centre or group of centres. According to the OECD, an area outside the core city is part of a metropolitan area if more than 15% of its employed residents commute into the city.[8] This chapter uses the term 'metropolitan area' to encompass both concepts: the physical contiguous urban area and the actual pattern (i.e. the functional geography) of its labour market. Accordingly, it defines metropolitan areas as 'functional urban agglomerations', so as to take into account the movement and relations of people in their daily lives.[9] However, Metropolis - the World Association of the Major Metropolises and UCLG consider metropolitan agglomerations with a demographic threshold of one million inhabitants (although in Europe, cities of more than 500,000 inhabitants could also be considered metropolises).

The range of terms used to describe metropolitan processes often conflate different factors of function, scale, spatial form and level of development:

- **megacities** are widely understood to include cities with a population of over ten million;
- **meta-cities** and **megaregions** have both been used to describe regions with more than 20 million people.[10]

Some terms insist on a more functional dimension:

- **city region** often signifies a regional tier of authority;
- **metropolis** implies a single metropolitan area which is a major centre of economic activity.

Care needs to be taken when selecting and using these terms. Failure to consider the nuances has meant many international benchmarks of cities' size and development lack the internal coherence needed for both scientific comparison and policy-making. In this chapter, 'metropolitan area' is the preferred terminology, while 'region' generally denotes a continent or sub-national level of government (federated state, province or department).

development.[5] One of the main contributions of this chapter is to illustrate how governments can better engage metropolitan areas through a more integrated approach, in order to maximize synergies within and between them, as well as with other cities and territories.

This chapter reviews existing evidence of metropolitan development to date, in terms of governance, economic development, sustainability and quality of life. This review emphasizes the rapid pace of change experienced in most metropolitan areas, and aims to offer clarity about the different geographies, definitions and drivers of metropolitan growth, as well as its opportunities and threats. Throughout, it showcases examples of positive and less positive reforms and experiments from around the world. Finally, the chapter concludes with 11 key messages.

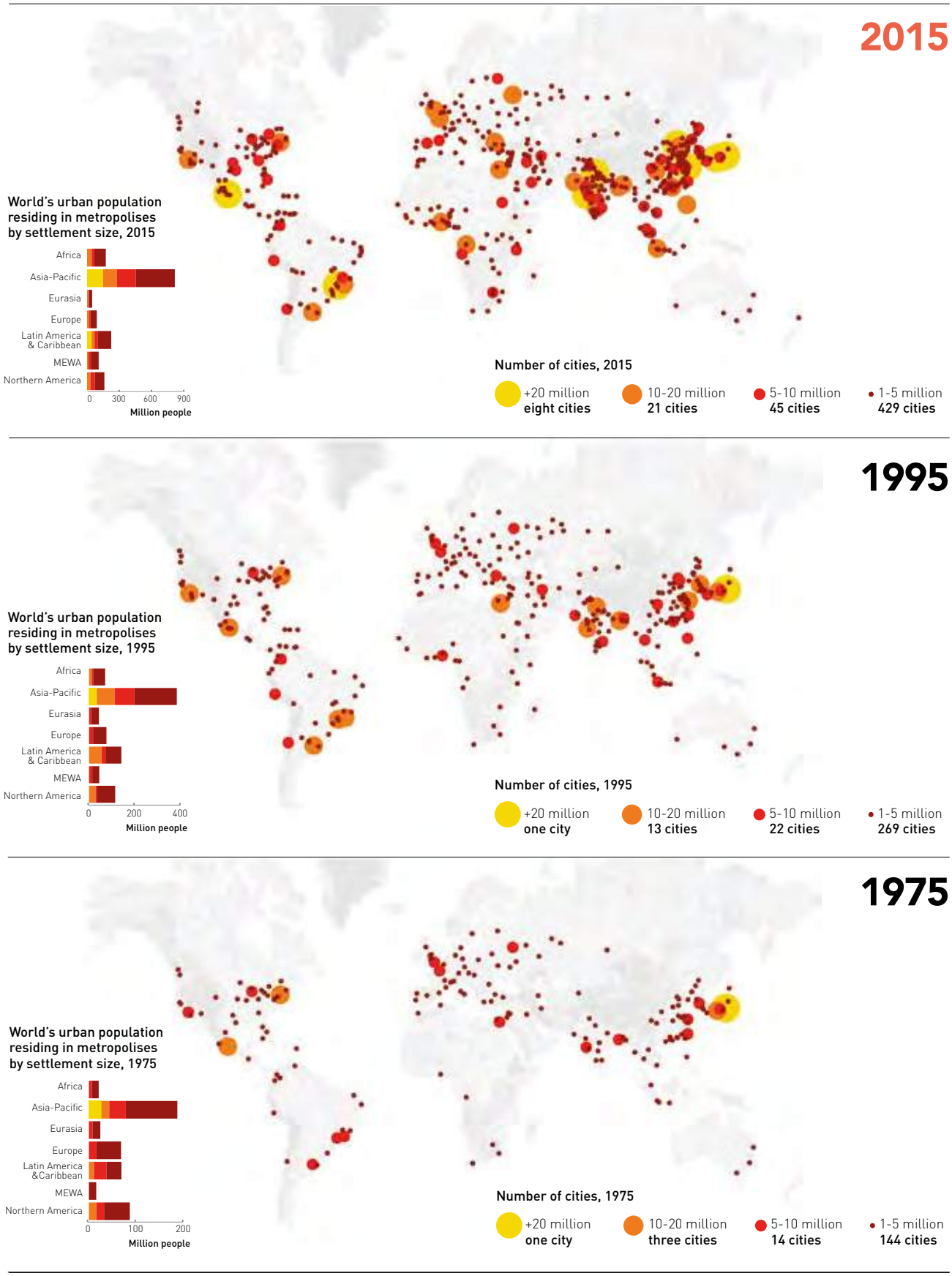
# 1.1 GROWTH AND CHANGE IN METROPOLITAN AREAS

Metropolitan areas are still growing very fast. In the 200 largest areas, average population growth was 46% between 2000 and 2014, and the population of the fastest-growing metropolitan areas such as Xiamen (China) and Abuja (Nigeria) nearly tripled. Forecasts indicate similarly strong growth for the future (around 2.5% per year), with Asian and African metropolitan areas growing most quickly.[6] These trends are the result of both 'push' factors, such as growing agricultural productivity, land-tenure pressure, conflict and natural disasters in rural areas, and 'pull' factors, such as job opportunities, investment, institutions and services located in urban areas.

Many types of metropolitan areas now co-exist in the global system of cities. There are the globalized, 'established' metropolises, which host the densest concentrations of firms, capital and educated labour, such as Hong Kong, London, New York, Paris and Tokyo. There is also a recognizable group of 'emerging' world cities, business and political capitals of large fast-growing economies such as Istanbul, Mexico City, São Paulo and Shanghai. Furthermore, a growing cluster of 'new' medium-sized cities, such as Singapore, Boston, Cape Town and Melbourne, have become metropolitan in scale and deliberately specialize in a small number of international markets.[7]

Figure 1.1 **Evolution of metropolitan areas 1975 -2015**

Source: UCLG and UN-DESA



## BOX 1.3 METROPOLITAN PERIPHERIES[13]

The different conceptions of metropolitan areas have given rise to different versions and definitions of **periphery.** This is illustrated by the variety of words that are used in several languages to describe 'peripheral' development, e.g. *banlieue, suburb, extraradio, periferia, sobborgo, jiaoqu*. The term also encompasses very different social and spatial realities (e.g. rich and poor residential areas). The growth of metropolitan areas has given rise to at least four dimensions of 'peripheral' development, which may appear in different combinations:

- geographical: many cities, municipalities and settlements are 'geographically' situated in the outer ring or far reaches of a metropolitan area. The degree to which they are spatially peripheral often changes over time. As metropolitan areas expand, those at the periphery may become part of the inner ring, and vice versa.
- political: cities and municipalities may be 'institutionally constrained', because of a lack of involvement, decision-making and political influence in metropolitan governance processes.
- socio-economic: in many cases, cities and municipalities that are peripheral in a metropolitan area can be economically disadvantaged, lack access to jobs and prosperity, and/or be 'underserved' by public services and amenities. These marginalized settlements can be located in distant suburbs or even in more central parts of metropolitan areas, including those that are central but in decline and de facto become 'peripheral' for development purposes. This 'peripheral' or 'splintered' urbanism (a concept further developed in Section 3) relates to urban spatial fragmentation and social segmentation.
- these three dimensions add up to a fourth – a 'subjective perception' of periphery by local residents who 'perceive' themselves as living in marginalized neighbourhoods and often look to other areas as part of the core. In this case, the periphery is an experience that is endured rather than desired.

As this chapter illustrates, the extent to which areas are central or peripheral may change and evolve as a result of economic trends, planning decisions and political choices. It is thus important for metropolitan areas to develop a much more sustainable and inclusive strategy for their peripheries.

# 1.2 MEETING THE DEMANDS OF THE METROPOLITAN AGE

The planning and leadership of metropolitan areas present major political challenges that require immediate action and focus. Most critical is the inclusion and integration of areas that are, or have become, peripheral to the urban economy, spatial form or institutional processes (see Box 1.3). In developing countries, a rapid urbanization process has often been characterized by weak planning and institutional development, as well as by the rise of informal settlements in which many people live with limited or no access to basic services.[11] It is worth remembering that over 880 million people currently live in slums, most of them within metropolitan areas. Meanwhile in more advanced industrialized regions, the physical footprint of metropolitan areas is also growing. This is often as people flee land-value inflation and seek suburban lifestyles, and as more cities become part of new industrial value chains. In both developed and developing countries, metropolitan areas experience sprawl, social fragmentation, economic challenges and environmental threats. As recent surveys of city leaders highlight, these phenomena are both a cause and effect of congestion, inadequate public transport and low productivity, and are exacerbated by limited options to finance new infrastructure.[12]

The growing political and economic importance of metropolitan areas is not matched by public policies and reforms. Weak political cooperation, government fragmentation and inconsistent bureaucratic authority discourage joint efforts in tackling externalities in metropolitan areas.[14] **As the process of reform and adjustment has not kept pace with growth, local governments, mayors, councils and other appointed city-level authorities have found themselves under-powered to deal with the intensified demands made upon them**.[15] The rise of urban social movements in past years in various cities – including Paris, São Paulo, Istanbul, and several cities in the United States – reflects the growing demand of citizens for a new 'Right to the City' and a rejection of the unevenness in the way metropolitan areas are managed.

**Cities are a common good that should be protected in order to guarantee equal access to opportunities and the respect of human rights**. The principles developed in the Global Charter-Agenda for Human Rights in the City, presented in the introduction of this GOLD Report, can become a global standard for participatory policies, and socially inclusive and environmentally sustainable actions in metropolitan areas. They should be a reference for the renewal of the social contract between local authorities and their citizens, strengthening local democracy and supporting a vibrant and engaged civil society.

The problems currently facing metropolitan areas raise six key questions about how they can grow smartly, inclusively and sustainably in the future:

- What type of governance should metropolises of the 21st century promote?
- What strategies should metropolitan areas implement to manage their growth and mobilize necessary resources?
- How should metropolitan areas plan and adjust to reduce inequalities and social and spatial fragmentation?
- How can the development and resource needs of metropolitan areas be made compatible with the imperative to reduce their ecological footprint?
- How can metropolitan areas ensure universal access to infrastructure, housing, public services and social amenities?
- How can metropolitan areas work together with other cities and their hinterlands to promote inter-territorial cohesiveness instead of destructive competition?
- Can metropolitan areas incorporate the principles that inform the Global Charter-Agenda for Human Rights in the City, and protect and promote rights to culture?

The first of these questions is addressed in Section 2 of this chapter on governance. Section 3 on economic development provides a response to the second and third questions. Section 4 on sustainability and quality of life addresses the third question in more detail

**In more advanced industrialized regions, the physical footprint of metropolitan areas is also growing**

Photo: Andrea Ciambra-Toronto (Canada).

and provides further insight to respond to the final questions. The conclusions return to the 'Right to the City' in metropolitan areas, before highlighting the key messages for the 'Global Agenda of Local and Regional Governments'.

This work also builds on the valuable efforts and engagements of Metropolis. Created in 1985, Metropolis is a network of more than 140 cities and metropolitan regions with more than one million inhabitants, advocating and fostering cooperation and knowledge-sharing among its members.[16] Through the PrepCity process leading to Habitat III, Metropolis defined a set of Basic Principles for Better Cities, consistent with the priorities of the New Urban Agenda and based on the belief that cultural and political issues are as important as economic and environmental ones.[17] This chapter is also based on the work of UCLG's Peripheral Cities Committee, a platform for peripheral local authorities, closely linked with the World Forum of Peripheral Local Authorities (FALP). The FALP network brings together nearly 230 local authorities from 32 countries, working with academics and social movements (see Box 2.4bis). The chapter also encapsulates many of the policy messages from the Habitat III process, and particularly from the Montréal Thematic Meeting on Metropolitan Areas (see Box 1.4).

As this report suggests, although the world is only a little way into the new 'metropolitan' century, it has already reached a crossroads. It is in metropolitan areas that the battle for many of the principles enshrined in the Global Charter-Agenda for Human Rights in the City is being fought. These includes combating inequalities and marginalization, the fight for universal access to decent housing and basic services, and the protection of human rights, gender equality and equal opportunities for all. There is little time left to avoid the irreversible damage of climate change, and metropolitan areas are at the forefront in building and scaling viable alternatives to fossil-fuel production and consumption. Metropolitan areas are also key to building more collaborative and sustainable relationships between cities and wider regional and national territories.

Despite their limits and constraints, metropolitan areas are a source of great promise. Well-organized, endowed and empowered they can be prosperous, inclusive, safe and sustainable. Through analyses and examples, this chapter aims to contribute to a 'metropolitan narrative' for a 'Global Agenda of Local and Regional Governments'. It reports on the progress achieved in metropolitan areas so far, and seeks to identify the key challenges and policy priorities for realizing their potential.

## BOX 1.4 THE MONTRÉAL DECLARATION ON METROPOLITAN AREAS[18]

In October 2015, the Thematic Meeting on Metropolitan Areas was held in Montréal, as part of preparations for Habitat III. The Declaration that came out of that meeting defined the main challenges and transformations necessary for building more inclusive and interdependent metropolitan areas, as well as mechanisms for their implementation.

More specifically, the Declaration emphasized the need to provide a clear legal and institutional framework for metropolitan governance based on the principles of democracy, local autonomy and subsidiarity; promote a new partnership with other levels of government to strengthen metropolitan governance mechanisms and implement financing mechanisms adapted to metropolitan challenges; develop integrated participatory planning to promote compact and mixed use, ensure sustainable mobility and environmental sustainability to fight climate change, ensure resilience; and promote inclusive policies for housing, social services, gender equality and cultural heritage, with the aim of creating a healthy environment for all.

Participants at the thematic meeting also reaffirmed the need to place the 'Right to the City' at the heart of metropolitan policies, and ensure cohesion and solidarity between the territories which make up metropolitan areas. This is in order to promote equalization mechanisms and civil society participation in the decision-making process.

# 2.

# GOVERNANCE: ESTABLISHED AND EMERGING MODELS FOR METROPOLITAN AREAS

Governance of metropolitan areas is one of the main levers to guiding and facilitating the transformation needed to fulfil the promise of a 'metropolitan age'. Sustainable metropolitan development depends upon strong political will, a lucid grasp of urban complexity, clear legal and institutional frameworks, adequate powers and resources, and the support of an active and involved civil society - all key components of effective governance. Instead, most metropolitan areas endure significant governance challenges and face an ongoing imperative - still unrealized - to adjust and reform.

In effect, most metropolitan areas are 'accidental' outcomes of many cycles of development. As cities have grown beyond their historic political and electoral boundaries, their governance has become more complex and fragmented, comprising a series of local governments, authorities, agencies and interests that were not originally designed to address questions at the metropolitan scale. This means that they are usually governed by a form of 'power-sharing', and ad hoc and temporary coalitions with varying levels of legitimacy and transparency.

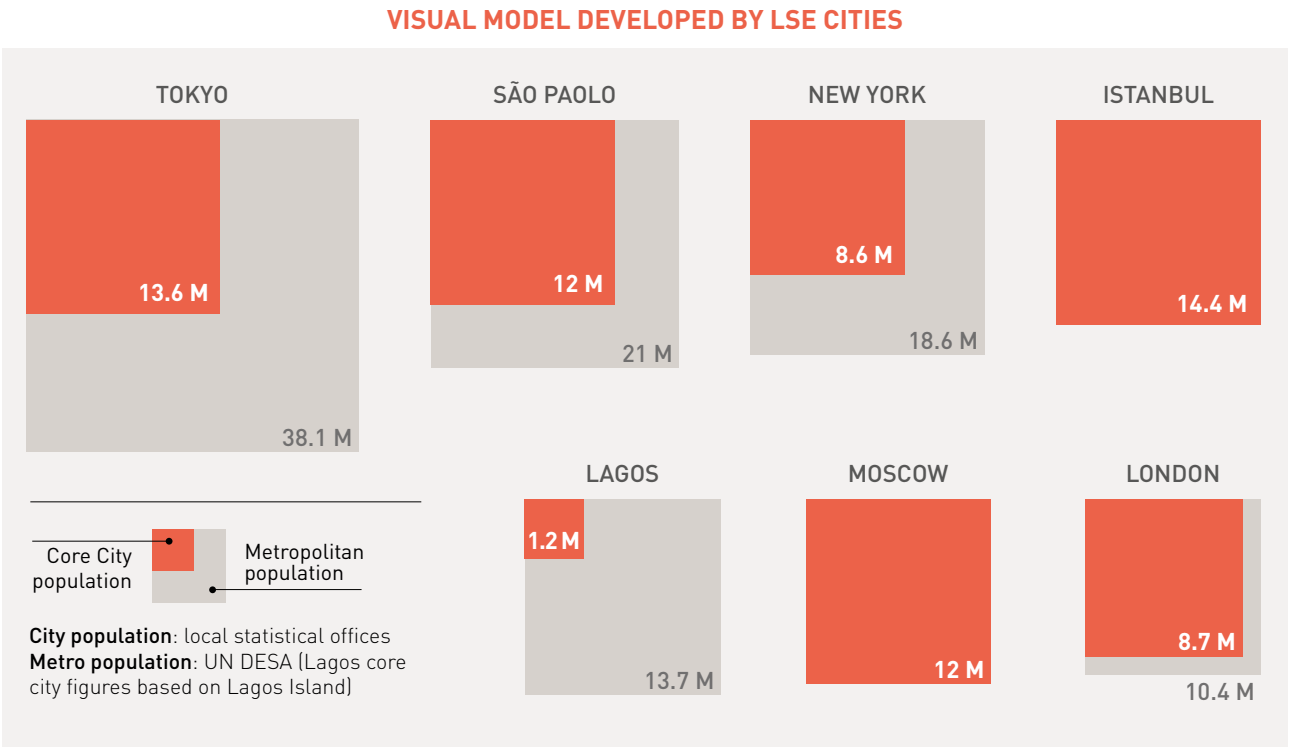
In 2016, only a few cities have most or all of their metropolitan population governed within a single administrative territory (see Figure 2.1). For many, such as Sydney and Zurich, the original core city is dwarfed by the wider metropolitan area.[19] The legacy of metropolitan growth is often one of infrastructural shortfalls, competition and inequality across different parts of the metropolitan area.

**Most metropolitan areas endure significant governance challenges and face an ongoing imperative - still unrealized - to adjust and reform**

Photo: Mike Linksvayer - Buenos Aires (Argentina).

Figure 2.1 **Population size of administrative 'core' city and metropolitan area in the largest metropolitan area in each of UCLG's seven regional sections**

Source: United Nations Population Division (2014). 'World Urbanization Prospects: The 2014 Revision', 2014; Thomas Brinkhoff, 'Metro Lagos', 2016




## BOX 2.1 METROPOLITAN AREAS' BATTLE FOR RECOGNITION

The ability of metropolises to emerge as collective and coherent actors often depends on the appetite of national governments to recognize and support metropolitan challenges and governance needs. In many countries, metropolises are struggling with this. It is common for progress to be slow and incremental, but several countries have in fact taken important steps in recent years, for example in the regions of Latin America and Europe.[20]

In Brazil, a 2015 federal law has established the requirements for the institutionalization of metropolitan areas as well as guidelines for planning and multilevel governance.[21] Observing the rules and the deadlines of the *Estatuto da Metropole*, the 39 municipalities that constitute the Metropolitan Region of São Paulo (*Região Metropolitana de São Paulo* - RMSP) and the State Government are together developing a Plan for Integrated Urban Development. This defines, among other goals, a suitable structure of metropolitan intergovernmental governance for the Plan's execution.

In Chile, metropolitan areas have now been recognized for the first time and, in Colombia, a 2013 law improves the legal framework for coordinating and financing its six metropolitan areas.[22] In Mexico, a comprehensive regulatory process is getting to grips with the country's growing 'metropolization' issues and, under this fledgling framework, multi-municipal conurbations of over half a million people will have metropolitan status. Meanwhile in Italy, 14 'metropolitan cities' were established by the *Delrio* law in 2014, with authority to oversee transport and planning. In France, metropolitan areas have been granted enhanced status, allowing for the creation of a dozen more metropolitan cities in 2015.

The increasingly complex landscape of urban metropolitan areas – megacities, metropolises, urban regions and corridors – requires new governance systems that address whole urban functional areas in order to overcome institutional, social and spatial fragmentation. Weak metropolitan governance undermines the potential of metropolitan areas to function as cornerstones of national development.

Leaders in metropolitan areas work within governance parameters that often leave them with insufficient formal authority to meet the challenges their city faces. The most serious gaps often include limited resources to invest in required infrastructures; failures of coordination with other levels of government and among neighbouring local governments; compartmentalized sectoral polices that do not respond to metropolitan needs; and inadequate national support for urban agendas. In particular, the big development challenges faced by metropolitan areas require sustained action through several cycles of development and investment that generally transcend the short-term perspectives of political terms and electoral mandates.

Although the global momentum to recognize metropolitan areas and grant them legal status is growing (see Box 2.1), many reforms have lacked incentives and cooperative mechanisms to support or finance their integration.

For metropolitan areas to acquire and retain a governance structure that supports sustainable development, many have had to innovate through new flexible models and new kinds of reforms. Importantly, there is increasing awareness that metropolitan governance must address not only local governmental arrangements, but also the role of higher tiers of government and civil society. Drawing on international evidence and examples, this section firstly reviews the different types of government arrangements and processes of reform that metropolitan areas have undertaken. It then examines the roles of higher tiers of government and civic leadership organizations. Finally, it evaluates the potential for strategic planning to foster more integrated and participatory metropolitan governance and development.

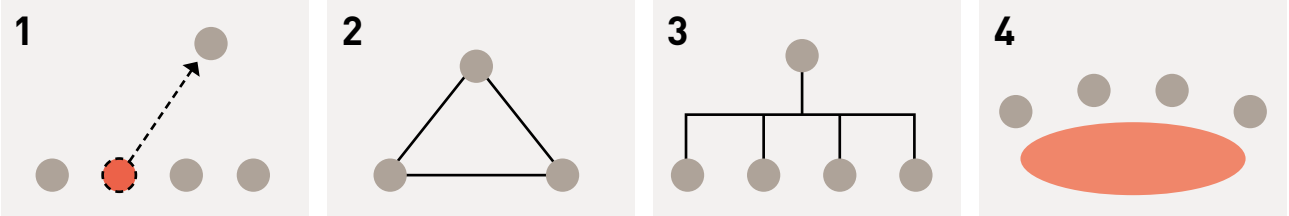
# 2.1 DIFFERENT MODELS OF METROPOLITAN MANAGEMENT

A metropolitan authority and representation system can now be found in most parts of the world. A 2015 review found that 68% of metropolitan areas in OECD countries have a metropolitan governance body working on regional development, transport and planning. Only a quarter of these bodies, however, has actual substantive regulatory powers.[23]

Metropolitan governance has taken many forms to achieve its goals, often reflecting deep-rooted national, political and cultural traditions. Scholars and analysts have often sought to compare and categorize models of metropolitan governance and management. While these do not cover the full spectrum of possible arrangements and to some extent neglect the impact of both higher-tier governments and non-institutionalized organizations (see Sections 2.2 and 2.3 for more details), four main models (see Figure 2.2) have been commonly distinguished in the literature.

Figure 2.2 **Four models identified by the OECD**[24]

Source: OECD (2015)




1 Special status of metropolitan cities with broader competences

2 Inter-municipal and multi-purpose authorities

3 Elected or non-elected metropolitan supra-municipal structure

4 Soft, informal coordination in a polycentric system

The **single-tier metropolitan government model (1)** sees one government authority providing services to most or all of the metropolitan area. This model is often the result of either a merger of local governments, or designation by a higher tier of government as a special 'metropolitan city' (e.g. Moscow, Shanghai).[25] Sometimes these areas are 'over-bounded' well beyond the built-up area (e.g. Chongqing, Istanbul) or, more frequently, they are 'under-bounded' and have spilled over their administrative boundaries (e.g. Toronto).

Single-tier models are intended to create financial efficiency and economies of scale in service provision. They draw a larger tax base and are generally conducive to the creation of an identity and vision for residents and business to rally behind. Some examples of this model, however, have been criticized for their lack of efficiency, accountability or political legitimacy and limited channels for democratic engagement.[26] This has been visible in Toronto, in Canada. The merger of local governments in Toronto in 1998 only integrated the central core of the wider functional region, rendering it too small to address regional transport and development issues. Although wages, salaries and service provision were all harmonized, the anticipated economies of scale did not materialize as costs unexpectedly increased.[27]

**The diversity of governance models shows that there is no 'one-size-fits-all' solution**

The **inter-municipal partnership model (2)** sees local governments voluntarily partner within a formal or informal purpose-driven framework. This mode has become increasingly popular globally, as it offers economies of scale without undermining the autonomy of local authorities to tax and spend. Municipalities may create metropolitan agencies to coordinate public assets (e.g. 'special districts' in the United States provide shared services across municipal or county boundaries) and support redevelopment in complex ownership situations, and even to act as mediators with central governments, private and non-profit sectors.[28]

The inter-municipal system works well when all cooperating municipalities share similar objectives, but has proven challenging whenever inter-municipal conflict emerges. A deep-rooted ethos of consensus politics, found in many metropolitan areas in Switzerland, the Netherlands and Sweden and, in some cases, in Canada and Australia, can make this voluntary approach highly effective, although these are exceptions rather than the rule.[29] Inter-municipal cooperation can, however, fill the vacuum in the management of services or other development projects and create the impetus for wider reform. This has occurred in Paris where, after a decade of joint efforts among over 100 municipalities, a new metropolitan government (*Métropole du Grand Paris*) came into force in 2016.[30] The *Métropole's* new governance framework maintains strong respect for the principle of subsidiarity, but its multi-layered complexity and the fact that it only encompasses 60% of the metropolitan population have cast doubt on its ability to effectively address Paris' development challenges.[31]

Photo: Carlos ZGZ - Shanghay (China).

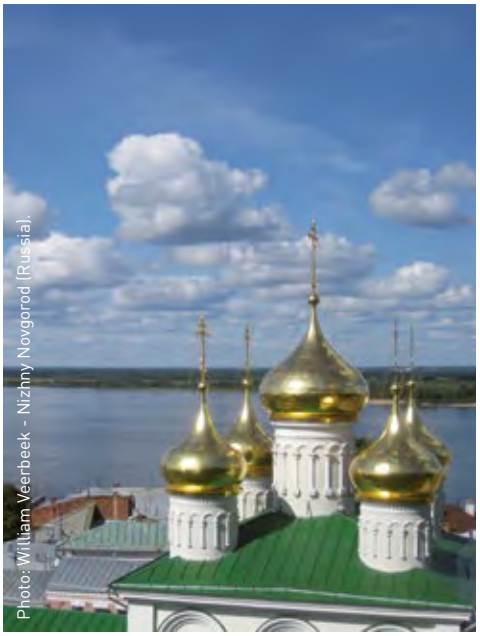


Photo: William Veerbeek - Nizhny Novgorod (Russia).

Photo: Bert Kaufman - Rome (Italy).

The **two-tier government model (3)** features an upper-tier citywide or metropolitan authority above a system of smaller local authorities. The upper tier usually manages spatial planning, development and delivers certain services, while responsibility for education, housing, healthcare and welfare is often retained at the local level. The balance of power between the two tiers may vary: some have a so-called 'strong mayor, weak boroughs' equilibrium whilst others have one that is 'weak mayor, strong boroughs'. At both ends of the spectrum, this model aims to combine the benefits of consolidated government while maintaining local accountability and responsiveness.[32]

There are many examples of successful two-tier systems, but the model is often incomplete and may require ongoing adjustments or reform. In some cases, the two-tier model is seen to operate effectively at the city level, while other regional or local governments preside over the wider urbanized areas into which development has spilled (e.g. London, Seoul and Tokyo). Elsewhere, a two-tier model even operates at different spatial scales, with a city government surrounded by a regional government (e.g. Madrid).[33] Meanwhile, in other metropolitan areas, a two-tier model is thwarted by fiscal imbalances between the two levels. In Dar es Salaam, one of the world's fastest-growing cities, a metropolitan coordinating body was established in 2000, but the municipal councils receive much higher fiscal transfers than the metropolitan authority and have stronger working relationships with central government than with the metropolitan tier.[34]

Photo: Scott Lowe - Los Angeles (United States).

Finally, the **informal and fragmented one-tier model (4)** has numerous separate local governments delivering services within the metropolitan area, without any overarching authority or body to encourage cooperation. The large number of local governments limits opportunities for coordination oriented towards economies of scale. Los Angeles is one prominent example, a region of 13 million people governed by 200 city governments and five county governments, with Los Angeles County at the centre. High fiscal and economic imbalances among different municipalities have been common in this kind of governance system.[35]

There are a number of exceptions that do not fit neatly into any of these models. Among the most notable are Singapore, Hong Kong and Dubai, three highly empowered cities that have much greater autonomy than most cities, and whose wider built-up areas beyond their borders have weakly defined parameters.

Most metropolitan areas are in fact 'hybrids' of more than one model, because of their complex geographies, the status of different delivery agencies, and the fact that they are nested within governance structures both above and below them. This diversity of governance models shows that there is no 'one-size-fits-all' solution. Constant transformations and the changing forms of large agglomerations will require the elaboration of newly evolving forms of governance – relying on stronger multilevel governance and multi-stakeholder dialogue – to respond to their new challenges.

All choices about metropolitan governance have trade-offs between scale, efficiency, access and accountability. Nevertheless, international evidence does suggest that mechanisms for metropolitan coordination can help unlock progress on integrated infrastructure, balanced development, increased rates of investment and shared identity. The subsidiarity principle remains essential as local governments are key decision-makers in the delivery of basic services. But substantive metropolitan coordination can ensure intergovernmental and multilevel coherence, align strategic decision-making, facilitate cost-sharing and cost-saving, improve the redistribution of resources within the metropolitan area, and offer an overarching goal for common development. A high coordination equilibrium

**International evidence does suggest that mechanisms for metropolitan coordination can help unlock progress on integrated infrastructure, balanced development, increased rates of investment and shared identity**

can contribute to eliminating perverse incentives and competition, promote social cohesion, develop more evidence-based policy, and improve land and development management. The impact of metropolitan coordination is particularly important to strengthen regulation and oversee the delivery of public services, for example, to reduce transport deficits and the social and economic marginalization they perpetuate.

In practice, metropolitan coordination is rarely, if ever, absolute and seamless. It is usually partial, overlapping and not fully sequenced to match goals. Metropolitan areas must determine what their long-term development strategy is and define their coordination targets accordingly.

### BOX 2.2 BUILDING A METROPOLITAN VISION FROM THE GROUND UP: GRAND MONTRÉAL

Historically, leaders in metropolitan Grand Montréal have struggled to collaborate on collective projects. After a provincial government's attempt to merge all 28 municipalities on the island of Montréal was rejected in 2006, a broader metropolitan organization grew into a regional management approach that balanced the needs and interests of the centre and periphery.[39] The Montréal Metropolitan Community (CMM) has since been governed by a council of 28 mayors.

The first-ever Metropolitan Land Use and Development Plan was devised and adopted in 2011, setting ambitious long-term targets for the economy, environment and transport. The CMM's sizeable budget for social and affordable housing has been important in establishing the right to housing and housing assistance at the metropolitan rather than municipal level.[40]

High-quality communications, public education and relationship-building have helped sustain momentum for the metropolitan process. A day-long metropolitan *agora* is organized every two years to bring elected officials, city workers, planners and civil society groups together from the 82 municipalities to discuss the future. This dialogue has deliberately focused on developing a strong sense of regional identity and allowed Montréal to showcase its cultural assets and good quality of life to an international audience.[41]

The cooperation achieved in this framework has even prompted the Quebec provincial government to grant more municipal autonomy on spending and governance to local governments via a new fiscal pact.[42]

# 2.2 DEMOCRATIC METROPOLITAN AREAS AND THE ROLE OF LOCAL GOVERNMENTS AS CONVENERS

It is a key challenge for metropolitan governance to deliver services and strategy effectively and accountably, via transparent governance mechanisms, supported by strong citizen participation. This can be particularly difficult when fragmented governance arrangements, political parochialism and competition prevail, with increased inequalities between metropolitan districts an all-too-common outcome. **Empowered local governments with stronger democratic legitimacy are a precondition to achieving many of the behavioural changes necessary for inclusive and sustainable metropolitan development, and to creating a strong metropolitan citizenship and sense of belonging**. The role of local and regional governments in building successful democratically legitimate metropolitan areas has yet to receive sufficient focus.

Metropolitan areas with a limited history of partnership among local administrations are beginning to create more opportunities for dialogue and joint coordination. Their success depends on the availability of adequate legal tools and related incentives to achieve 'buy-in' from all levels of government – particularly from core and peripheral cities. Reforms, moreover, need to be tailored to different national and regional contexts.[36] This is important as peripheral jurisdictions often find it difficult to advance their interests over the interests of central cities, whose bargaining power with investors and higher levels of government can be superior.[37] Examples indicate that the democratic legitimacy of local government-led metropolitan partnerships is critical to building effective policies for larger regional issues (see Box 2.2).[38]

There are also many examples, however, where the forced merger of local governments or top-down imposition of metropolitan governments have been both unsuccessful and unpopular (see Box 2.3).[43] By contrast, bottom-up processes involving influential and charismatic local and city leaders are often at the heart of a longer-term consensus-building

process for metropolitan collaboration and collective action.

In many cases, local governments have been able to build voluntary bottom-up metropolitan partnerships despite a national context that largely favoured top-down arrangements. Greater Manchester in the United Kingdom is one example where a longstanding practice of voluntary partnership emerged over 25 years under the stewardship of committed and charismatic local politicians. This resulted in a Combined Authority being established to bring together ten local authorities and provide a stronger and more democratically legitimate model of metropolitan governance. This is the first statutory combined system of its type in the United Kingdom, and different from the two-tier system of government established in London. From this platform, Greater Manchester has been able to negotiate successfully with central government to achieve public sector reform, create new investment models, and gain control over key items of spending.

Within metropolitan areas, peripheral cities tend to have different perspectives on the methods and objectives of governance (see Box 2.4). This diversity and the need to involve all voices underline the importance of a polycentric and inclusive approach to metropolitan issues. The imperative for peripheral cities and territories is to create governance arrangements that reflect both their importance to metropolitan areas and their distinctiveness within them.

## BOX 2.3 ABIDJAN, AN INCOMPLETE 'TOP-DOWN' METROPOLITAN APPROACH

Abidjan (Côte d'Ivoire) is an example of where metropolitan governance has been strongly shaped by central government in a context of political instability.[44] A 2001 reform gave the city government special status and the city council was replaced by an expanded metropolitan government operating at a higher tier. The new government is now led by a district governor appointed by the President of Côte d'Ivoire. As a result, the metropolitan government manages development and planning for the ten municipalities and three adjacent sub-prefectures. Serious political conflict in 2010-11, however, hampered further progress towards cooperation and, more recently, there are signs of a lack of inter-jurisdictional coordination over urban transport developments.[45] Finally, in September 2012 (after a presidential election), the District of Abidjan was dissolved by a presidential ordinance and replaced by a governorate (an executive body) under the direct control of the national government.

## BOX 2.4 POLYCENTRIC METROPOLITAN GOVERNANCE: DEMOCRATIC CHALLENGES AS VIEWED BY PERIPHERAL CITIES[46]

The legitimacy of metropolitan authorities is still widely debated. They are often accused of being technocratic and unrepresentative of the diverse interests and local contexts they are tasked with leading. The main challenge is ultimately to design metropolitan institutions in a way that does not deprive local territories, their representatives and their citizens of their voice in the decision-making process.

Viable metropolitan institutions, from the perspective of the periphery rather than the core, need to promote a 'collaborative and cohesive' metropolis in which each district or territory enjoys an actual power of 'co-decision' and 'co-production'.[47] The often neglected 'software' of shared coordination rules rather than the 'creation of a new governmental institution (the 'hardware'), so often favoured today, needs to be prioritized.[48]

Given the democratic deficits and substantial costs of hierarchically integrated metropolitan areas, many local governments and, in particular, those of 'peripheral cities' now support a model of polycentric or multipolar metropolises. This is based on a confederated or federated system in which a metropolitan authority co-exists with sub-metropolitan local governments, sharing their competences according to the principle of subsidiarity. This model encapsulates the challenges that territories face at the metropolitan level and promotes a democratic structure that neither marginalizes nor neglects those communities that are regarded as peripheral (see, Box 2.4 bis on the UCLG Committee on Peripheral Cities).[49]

**A democratic and collaborative metropolitan governance system** should observe several key principles: **local democracy**, with elected metropolitan authorities that are **accountable** to an active civil society; **subsidiarity,** with a clear definition of roles and powers between different levels of governments and among local governments; and **adequate resources and financial instruments** to encourage local governments' cooperation (see Section 2.3.1). A fair and sustainable metropolitan governance system, ultimately, is one that both incentivizes polycentric and balanced development, and is capable of ongoing adjustments to avoid lock-in to unproductive and unjust patterns of growth.

### BOX 2.4 BIS UCLG'S PERIPHERAL CITIES COMMISSION AND THE CANOAS DECLARATION (2013)

As mentioned above, UCLG's Peripheral Cities Committee is a reflection and exchange platform for peripheral local authorities which aims to respond to the challenges of metropolitan development across the world. The Committee is based on the work of the World Forum for Peripheral Local Authorities (FALP),[50] a network created to develop a single voice for peripheral areas while promoting the exchange of experiences. During one of its congresses in 2013, the network adopted the Canoas Declaration[51], which states: 'Our commitment to solidarity and polycentric metropolis, is the refusal of an urban civilization of 'ghettos', of all institutional and economic tutelage. It is the affirmation of the role of citizens, of the recognition and visibility of the periphery in the debate and metropolitan construction, so that each and every one lives in a territory that counts and contributes to the common project. To achieve this, there is no standard model or design. The paths to inclusive, solidary, sustainable and democratic metropolises, are to be invented for its citizens'.

When it comes to governance, the Declaration states: 'We represent a diversity of realities, subjectivities, sensibilities that are named urban agglomeration, metropolitan area or region, or simply metropolis. But, whatever is the word used to qualify this reality, we all refuse to be invisible, we are convinced that our voices must be heard to overcome the challenges of our urban world'.

# 2.3 REFORMING METROPOLITAN GOVERNANCE

Whichever metropolitan governance arrangements cities inherit, adapting to economic and social change is a challenge that awaits each and every one of them. Cities are less and less self-contained and their governance boundaries increasingly overlap. A flexible geometry is therefore essential.

Governance systems are increasingly being reformed and upgraded, as national and city leaders lead substantive processes of invention and innovation. The reforms are often motivated by concerns about economic competitiveness, spatial growth patterns, investment deficits and regional coordination failures, and are designed to adjust and update the governance structure to 'catch up' with constant spatial expansion (see Box 2.5 on Ahmedabad).

Some metropolitan areas adapt their governance structures incrementally with administrative boundaries being gradually superseded, or alliances expanded, to adjust to new spatial realities (e.g. Amsterdam since the 1990s). Alternatively, an initial reform may be supported by periodic adjustments that add to or alter the powers held by city or metropolitan governments (e.g. London since 2000).

Other metropolitan areas are the subject of deliberate one-off reforms to solve institutional fragmentation. This may include a merger of local councils under a new executive mayor (e.g. Auckland in 2010), or a land extension to the metropolitan government (e.g. Moscow in 2012). Their successful implementation often depends upon a well-directed transition to allow a comprehensive strategy to be built; collaboration with authorities 'outside' the new metropolitan boundaries, as well as financial or institutional support in future political cycles. Agreement about the appropriate size and scale of the metropolitan authority is usually critical.

## 2.3.1 The financing of metropolitan areas: the backbone of every reform

Financing and funding are two key pillars of metropolitan governance and reforms. Current estimates indicate that global infrastructure investment is USD 2.7 trillion a

year, well below the USD 3.7 trillion needed.[53] Many metropolitan areas operate within a 'low-investment, low-return' equilibrium, and their local governments lack the fiscal resources to invest in the infrastructure required for long-term growth. As a result of central governments' lack of capacity or willingness to invest in metropolitan areas, **fiscal decentralization has become a key agenda to promote sustainable development, equity and liveability**.[54]

Fiscal decentralization has been shown to be strongly correlated with increased prosperity and productivity, so that doubling the sub-national share of spending is associated with an average 3% increase in gross domestic product (GDP) per capita.[55] In many countries, however, fiscal decentralization is still pending. National legislation on metropolitan policy is not always accompanied by mechanisms to finance a metropolitan agenda, and many governments have effectively abdicated responsibility for investment, despite the returns that can accrue to a whole nation when agglomerations are economically and socially successful.[56]

## BOX 2.5 AHMEDABAD, A DISTINCTIVE CASE IN INDIA

Ahmedabad is one of the few cities in India to have a single authority, the Ahmedabad Municipal Corporation (AMC), which takes on all the responsibilities usually assigned to urban local bodies for the area's approximately 5.5 million residents.

Ahmedabad's success has been enabled by strong local governments and fiscal reform which allowed the AMC to become the first municipal body in India to enter the financial markets and issue municipal bonds. The AMC has maintained a strong credit rating, and has sought to eradicate cash losses. It has also reformed the property taxation system, in order to improve efficiency, accountability and transparency. Citizen participation in decisions to invest in transport and slum upgrades has been core to this metropolitan development.

Although challenges still remain, Ahmedabad's experience has shown the ability of a consolidated government, in tandem with civil organizations, to extend access to public utilities and integrate residents into the wider urban community.[52]

### *Metropolitan fiscal challenges*

The main fiscal challenge for metropolitan areas across the world is to elicit enough economic growth to be able to finance their increasing expenditures while, at the same time, organizing a cost-efficient governance of service delivery and inclusive policies. In this regard, many such areas are faced with **inadequate revenue tools and a low retention of raised taxation revenue**, which results in excessive reliance on intergovernmental transfers and equalization measures. When these are unpredictable, metropolitan areas cannot plan (e.g. for large infrastructure) adequately or reliably for the long term.

Table 2.1 **Metropolitan governance reforms can take a wide variety of formats**

Source: Clark and Moonen.

| | | | |
|---|---|---|---|
| **Rearrangements to government authority** | 1 | Creation of metropolitan entity that represents municipalities. | Barcelona, Milan |
| | 2 | Supra-municipal elected government and parliament. | Stuttgart |
| | 3 | Metropolitan authority and directly elected Mayor. | Seoul |
| | 4 | Metropolitan Combined Authority. | Greater Manchester |
| | 5 | Shift from two-tier to single-tier. | Johannesburg |
| **Boundary changes** | 6 | Expansion of the boundaries of the metropolitan municipality. | Istanbul |
| | 7 | New city to absorb expansion. | Mumbai |
| **Metropolitan partnership agreements** | 8 | Regional alliance for international promotion. | Stockholm |
| | 9 | A voluntary metropolitan planning body for economic development. | Seattle |
| **Reforms to local government** | 10 | Reduction in number of municipalities. | Berlin |
| | 11 | Amalgamation of municipalities. | Toronto |

Many commonly available taxes, moreover, are inelastic property taxes that are not proportionate to the increased spending demands in domains such as social welfare or housing.[57] To be sustainable, metropolitan financing systems should allow a return on investment to be able to mobilize a sufficient part of the local wealth. Furthermore, **lack of clarity in the assignment of expenditure and delivery responsibilities** among different tiers of government means that metropolitan areas are often allocated revenue and spending tasks before functional competences are defined, and vice versa.[58]

Metropolitan areas often also have to contend with **net fiscal outflows** whereby the sums reinvested in them through government allocations are disproportionately low compared with the total tax revenue their activity generates. This phenomenon has been widely cited in capital cities such as London and Warsaw. Evidence from countries such as Italy suggests that increasing redistribution from successful urban areas often fails to activate a process of convergence between different regions.[59]

In developing countries, government-imposed **handicaps on the ability to borrow capital** have disincentivized innovation and delayed important infrastructure development.[60] However, given the urgency to invest, pre-financing tools are crucially needed. The most recent study found that only 4% of the 500 largest cities in developing countries could access international financial markets, rising to 20% in national markets.[61] Finally, an endemic **lack of local finance information** can erode accountability, participation and creditworthiness of metropolitan governments.

Although metropolitan areas must continue to advocate for fair and predictable intergovernmental transfers, it is now a key priority for them to capture as much value as possible from the economic growth they generate (see Box 2.6). The development and optimization of value capture mechanisms, the strategic use of public land, local general taxation measures, development levies, planning approval fees, and negotiated investment pools, will be essential to sustainably finance metropolitan projects and services, while ensuring that fiscal decisions remain transparent and inclusive.[63]

### BOX 2.6 THE REFORM OF LOCAL FINANCES IN LAGOS

Since Nigeria returned to civilian rule in 1999, Lagos has developed a much more effective model of metropolitan governance. The Lagos State government has seized the opportunity of stability and managed to raise its tax revenues and use them to restore basic infrastructure and expand public services and law enforcement. The government undertook to increase its own fiscal capacity to meet public demands. Improvements in compliance and accountability have seen annual income and property tax revenues grow from USD 190 million in 1999 to over USD 1.2 billion in 2014. These additional funds have been used to build and maintain roads, clean up the city, improve security and introduce new public transport options such as high-capacity bus corridor systems. Annual capital expenditures nearly trebled in the five years from 2006 to 2011 to around USD 1.7 billion. Access to tax revenue has also given the government a strong financial incentive to promote economic growth. The last two political cycles have seen a more efficient state administration emerge, with high-calibre employees, implementation of tax reforms relying on partnerships with private contractors, and public outreach endorsing a social contract between taxpayers and the state. Lagos's experience highlights the importance of gaining societal buy-in by drawing attention to visible early achievements and by being committed to wide service coverage.[62]

### *The path to metropolitan revenue self-sufficiency*

Revenue self-sufficiency in metropolitan areas largely depends on the local tax base, which should constitute the primary source of revenue. Taxes on business activities can generate significant revenues for metropolitan areas (local business taxes, for instance, account for more than 30% of city revenues in China),[64] and are more responsive to economic growth. Property taxes are a key revenue source that, especially in developing countries, is often untapped due to various constraints (e.g. unrecognized settlements such as slums). The efficient implementation of tax instruments to preserve incentives and attractiveness; the shared coordination of tax collection; as well as the elaboration of fiscal responsibility laws to induce fiscally responsible behaviour and clarify local responsibilities, should all be taken into account as potential tools and innovations in this sector.[65]

Alongside more 'traditional' revenue sources (intergovernmental transfers, user charges, property and income taxes, sales and business taxes), metropolitan governments have been developing new mechanisms to capture future value and enhance the efficiency and accountability of private sector partnerships.

In order to address the gap between cores and peripheries in metropolitan areas, mechanisms of **horizontal fiscal equalization** have been used to support tax revenue-sharing throughout a metropolitan area to deliver combined services or economic development programmes (see Box 2.7).[66] This model of redistribution helps improve equity, reduce competition, and provides a collective fund for investments that can facilitate metropolitan growth.[67]

**Value capture finance** is another type of mechanism for fast-growing cities to retain and reinvest the wealth generated by public investments, supported by strategic public land management and finely-tuned instruments and regulations. Land value capture mechanisms can provide up-front capital that significantly reduces reliance on debt. They require, however, adequate legal regulations to prevent them from distorting social and environmental objectives or deepening spatial and social segregation. Participatory and compensation mechanisms, in particular, are crucial to distribute the enhanced value fairly and resist an excessive financialization of the urban economy.[71] Similarly, many metropolitan areas are finding ways to generate additional savings and **revenues from their publicly-owned land and infrastructure**, adopting a more entrepreneurial approach to their property portfolios,[72] and managing strategic assets through full inventorying, life-cycle costing, and de-risking of sites.

**Municipal borrowing and bonds** allow some local governments to access the capital market, catalyze investment and direct loans, or finance infrastructure up-front. This strategy has a long-standing tradition in metropolitan areas in many developed countries (e.g. the United States). Over the last decade, bonds have been used by metropolitan areas in transitioning and developing countries, such as Bogotá (Colombia), Moscow (Russia) and Johannesburg (South Africa), among others. Diversified bond and borrowing strategies – either municipal or from other sources – are a viable option if local credit markets are deep and private investors perceive the local authorities' risk profile to be sufficiently low.

**Robust Public Private Partnerships (PPPs)**, such as build-operate transfers, concessions and joint ventures, can play an important role in improving the efficiency of service delivery in metropolitan areas. Although some PPP contracts have been unsuccessful or had negative consequences, the risks of failure are reduced when local governments design clear policy frameworks and are fully informed about the sector in question. While PPPs can improve the operational efficiency and economic stability of public services, it should also be noted that they are not devoid of pitfalls and should not be seen as a silver bullet that will solve the lack of financial resources and unmet infrastructure needs.[74] Currently, private investments in basic services are very limited

## BOX 2.7 FINANCIAL REDISTRIBUTION IN METROPOLITAN AREAS

**Copenhagen** is widely considered to have one of the most equitable and efficient metropolitan fiscal equalization systems in the world. Within the Greater Copenhagen area, fiscal equalization is entirely dependent on the municipalities, with no direct grants coming from central government. Wealthier municipalities contribute to poorer ones, resulting in increased equity in investment and service delivery across the metropole.[68] In 2014, 17 municipalities contributed around EUR 250 million to 17 other beneficiary municipalities.

**Tokyo** has also successfully implemented a fiscal equalization programme on a much larger scale. Its metropolitan government levies taxation and redistributes funds between its 23 wards. While it retains 48% of funds to provide collective metropolitan services, the remaining revenue is distributed between wards based on need. Meanwhile, in the United States, **Minneapolis-St. Paul** has also been running a successful metropolitan equalization programme for over 40 years. This has fostered balanced development while preserving local government autonomy. Its success helped inspire other metropolitan areas such as **Seoul** to adopt a similar scheme.[69]

A different example of a redistributive taxation system can be found in **Johannesburg**, where 'pro-poor' national objectives are enshrined in the actual structure of local tax systems, since poorer groups are exempted from land-revenue taxes.[70] The city is also developing a pool fund among municipalities to invest in common projects.

(representing only 5% of global investments), and cover only a limited number of sectors (telecoms, energy, transport and, to a lesser extent, water).[75] Other alternatives, such as Public-Private-People Partnership (PPPPs) (see Section 4.2.3), involving public authorities, private actors and communities, should likewise be considered.

Increasingly, local governments are working together with banks, private partners and local communities to build bespoke funding instruments for policy and service delivery. The co-management of services, pooling of resources, developing complementary local currencies, and the establishment of savings groups to safeguard public goods, are worthy of more attention.[76]

Currently, investment lags well behind the pace and scale of urbanization. The sustainability of metropolitan areas around the world will greatly depend on the acceleration of investment and the rapid construction of alternatives to traditional financial mechanisms and debt-based approaches.[77] A failure to prioritize investment in metropolitan areas will have severe and potentially permanent economic, social and environmental consequences.

## BOX 2.8 INNOVATIVE FINANCING STRATEGIES IN SHANGHAI

In the late 1990s, Shanghai developed an effective approach to urban financing that allowed it to better respond to increasing pressures for new mass infrastructure. In 1997, the merger of all municipal, local and industrial fundraising mechanisms into a single municipal agency, the *Chengtou*, created a one-stop shop for urban infrastructure. The new authority acted as a public real-estate developer, raising enough capital to finance nearly half the city's total infrastructure upgrades during the 1990s and 2000s.

As part of this process, state-owned enterprises (SOEs) acquired land from municipalities cheaply. After a first round of development, the SOEs sold the land or opened up shares at market prices, thereby preserving liquidity and funding the next stages of development. More recently, the centralization and simplification of transport asset ownership has helped the municipality coordinate and integrate the transport network.

Shanghai's model is incomplete, however, and may need a future cycle of reform. Land sales provide only diminishing returns in the long term, due to the declining availability of land and the rising costs of development operations. A structural lack of transparency and information-sharing has also nurtured opposition among peripheral neighbourhoods and districts trying to preserve their tax base and autonomy in service delivery.[73]

## 2.3.2 The impact of reforms

Achieving substantive metropolitan governance and reform is not an easy task. Cultural resistance to institutional amalgamation is widespread, as residents tend to have a deeper sense of belonging and allegiance to localities than to larger conurbations. In addition, local political hostilities; disparities in municipalities' tax and institutional structure; fiscal emergencies at higher tiers of government; and legal disputes around spending and policy powers, are common in derailing or circumscribing processes of reform. Furthermore, evidence from Canada and Australia shows that by no means do all metropolitan consolidations manage to achieve greater public sector efficiency or economic growth.[78]

Metropolitan governance reforms clearly vary in their ambition and scope. Many have only tackled limited issues rather than wider metropolitan challenges. Reforms are rarely perfect and often involve trade-offs. However, although longer-term evaluation of reforms is necessary, it is clear that many reforms have already had positive effects. These include strengthening metropolitan leadership, engaging local governments, improving spatial management, building trust and coordination among municipalities, and creating a culture of innovation and inclusion.

An inventory of good practices for the effective implementation of metropolitan governance should include:

- **broader consultations**, including all actors, to build a credible case for change, supported by robust background research;
- **strong leadership and advocacy**, both through personalities and institutions, to sustain momentum for reform;
- a long-term process of **cooperation and incentive-building by central government;**
- **collaboration and buy-in** from local governments, fostered via concrete projects and initiatives;
- **financial solutions that match the new governance structures** with corresponding investment resources and the promotion of equalization mechanisms within metropolitan areas;

- more integrated and **long-term strategic planning approaches, to include the whole functional metropolitan area** (see also Section 2.6);
- analyses of **the impact on infrastructures and services, to improve economies of scale and access for all metropolitan inhabitants;**
- the development of efficient tools and policies to **support metropolitan economic development, innovation and diffused prosperity within the metropolitan area and its hinterland** (especially by strengthening rural-urban linkages);
- **data openness and data-sharing** to inform and speed up decision-making;
- a system of **incentives and compensations for those that oppose reform or are likely to lose out in the process of resource reallocation;**
- reaching out to citizens, to **foster a shared sense of 'metropolitan belonging'** through cultural and other collective events.

**All reform processes should be supported by capacity-building for metropolitan and local governments**. This involves establishing new institutional settings (e.g. a metropolitan planning department, metropolitan transport authorities, a land management office, economic development agencies, social housing offices, crisis-management and coordination offices). It also necessitates developing appropriate knowledge and tools to manage and monitor metropolitan development, creating integrated cross-sector policies to protect common goods (e.g. natural resources, public space) and collaborating with other actors inside and outside government.

# 2.4 THE CONTRIBUTION OF OTHER TIERS OF GOVERNMENT TO METROPOLITAN DEVELOPMENT

National and sub-national governments (e.g. states, regions, provinces) are critical partners in the development of metropolitan areas, but there are many tensions that underlie these vertical relationships. The role of higher tiers of government in supporting metropolitan areas and delivering reform has often been equivocal, not least because in some cases metropolitan authorities are viewed as potential competitors. A new deal between metropolitan areas and higher tiers of government, which prioritizes longer-term national policies to support metropolitan governance and investment reforms, and attends to the needs and aspirations of smaller and intermediary cities, is now urgently required.

As metropolitan areas grow, they experience side-effects and negative externalities for which national support and adjustments are essential. Some are generated by the metropolitan areas themselves (e.g. transport congestion, stretched housing and labour markets, public services, environmental vulnerabilities and social divisions); others by the siloed nature of national sectoral policies (land-use, economic development, infrastructure, health and education); and some by larger

**A new deal between metropolitan areas and higher tiers of government, which prioritizes the needs and aspirations of smaller and intermediary cities, is now urgently required**

Photo: Mehmet Aktugan - Izmir (Turkey).

regions and the global context as a whole (growing disparities in productivity and prosperity, attraction of investments and international companies, immigration and cultural influence).

Despite these externalities, higher tiers of government are often slow to react to changes in the profile of their cities and to adjust city boundaries or powers to take account of growth. Such practices are politically unpopular and involve substantial adjustment costs and/or political capital. But metropolitan areas rely on central or state government to endorse processes of devolution, decentralization, and metropolitan thinking.

There are several interventions that higher tiers of government can make, and reform processes they can support, in order to improve metropolitan governance, fiscal arrangements and regulatory frameworks. These include:

- Recognition of metropolitan areas: Many **national governments still do not fully acknowledge the role of cities and especially metropolitan areas**, as the primary engines of prosperity in the 21st century. To support the attractiveness of larger urban areas, national governments need to adapt policies to metropolitan challenges. As mentioned above, some countries (e.g. Argentina, Brazil, Colombia, Ecuador and Mexico) have begun to revise the status of their capital cities and/or have started to adopt a less 'spatially blind' approach to metropolitan areas.
- Reform of metropolitan governance: National or state governments are usually the actors with the financial and legislative capacity to promote metropolitan reform. **Adequate legal tools and institutional frameworks are required to foster metropolitan governance that addresses evolving functional agglomerations** and related incentives to promote voluntary inter-municipal cooperation. National standards (such as population thresholds) could be established for identifying areas where metropolitan governance is required – taking into account the specific economic, social, environmental and cultural characteristics of different places.[79] National legislation is also needed to support transparent and accountable local governments and citizens' participation in local decision-making (audit and procurement systems, access to public information, open data, etc.).
- Update and adapt planning and regulatory frameworks: National governments can 'champion' and promote metropolitan areas and certain locations within them.[80] France, Japan and Korea are among those who have adjusted their national planning regimes to shape land-use decisions in their leading metropolitan areas, through subsidies, exemptions or special zones. Updated **regulations can empower local governments to improve land management and control real-estate and land-market speculation in order to tackle social exclusion and spatial fragmentation.**
- Support adequate levels of investment and partnership for services and infrastructure delivery: Many countries have implemented reforms to facilitate the participation of private and community sectors in service provision in recent years. But in some cases (e.g. Latin America), local governments consider legal frameworks relating to tendering, contracts and oversight to be insufficient or unimplemented. Cities need stronger fiscal and regulatory tools and capacity-building support from national governments to engage effectively in complex PPP projects, in order to ensure affordable universal access to public services and the protection of public goods.
- National urban policies (NUPs) that have a clear perspective of metropolitan areas and the interactions among them and with intermediary cities and their hinterlands can foster a stronger, more polycentric system of cities. National departments can also facilitate networks and collaboration between metropolitan areas that are helpful in preventing binary and zero-sum perspectives.

In the future, higher tiers of government should recognize the distinct role of metropolitan areas, and the imperative to create policies and incentive frameworks that are calibrated to tackle metropolitan challenges, and which avoid perpetuating negative or unsustainable growth patterns.

# 2.5
# THE ROLE OF CIVIC AND NON-GOVERNMENTAL ORGANIZATIONS IN THE GOVERNANCE OF METROPOLITAN AREAS

The active engagement and participation of actors outside formal government is essential for metropolitan governance to be effective and legitimate. **There is increasing demand for a democratization of metropolitan governance** that gives a bigger role to local organizations and citizens. Within this, more distributed governance and gender-inclusiveness are also being prioritized to stop the forms of discrimination to which women are still exposed, and to foster their involvement in local decision-making. However, the degree of public participation and inclusion in how decisions are made in metropolitan areas varies greatly. Much is influenced by historical tradition, political culture, social networks, local capacity, and the objectives and activities of metropolitan authorities themselves.

In general, the role of civic, gender and non-governmental organizations in governance structures has been increasing in many parts of the world. Legislative frameworks such as the National Reconstruction Development Programmes in South Africa, or the city statutes in Brazil, have shaped subsequent inclusive urban reforms in metropolitan areas such as São Paulo or Johannesburg. In Europe, many metropolises have adopted regulations to promote participation and transparency (e.g. neighbourhood assemblies in Barcelona, detailed in Box 2.9, and the debates on the *Grand Paris Express* or *Paris Metropole* meetings, among others). There is a strong and growing imperative to ensure that local and metropolitan governments fulfil democratic aspirations, recognize bottom-up initiatives, develop a real shared sense of belonging to the metropolis, and avoid the risks of technocratic metropolitan governance.[81] However, these practices have also raised criticism about the actual room for manoeuvre granted to autonomous bottom-up initiatives. Civil society organizations (CSOs) are thus requesting greater recognition of their rights in line with so-called 'participatory democracy'.[82]

## 2.5.1 Institutionalized forms of 'participatory' democracy: light and shade[84]

In many metropolitan areas, institutions have invited more direct input from citizens.[85] The Voice of the Mayors, published by the afore-mentioned Metropolis to disseminate the vision of metropolitan leaders, and the International Observatory on Democratic Participation (OIDP),[86] gather past experiences and lessons learned from participatory initiatives in metropolitan areas and cities.

Instruments of participatory democracy can create 'virtuous circles' of engagement between citizens and institutions through different mechanisms and channels (e.g. neighbourhood committees and assemblies, open town council meetings, councils for the elderly and youth, referenda, e-democracy, participatory budgets and planning, among others).[87]

**Good metropolitan governance should also create mechanisms to promote women and girls' participation and decision-making in metropolitan institutions**. This means women's leadership at every level of urban governance and active policies to end discrimination. Enhanced women's

### BOX 2.9 THE BARCELONA METROPOLITAN AREA'S TRANSPARENCY AGENCY

The Transparency Agency of the *Area Metropolitana de Barcelona* (AMB) was created in December 2015 to monitor and deliver services related to the administrative transparency of the metropolitan institution. The Agency promotes effective regulations on transparency, right of access and good governance, coordinates metropolitan initiatives, and supports research and training. It also guarantees the availability of information and data on an AMB transparency website portal. The Agency has a consultative and collaborative role in the preparation of protocols and reports for the development of regulations, while reserving the right of access to information, and ensuring the fulfilment of obligations established by the regulations on transparency regarding interest groups. It has also promoted the creation of an Advisory Council on metropolitan transparency, the approval of codes of conduct among senior positions within the AMB, and the establishment of indicators of transparency and good governance in processes of monitoring and evaluation.[83]

representation could guarantee better access to resources under more equal conditions and ensure that public policies address existing gender inequalities. Metropolitan areas making the biggest steps in this area have invested in improving women's safety and security in public spaces, reducing violence against women, and training women to participate in and influence policy. They have also enacted laws and guidelines to make new governance institutions more inclusive.[88]

E-democracy is also changing forms of participation. The concept of e-government, introduced in the late 1990s, fosters the idea of serving citizens by improving their access to public services using new technologies. Over the past two decades, this has become a viable instrument to promote effective, transparent, accountable and democratic institutions.[89] The participation of citizens through digital instruments is a more recent development, but the concepts of 'Civic Media'[90], 'Smart Citizen'[91] and 'Digital Civics'[92] are already gaining ground.

The notion of participation, however, is not a panacea. Some initiatives have been criticized for favouring already privileged social groups, rather than those most excluded from public discourse. In Mumbai, for example, those with class and caste privileges have benefited most from the opportunities offered by participatory democracy (see Box 2.11).[105] In many cities, in fact, participation has gone through a 'gentrification' process, or has been used to strengthen 'clientelism' networks (cronyism).[106] Metropolitan participatory democracy and its instruments should instead involve and engage citizens from the bottom up and throughout the whole decision-making process, as part of its aim to redistribute and reallocate resources.[107]

## BOX 2.10 CITYLABS AND INNOVATION MASSACHUSETTS INSTITUTE OF TECHNOLOGY'S (MIT) SENSEABLE CITY LAB

Many metropolitan areas around the world have invested in CityLabs as a means of making city innovation and 'smart' agendas more inclusive. Some labs (such as the Massachusetts Institute of Technology 's (MIT) Senseable City Lab)[93] have focused on projects that leverage big data for urban solutions. Others (such as Cornellà's CitiLab[94] and Barcelona's 22@),[95] have become flagships for smart city or economic innovation programmes. Living laboratories have also been established to foster the involvement of communities in innovation and development measures.

In South Africa, the African Centre for Cities is promoting CityLab projects in the greater Cape Town metropolitan area.[96] This is dedicated to the creation, measurement and preservation of a healthier urban environment;[97] control and reduction of urban violence and the strengthening of public safety;[98] as well as innovative approaches to housing policy and the delivery of housing services in otherwise marginalized areas.[99] In Mexico City, the municipality has established *Laboratorio para la Ciudad* (Laboratory for the City)[100] as an open-government,[101] technology-driven platform that involves citizenship, especially young people and those engaged in the informal economy. In spite and because of the city's huge size and population, Mexico City is a quintessential living laboratory for civic innovation, creativity-driven policies, social and urban experiments, and so-called 'provocations'[102] to bridge grassroots demand with government action.[103] UN-Habitat's recent initiative, Digital Civics, engages children in City Builder Labs to build public space by playing with the well-known Minecraft game, youth in City Changer Labs to solve urban issues with mobile technology, and citizens of all ages in City Maker Labs to improve quality of life with digital fabrication.[104]

### *Participatory budgets: recent evolutions*

Participatory budgets are often cited as a democratizing instrument that has revolutionized the ability of citizens to become involved in metropolitan governance. This is by making budgetary issues, normally the domain of elected officials, open to everybody. This tool is widely employed around the world today with about 3,000 known initiatives of its kind.[109] The example of Porto Alegre (Brazil), where it was implemented for the first time in 1989, provides compelling evidence of its effectiveness, but also reveals some of its limitations. [110]

Participatory budgets have been criticized for limiting the sphere of engagement of citizens, weakening popular organizations and risking political manipulation.[111] To address these issues and create other channels of engagement, new practices have been developed.

For example, in Canoas, a city on the periphery of Porto Alegre, 13 dedicated instruments have been put in place in the past eight years to support citizens' participation (with more than 185,000 inhabitants involved). These are to gather information about collective demands (participatory budgets, neighbourhood committees, assemblies on commercial areas and public services); to gather information about individual

demands (public hearings and engagement programmes such as *Mayor in the Street* and *Mayor in the Metro*); collaboration tools (such as the *Agora Network*); coordination (e.g. the *Social and Economic Development Council* or the *Council House*); and strategic development (City Congress, multi-year participatory and sectoral plans).

Already recognized at the international level by the International Observatory on Democratic Participation (OIDP), these tools mix online and offline channels for social dialogue, expanding citizens' engagement in both expenditure planning and revenue discussion.[112]

The integration of multiple channels of participation can be seen as a way of diversifying engagement, accommodating different interests and increasing the number of participants, as seen in cities such as New York, Johannesburg and even some cities in China.[113] In Seoul, for example, the metropolitan government has recently promoted a Citizens' City Hall Programme that combines an open-door policy for ideas and opinions with on-site visits, allowing the public administration to discover solutions not from behind a desk but, rather, through direct community engagement.[114]

In complex metropolitan areas, however, there are specific challenges. These include: the growing distance of such institutions from the daily life of citizens; the scale and differentiation of the problems to be solved; and the need to harmonize decisions coming from different local or intermediate governments. These are all factors that risk 'diluting' or 'polluting' citizens' perceptions of processes of social dialogue as real spaces for direct participation with guaranteed outcomes. But numerous experiments are contributing to 'scale-up' citizen participation beyond the municipal level.[115]

The concept of participation is changing, moving beyond simple consultation, to create a space that will **eventually rebalance the distribution of decision-making powers in society**. This requires local governments to respect some basic conditions, such as the empowerment and autonomy of social movements and local stakeholders. 'Enablers' of citizen engagement need to be simple, reciprocal, representative, inclusive and people-oriented. They need to take privacy rights and citizens' feelings seriously, encompass transparent and shared rules, and endow citizens with real decision-making powers. Furthermore, local governments must develop an increasing number of participatory processes, online and offline, which are balanced and implemented with regularity and continuity.[116]

### BOX 2.11 NEIGHBOURHOOD ASSOCIATIONS' PARTICIPATION IN METROPOLITAN GOVERNANCE: THE EXAMPLE OF INDIA'S METROPOLISES[108]

In the past few years, a number of Indian metropolitan areas have launched participatory programmes to engage citizens, NGOs and community bodies in a quest to improve city infrastructure and economic development (Bangalore, Delhi and Hyderabad, for example, underwent a number of forms of 'e-governance'). Their experience of neighbourhood associations highlights the ambiguities of participatory democracy and its processes. In the last 20 years, these associations have become a legitimate interlocutor in urban governance and helped renew and enhance India's local democracy. Despite concerns of democratic deficit and elitism, they have made public authorities in metropolitan areas more transparent, accountable and responsible, and have allowed the middle classes to mobilize politically. However, the effectiveness of neighbourhood associations as a representative 'voice' is in question. They have largely favoured the privileged against the poor and the needs of the most disadvantaged have rarely been defended. It is essential, therefore, that mobilization and inclusion of individuals and collectives reflect the high degree of social diversity of metropolises, so that all interests and voices are considered in the decision-making process.

## 2.5.2 Civil society initiatives[117]

Besides these instruments, other forms of democratization, initiated by civil society in its broadest sense, play an increasingly important role in metropolitan governance. Many local governments have decided to work with existing rather than create new citizens' movements, as a more sustainable way of engaging communities directly (e.g. 'neighbourhood tables' in Montréal).[118] Thus, the role of citizens' associations committed to the improvement of living conditions and housing policies, and the promotion of the 'Right to the City', is now more visible than ever in many metropolises. This is happening both in highly urbanized and more recently urbanizing countries.

There is plenty of evidence of the power and dynamism of such movements. For

example, an informal grassroots 'shadow ministry' of housing has been created in Egypt to produce critical information for housing policies.[119] *Un Centre Ville pour Tous* ('A City Centre for All') in Marseille (France), has supported neighbourhood renovation without any population displacement. The NGO SPARC (Society for the Promotion of Area Resource Centers) has in the past led various initiatives in Mumbai's slums to avoid evictions. Cooperatives of architects and neighbourhood committees have joined forces in Caracas (Venezuela) to regularize urban plots.[120] Johannesburg has promoted the 'Josi@work' initiative for 'co-production' and delivery of services by the municipality and grassroots associations.[121]

These empowerment processes are catalyzed by local associations, with or without the help of NGOs, whose room for manoeuvre and negotiating power improves whenever they build on national coordination. They tend to rely extensively on community leaders who defend an approach to collective action that is not 'clientelistic'. Slum Dwellers International (SDI), with a presence in 33 countries, has been able to develop a strategic alliance with an Indian national women's organization active on microfinance (*Mahila Milan* – 'Women Together') and SPARC.

This has included women and pavement dwellers at the core of its governance, leading to a number of initiatives that range from resistance to eviction to savings groups, the building of new social housing units and self-management of planned displacements (as in the case of slums sprawled along railways). One example of its success is that it has managed to expand its savings group network to 65 Indian cities.[122]

**There is growing consensus that the diversity and skills brought by immigrants are a driving force for social, cultural and economic development in metropolitan areas**

### 2.5.3 Migration, integration and welcoming metropolitan areas

There is growing consensus that the diversity and skills brought by immigrants are a driving force for social, cultural and economic development in metropolitan areas. The governance of migration is an increasingly complex and pressing task for those areas that absorb domestic and international populations. While national governments decide on the overall framework for immigration, responsibility for attracting, retaining and integrating immigrants is usually shared by municipalities and metropolitan governments. Non-governmental actors are increasingly active in supporting this process, especially where interventions are needed to reduce social division and discrimination.

Collaborative governance between CSOs and local governments to integrate immigrants has proven effective in many metropolitan areas. In Vancouver, for example, the Multicultural Advisory Committee has provided a bridge between civil society and municipal governments, enabling community capital.[123] Municipal administrations and community services have also partnered in Stuttgart as part of the city's Pact for Integration that has focused on equal opportunities and the role of cultural diversity as a community and economic asset. Since 2000, the Greater London Authority (GLA) has had an equality policy to fight cultural, social, and economic exclusion affecting London's immigrants, minorities and women, with a strong inter-sectional perspective.[124] Many cities are developing proactive policies to facilitate the integration of immigrants.[125]

**A network of metropolitan cities in Europe, including Barcelona, Madrid, Paris and others, have mobilized to become 'Cities of Refugees' in answer to the humanitarian crisis of refugees and migrants coming from Syria and other regions**.[126] As regards internal migrants, the municipality of Chengdu, China, adopted a pioneering migrant inclusion policy allowing them to express their concerns at the community level, including about public resource allocation. Other cities are following suit.

## 2.6 STRATEGIC PLANNING: A GOVERNANCE TOOL FOR PARTICIPATION AND INTEGRATED METROPOLITAN MANAGEMENT

An important stimulus to positive reforms and cultural change in metropolitan governance comes in the form of strategic planning. This is within the overall objective of promoting integrated development by combining urban policies with economic development and management strategies. In many larger metropolitan areas, strategic plans have become important tools to achieve a longer-term framework for managing their development.

This is predicated on a shared assumption that housing, transport and sustainability policies cannot be adequately addressed in a short-term four to six year electoral or investment cycle. It also

seeks to analyze and develop the metropolitan area as a whole as a living system, rather than just the sum of its individual jurisdictions. In principle, the strategic process allows cities to build a vision and an overarching framework, promoting the integration of mutually reinforcing initiatives and actions.[127]

The preparation process engages many actors, promotes dialogue, and puts metropolitan issues on the agenda of key decision-makers, which can contribute to the strengthening of metropolitan governance. It offers an opportunity to plan collaboratively across the many territories that share a functional metropolitan geography, preserving a participatory approach that includes local stakeholders and civil society. Its impetus should go beyond official political mandates and synchronize activity between local governments, as well as with the private sector, civil society and key regional institutions.[128]

Different metropolitan areas, ranging from advanced and high-income metropolitan areas to large megacity agglomerations, to medium-sized metropolitan areas (see Table 2.2), implement strategic planning to address their particular local constraints.

**Leaders need to move away from fragmented sector-specific decision-making to a more strategic approach that takes into account the systemic tensions between inclusion and sustainability and the necessity for growth**. Those with a shared, overarching vision, undertaken in an inclusive way, underpinned by strong urban governance,

Table 2.2 **Examples of strategic planning approaches at the metropolitan level.**
Source: Clark and Moonen.

| City | Strategic plan | Year last updated | Target date | Areas of focus |
|---|---|---|---|---|
| **Auckland** | Auckland Plan | 2010 | 2040 | Transport, housing, liveability, young people. |
| **Barcelona** | Barcelona Vision 2020 | 2010 | 2020 | Entrepreneurship, research, transport. |
| **Dar es Salaam** | Master Plan | Approval process | 2032 | Spatial structure, transport, density. |
| **Lima** | PLAM 2035: Metropolitan Urban Development Plan for Lima and Callao | 2015 | 2035 | Budget planning, project structuring, legal tools, single transport authority. |
| **London** | London Plan | 2015 | 2031 | Regeneration areas, town centres, transport. |
| **Melbourne** | Plan Melbourne | 2014 | 2050 | Jobs and investment, housing choice, governance, water, liveability, transport. |
| **Nairobi** | NIUPLAN: Nairobi Integrated Urban Development Master Plan | 2014 | 2030 | Decentralized CBD; railway development; water distribution network; storm water drainage system. |
| **New York** | Fourth Regional Plan | 1996 (2017) | 2040 | Parks, waterfronts, open spaces, transport projects. |
| **Paris/Île-de France** | Île-de-France Regional Master Scheme | 2013 | 2030 | Planning, density; economic development; housing; environment; mobility/transport; energy; equipment; services; natural and technological risks; heritage. |
| **Rio de Janeiro** | Strategic Development Plan of Integrated Urban Metropolitan Area | 2015 | 2030 | Universal sanitation transport integration and electronic card; information system between local governments to avoid natural disasters; broadband access; tax incentives. |
| **Riyadh** | MEDSTAR: Metropolitan Development Strategy for Arriyadh Region | 2003 | 2023 | Road network traffic management plan; King Abdullah Financial District suburbs; new sub-centres. |
| **Seoul** | Seoul 2030 | 2009 | 2030 | Citizen participation, equal opportunity, jobs, culture, sustainability. |
| **Shanghai** | Shanghai 2040 | tbc | 2040 | Human-oriented, green and innovation-led development. |
| **Tokyo** | Creating the Future: The Long-Term Vision for Tokyo | 2014 | 2020 | Ageing society, disaster resilience, economic zones. |

institutional coordination and broad coalitions that support and ensure continuity of execution and implementation, are better positioned for success. A long-term blueprint is needed that can be turned into granular, short-term actionable plans and responds well to local economic and social change. When these factors are in place, there is the potential to achieve otherwise difficult tasks: preventing peripheral areas or population groups from becoming permanently excluded from access to jobs, prosperity and social capital; integrating land policy and infrastructure provision; promoting mixed-use neighbourhoods; preserving cultural heritage and identity; enhancing energy efficiency; and promoting compact and polycentric urban spaces.[130]

Nevertheless, not all strategic plans are successful, in their formulation and implementation. Development priorities in their each metropolitan area are often contested and there is often the risk of certain government and investment interests having a negative effect on and jeopardizing meaningful citizen participation. Certain public authorities have, in fact, tended to prioritize plans that are primarily driven by economic development objectives, so as to position metropolitan areas favourably in terms of global competition, ignoring social and environmental dimensions. Similarly, citizens' participation in the elaboration, management and monitoring of urban strategies will often be limited to a consultative role (public surveys, workshops, forums and polls) as the decision-making process is mostly controlled by political and administrative authorities.[134]

Many cities – Singapore, London, Mumbai, Cairo,[135] Algiers[136] and Brussels[137] – have developed urban strategic planning documents, often with the support of external groups of experts, aimed at engaging the business community to support the metropolitan economy and building new alliances to respond to global competition.[138] But some of these strategies have elicited criticism from civil society and other social actors due to the limited extent of consultation.

However, in entities as institutionally crowded and socially imbalanced as metropolitan areas, the strategic planning process is still one way to engage and enrol all governments, institutions, businesses, community bodies and citizens in a common project of governing the metropolitan space.

In the future, strategic planning can contribute to the improvement of governance, legal and social mechanisms that lead to effective urban policies and their enforcement in metropolitan areas. The potential dividends include: **simple, effective legislative and regulatory frameworks** that are consistent from the top down, from central governments to the most proximate local authorities; strategic visions cascading into feasible and actual implementation plans; **inter-agency cooperation and cross-level policy consistency; and knowledge-sharing tools to guide and inspire**, rather than prescribe and limit the potential of strategic urbanism for metropolitan areas.[139] Strategic plans present a policy opportunity whose potential, in most metropolitan areas around the world, can be unlocked by ambitious and inclusive local governments.

## BOX 2.12 TWO EXPERIENCES OF STRATEGIC PLANNING

**Johannesburg's strategy for 2040**

Since 1999, Johannesburg has sought to create a strategy in order to build its institutional foundation, rethink the nature of local governance and create a successful city that meets the needs of its citizens and other stakeholders. The Joburg 2040: Growth and Development Strategy (GDS) was developed in 2011 and the new political leadership breathed new life into the strategic process. Joburg 2040 GDS is both an aspirational document that defines the type of society Johannesburg seeks to become by 2040, and a long-term planning instrument with a set of strategic choices to guide the city's development trajectory. It lays the foundation for multilevel, multi-scalar and integrated responses to the city's urban challenges and encapsulates the long-term perspective on urban development into succinct outcomes and outputs aimed specifically at achieving smart and inclusive growth by 2040.[131]

**Local democracy and planning in São Paulo, Brazil**

The city of São Paulo has a new master plan, approved on 30 June 2014 and enacted as a new law on 31 July the same year.[132] This provides a number of guidelines for the development of the city in the next 16 years. Together with public hearings, meetings and workshops that were part of a comprehensive participatory process, the Municipal Department of Urban Development (SMDU) launched the digital platform Gestão Urbana ('Urban Management'). This allowed greater access to data, and provided innovative participatory tools, such as an online proposal form, shared map and collaborative draft bill for citizens to post specific comments and suggestions for each article. This process was agreed, from the outset, with civil society and the Municipal Council of Urban Policy (CMPU). In total, 114 public hearings were carried out, with the participation of 25,692 people. In addition, 5,684 proposals were made in meetings and workshops and another 4,463 suggestions were sent using digital tools.[133]

# 3.

# ECONOMIC DEVELOPMENT IN METROPOLITAN AREAS

Metropolitan areas concentrate an unprecedented share of the world's wealth, business activity and innovation.[140] The GDP of certain metropolises is higher than some nation states. Tokyo, New York City, Los Angeles, Seoul, London and Paris, for example, would all rank among the world's 30 largest national economies.[141] Larger metropolitan areas, in particular, have the potential to help national economies become more globally connected and productive, and in principle they are able to diffuse multiple benefits across national urban systems through enhanced connectivity, economic specialization and cooperation. To realize this, metropolises are increasingly tempted by global competition to attract business and investors through the promotion of prestigious investments or global events. At the same time, however, these strategies expose the urban fabric and citizenship to significant tensions, creating substantive negative externalities, with often overlooked social and spatial effects (e.g. exclusion and gentrification) and dramatic environmental impacts.[142]

This section reviews some of the key economic dynamics at play in metropolitan areas, and the need for economic development strategies that both harness the positive externalities and address the negative externalities of their inputs. It also critically assesses the consequences of growing competition between cities in the current cycle of globalization, and examines the potential for alternative approaches oriented around 'attractiveness', to reconcile the need for prosperity with the wider goals of justice, inclusion, environmental protection and territorial cohesion. The environmental dimension will then be addressed specifically in Section 4 of this chapter.

## 3.1 METROPOLITAN ECONOMIES, AGGLOMERATION AND POSITIVE EXTERNALITIES

Metropolitan expansion is, to a certain extent, the spatial and sub-national expression of globalization processes.[143] Economic development has become more complex with increased globalization, economic liberalization, population mobility and technological evolution. Jobs, workers and capital have become highly mobile and increasingly concentrated in metropolitan areas. Global foreign investment has more than trebled since 1996, when Habitat II was convened, from USD 350 billion to well over USD 1 trillion, and the share of inflows to developing countries has increased from a third to more than half of this amount.[144] Numerous economic sectors are becoming globally traded, from established sectors such as financial and professional services, to newly internationalized sectors such as creative industries, clean technology, higher education, engineering and architecture.[145]

The close links between metropolitan growth and globalization have given rise to a whole literature that attempts to analyze these phenomena and describes, at the same

**Economic development has become more complex with increased globalization, economic liberalization, population mobility and technological evolution**

time, the development of large cities that, while well interconnected at the global level, seem increasingly disconnected from their own hinterlands.[146]

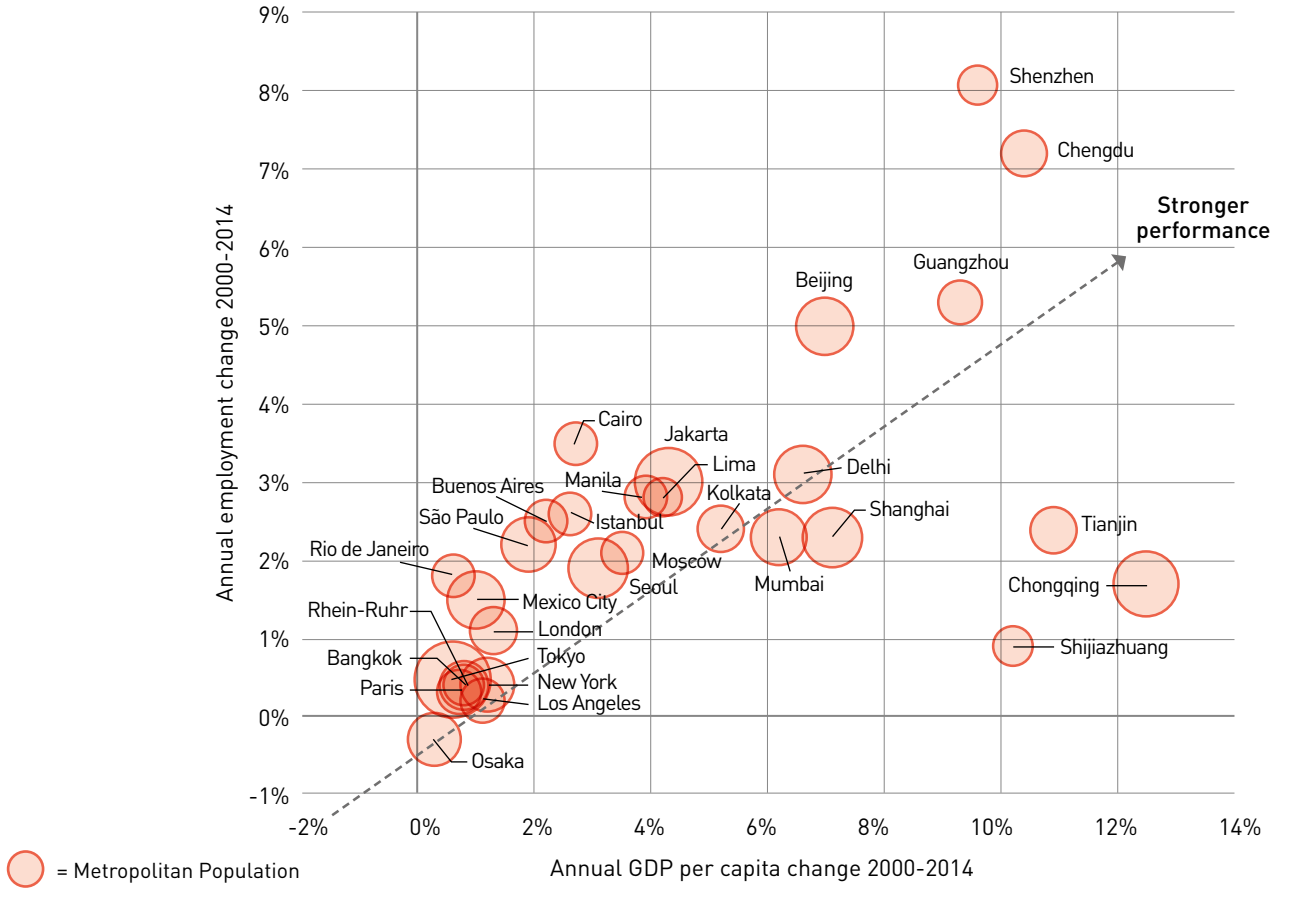
However, metropolitan areas are also acknowledged as 'engines of growth', as they provide critical advantages and externalities to their national economies. Worldwide, approximately 60% of metropolitan areas outperformed their national economies in terms of job creation in 2014, in line with previous figures.[147] Metropolitan areas are especially important drivers of national growth in the Asia-Pacific region and in Northern and South America, but the trend holds in every region. Global evidence indicates that where urbanization has been welcomed and planned for, rather than resisted and unplanned, it has been central to the economic transformation of many countries in recent decades. The BRICS nations are an example of where the concentration of population in large cities has tended to improve prosperity and living standards, notwithstanding ongoing imbalances and inequalities.

Graph 3.1 highlights the varied pace of economic and employment growth in metropolitan areas since 2000. It emphasizes the exceptionally fast growth of many Chinese metropolitan areas, including secondary cities such as Shenzhen, Chengdu and Chongqing, as well as several in India and South-eastern Asia. By contrast, many high-income metropolitan areas have been stuck in a low-growth phase, including Osaka, Paris and Los Angeles. Yet the variations in performance and outcomes both within and between nations and regions highlight the important role that local economic assets and approaches play in the global economy.

Metropolitan areas appear to offer many *prima facie* advantages to national development. The higher tax yields they obtain from higher value-added industries (e.g. finance, trade,

Graph 3.1 **Average annual GDP per capita and employment growth of the 30 most populous metropolitan areas, 2000-2014.**

Source: Brookings Institution and Oxford Economics.



ICT, etc.) can help the whole country regulate potential imbalances in other lagging regions. Their activities often stimulate the expansion of supply chains throughout the region and national territory. The international firms they host engage in direct and indirect knowledge exchange with local firms, and often increase access to new investment opportunities. Metropolitan areas also function as transport and infrastructure hubs, and therefore as gateways for tourism, communication, and commerce. Moreover, as part of what is known as the 'escalator effect', the services and industries in which they specialize provide diverse work and training opportunities that foster the upskilling of a workforce that may, eventually, transfer their acquired expertise to intermediary cities and/or rural areas. Finally, especially in the case of 'global' cities, that often grow into world-renowned financial and cultural centres, their social and cultural assets can improve a whole nation's 'brand' by association with the reputation of their largest and more dynamic metropolitan areas (e.g. New York, London, Paris, Tokyo, Shanghai, Sydney and Toronto).[148]

The spatial patterns of economic activity within metropolitan areas tend to change during successive economic cycles. There is often concern that economic demand is focused exclusively in the central core. But in other cycles, many metropolitan areas experience demand around airports, station termini, hospitals, university campuses, science parks, conference centres, and many other lower-cost and higher-yield sites further out from the centre.[153] The result of these different processes is that metropolitan areas have become more economically interdependent, and collective policy solutions have become more important.

Because metropolitan areas tend to concentrate higher-level economic and productive functions, however, **a pattern of winners and losers tends to emerge within them**. Core areas of central cities, for instance, usually remain attractive for certain activities, but many other parts of the wider metropolitan area are unable to attract public or private investment and lack connectivity with the main job locations. Income inequality is higher within big urban areas than elsewhere.[154] Preferences among younger adults for urban living, and the decline of manufacturing and distribution, particularly in developed countries, mean that the industrial make-up of new jobs is shifting in favour of economic activities that are already disproportionately located in central cities.[155] The resulting polarization is one of the principal negative externalities that arise from increasingly international demand for metropolitan areas.

### BOX 3.1 THE EFFECTS OF AGGLOMERATION[149]

The ability of firms and households in metropolitan areas to draw on a common pool of resources, to match up with jobs, and to learn from regular face-to-face contact, is a well-established feature of 'agglomeration economies'.[150] Although existing models to explain agglomeration remain far from complete, it is widely accepted that agglomeration enables efficient logistics, advanced clustering, access to diversity, and entrepreneurial creativity. Agglomeration effects have been widely measured in high-income metropolitan areas, but are now also being observed in the BRICS and other emerging countries. They are seen as being especially significant in metropolitan areas with a high share of knowledge-intensive jobs.[151] There is also increasing evidence that metropolitan areas located near to each other generate significant benefits from this proximity. Cities that belong to a network or 'system' of nearby cities are able to 'borrow size' and acquire higher-level metropolitan functions such as firms, international institutions and science. Yet there is no simple law of agglomeration or critical mass which guarantees that metropolitan areas become economically successful. 'Diseconomies' of agglomeration can and do occur when urbanization is poorly managed, when there is a lack of continuity and coherence in the way metropolitan institutions implement policies, and in particular when infrastructure is not financed or delivered to match growth demand.[152]

## 3.2 NEGATIVE EXTERNALITIES AND THE CONSEQUENCES OF 'COMPETITIVENESS'

Over time, the imperative to compete in nationally and globally traded sectors has visible (and often unintended) consequences for labour markets, spatial development and social bonds in metropolitan areas. The financialization of urban economies has intensified the competitiveness agenda,

increasing inequalities between and within metropolitan areas.[156] The deregulation of financial markets, institutional investment (by insurance firms, pension funds, private equity, etc.) into fixed assets; the privatization of public spaces and services; and the securitization of mortgages and municipal bonds, have substantially reshaped metropolitan economies, creating new and entrenched challenges.[157] Foreign investments in urban properties are expanding exponentially (from USD 600 billion in 2013 and 2014, to USD 1 trillion in 2014 and 2015) in metropolitan areas in all regions (London, New York, Shanghai, Shenzhen, Tokyo, Sydney, etc.).[158] Since the financial crisis of 2008 and its aftermath, the financing of cities has evolved in many Western metropolises, moving away from traditional forms towards investments in highly profitable areas and via financially-leveraged strategies. This has promoted an increased level of overall debt, particularly in real-estate, and associated financial instability and economic asymmetries in urban economies.[159]

**The financialization of urban economies has intensified the competitiveness agenda, increasing inequalities between and within metropolitan areas**

Despite the importance of economic development and competitiveness in metropolitan areas today, these imperatives can – and often do – generate significant negative externalities with adverse effects on sustainable urban development.

These challenges exist even for highly globalized metropolitan areas – such as London, New York and Paris - which have been very successful at increasing their productivity, attracting international firms and appealing to highly-educated workers, but with important social and spatial consequences. One common symptom in these cases is monocentric economic development that struggles to create new centres of economic activity. Thus, jobs based in the periphery are often dominated by low-paid industries or local services for residential commuter populations, and spatial fragmentation leads to a failure to efficiently connect people to jobs.[160] As a result, in many developed metropolitan areas, there is an increased social segmentation, with different forms of gentrification and 'ghettoization'.

For metropolitan economies in emerging or developing countries, the externalities are different in type and scale. GDP per capita growth has averaged 6% per annum since 2000, compared to 1% in developed economies.[161] But this strong performance often belies profound challenges of unemployment and under-employment, poorly integrated migrants, and increased residential and labour market segregation, that result in extensive expansion of informal economy and settlements.

Globally, income inequalities tend to be higher within large urban areas than elsewhere (including in developed countries), aggravated by a slowdown in job creation.[162] Employment in developed metropolitan economies has grown at well below 1% a year since 2000[163] and, in 2012, 45% of OECD metropolitan areas had an unemployment rate above the national average.[164] In developing metropolitan areas the average job creation rate has fallen to below 3% per year.[165] Loss of jobs in key traditional industries, and widening income disparities are all driving a paradigm shift towards shared and coordinated approaches to metropolitan economic development.

### 3.2.1 Polarizing effects within metropolitan areas[166]

A primary objection to the competitiveness agenda within metropolitan economic development policies is its link with increased socio-spatial inequalities. Financial reasoning and objectives may differ from purely urbanistic ones, such as social diversity, the fight against urban sprawl, or the quest for a consistent blend of accommodation development, economic activities and infrastructure.[167] Territorial policies to attract investment in metropolitan areas are often accompanied by planning and 'flagship' regeneration projects that directly and indirectly accelerate gentrification and marginalization of socially fragile communities. This can be compounded by a lack of financial resources and weak planning and public policy tools to manage the process of redevelopment in an inclusive way. An imbalance in capacity and resource between public and private sectors can result in projects being selected for short-term profitability rather than long-term value creation.[168]

The rise of privately financed 'mega-projects' – office buildings, shopping malls, stadia, casinos – has also stimulated a fragmentation of technical and infrastructural systems and large gaps in network quality and coverage. **This phenomenon – sometimes called 'splintering urbanism'[169] – makes it very difficult to organize metropolitan areas around the provision of coherent, equitable and standardized services**, such as water, energy, transport and communication

infrastructures. One acute manifestation of splintering urbanism is the rise of gated communities and private enclaves, which has spread within different metropolises in both developed and developing countries. Linked to the polarizing effect of economic globalization, these privatized spaces threaten aspirations for collective transit, health and education systems, and universal access to cultural resources.

Phenomena of 'urban polarization' result in more inequality between economically prosperous areas. This is characterized by a demand for a highly qualified workforce in certain usually centric zones whilst populations in other zones, despite their qualifications, are disadvantaged by the progressive removal of available jobs from their areas of residence – accompanied by growing unemployment and poverty. These evolutions are exacerbating 'spatial mismatches' between jobs and houses.[170] Inflation in land and property markets adjacent to these areas of intense economic activity causes workers to relocate further away from workplaces, creating dislocation for established industries that are less productive or which have high space demands – particularly for SMEs. This can also have negative effects on the fragile sectors of the informal economy, for example through the expulsion of street vendors from redeveloped areas. This logic, for instance, has led to the dismantling of the textile sector in the centric zones of Mumbai that had become unaffordably expensive. **Such imbalances can foment a number of social risks: alienation, social violence, deteriorating living conditions, sprawl, insecurity and environmental vulnerability**.

There are also many examples in developing economies where competitiveness policies have not led to increased economic attractiveness. In Cairo the expected multiplier effect after the transformation of the urban stock to promote the local productive fabric has not paid off, and policy instruments designed to monitor progress are still lacking. Land-use and property deregulation to attract local and foreign investors since the mid-2000s has not created a more competitive or productive economy.[171] Elsewhere, competitiveness initiatives in cities such as Lagos, Nairobi and Mumbai have been beset by leadership, coordination and infrastructure delivery failures. For these and other reasons, some observers argue that competitiveness objectives are incompatible with metropolitan development goals, such as social diversity, compact development, housing affordability and mixed-use living environments.[172]

### 3.2.2 Externalities in the wider nation

In many countries where metropolitan areas have expanded, analysts also observe a number of costs to the nation as a whole that may offset the positive externalities they bring. Successful and attractive metropolitan areas, for example, can drain other regions of their talent, intensifying the disparities in skills within a nation. Enhanced transport links to metropolitan areas appear to funnel demand towards them, damaging the growth potential of other areas. This can be compounded by the fact that metropolitan authorities have larger balance sheets and so are able to attract a disproportionate share of bankable investment projects, including with national governments.

There are also risks that monetary and regulatory policies can (sometimes inadvertently) lean towards the needs of metropolitan areas, at the expense of the rest of the country.[173] In some cases, the government policies and laws are weighted towards addressing rapid urbanization in metropolitan areas, leaving limited public resources for regional and rural areas. This is visible in the effects of housing policy in some countries, for example, where the unequal structure of the housing market is viewed to be a deterrent to labour migration between different regions. Finally, although metropolitan areas usually generate a higher proportion of national tax revenue and are net donors to national government treasuries, fiscal redistribution may not be viewed as enough to tackle the ever-growing welfare needs in other regions. This debate is prominent in cities such as London, Moscow, São Paulo, Tokyo and Warsaw.[174]

The extent to which all these negative externalities are real or perceived, however, is widely debated. What is clear is that metropolitan areas often need to take account of some of the perceived biases, and collaborate in order to amend them through integrated metropolitan governance, with policies and interventions that strengthen the collaboration with their hinterlands and support a more balanced urban development throughout the country.

**Metropolitan areas often need to take account of some of the perceived biases, and collaborate in order to amend them through integrated metropolitan governance**

# 3.3 IMPLEMENTING URBAN STRATEGIES FOR METROPOLITAN ECONOMIC DEVELOPMENT

Given the externalities that arise both within and beyond metropolitan areas, local and metropolitan governments are having to take a comprehensive and cross-cutting approach to their economic strategies to create jobs and support private sector investment while ensuring sustainability and quality of life for local residents.

When designing their economic development strategies, most metropolitan areas face similar challenges: a need for more coherent systems, rules and practices; capacity to attract employers and investors; citywide mechanisms for inclusive spatial planning; transport regulation and the promotion of quality of life; additional capital spending to sustain and improve key infrastructures; reduced competition and duplication among neighbouring municipalities and districts; the development of a skilled workforce that allows businesses to expand; and additional support from higher tiers of government. These tasks are **not conventional service delivery activities**. They involve strategic intervention to support non-governmental institutions and the wider labour market, and **often require new arrangements and organizational innovation across a metropolitan area.**

Metropolitan approaches to economic development not only aim to improve productivity, deliver hard infrastructure projects, and attract and retain a highly educated workforce.[175] They also adopt tactics to facilitate corporate investment, correct market inefficiencies (e.g. skills, finance deficits), become efficient and differentiated in their dealings with firms, and build capacity to foster entrepreneurship.[176] These local climate factors can yield widely divergent outcomes for metropolitan areas. For example, San Francisco and Los Angeles metropolitan areas had approximately equal economic performance in 1970, but today San Francisco has a 30% more income per capita advantage.[177]

Leaders in metropolitan areas observe the limitations of previous approaches, including in Canada, South Africa and the United Kingdom, among many others.[179] Despite financial and institutional constraints, there is increasing recognition that economic development is **a partnership rather than a top-down activity** and that the outcomes become apparent over business cycles (12 to 15 years) rather than electoral cycles (three to six years) of governments.[180] Economic development is more effectively orchestrated through the **combined efforts of local governments, chambers of commerce, development agencies, infrastructure and utilities providers, financial institutions, and other tiers of government, all in tandem with citizens**. Without this partnership, there are clear risks that growth-oriented projects will not deliver inclusion (e.g. through increased social housing or decent job creation) and, conversely, that initiatives to foster social development may not address barriers

## BOX 3.2 THE VISION OF THE WORLD ECONOMIC FORUM: LESSONS ON CITY COMPETITIVENESS[178]

Based on case studies of 33 cities from all regions and levels of development, a 2014 report by the World Economic Forum elicited four general lessons on city competitiveness, which cities themselves should grasp and then experiment with new rules and reforms:

- **Institutions**: The governance of cities requires leadership, long-term vision and empowered, well-coordinated municipalities.
- **National and local policies**: Cities rely on robust and fair macroeconomic policies, national openness to trade and foreign direct investment (FDI), flexible labour markets, efficient taxation, transparent domestic business regulation and tools to protect the most vulnerable, but cities should also develop their own policies on for example, FDI, trade, tourism and attractiveness.
- **Hard connectivity**: Cities must find a good balance between 'under-planning' and 'over-planning', plugging hard infrastructure gaps and making intelligent infrastructure choices that favour urban density and efficiency.
- **Soft connectivity**: Cities must promote social capital through investment in education, digital infrastructure, cultural and recreational facilities, and quality of life.

Table 3.1 **Metropolitan economic development versus local economic development.**

| | Local economic development | Metropolitan economic development |
|---|---|---|
| **Skills** | Single sector approach. | Integrated approach to education, housing, public health, business framework. |
| **Assets** | Local stand-alone companies and institutions. | Recognition and promotion of all assets in all municipalities; internal and external mobility. |
| **Complementarities** | Weak internal collaboration within metropolitan area. Risk of zero-sum substitution or displacement. | Strengthened cooperation within metropolitan areas and complementarities within national economies and with international actors. |
| **Target sectors** | Local sector approach. Potential for unintended spill-overs. | Diversified set of sectors that span the metropolitan area. |

to economic growth. Table 3.1 provides a simplified schema of a joined-up perspective for economic development.

**Not all metropolitan areas have the same economic development priorities**. For established and high-performing metropolitan areas, the focus is often to retain competitiveness and support new innovations and technologies. For those that are de-industrializing or modernizing their economy, attention is paid to participating in new niche markets and investing in not only physical but also human capital development (see Box 3.3 on the Global Cities Initiative). For a majority of metropolitan areas, there is a priority to develop networks between stakeholders and improve relationships and opportunities for SMEs.

Metropolitan economic development initiatives are more difficult to execute in many developing countries because of weak framework conditions, uncompetitive local industries, and other demands on limited resources. Where they have been attempted (for example in Curitiba, Durban and Shanghai), there are signs that suggest they can build capacity and support smaller domestically focused enterprises in emerging industries with better outcomes than top-down national approaches. Technology transfer, firm performance, local networks, training organizations, and interactive learning between institutions and industries are often the most urgent foci in these contexts.[181]

Metropolitan strategies tend to go through different phases. The first phase of a long-term economic strategy tends to be on delivering fast visible results that create further momentum for change. 'Quick wins' in the first five years in terms of investment, infrastructure and institution-building are often seen as a necessary catalyst for a second and third phase of broader partnership and development. Pilot projects are an important mechanism for testing the opportunities of clusters and technology over a 12 to 24-month period, as cities such as Hyderabad and Chennai have shown in the field of electronic manufacturing, and Brisbane with professional services.[182]

Not all economic strategies have proven either actionable or effective, but many metropolitan areas have had success. This section reviews evidence of metropolitan attempts to internationalize their economies, develop new spatial strategies, create knowledge-sharing and networking platforms, and provide support to SMEs. It also reviews alternative approaches that focus on the social and collaborative economy, and the fundamental role of the informal sector in the metropolitan areas of developing countries.

### *Supporting internationalization*

Achieving better reach into global markets is a strong component of metropolitan strategies. The broadening and scaling of innovation is a key tactic to boost metropolitan productivity and grow the jobs base. Evidence from places such as San Diego and Copenhagen suggests that firms operating in international markets and in receipt of foreign investment are significantly more likely to

innovate than firms that are domestically oriented.[183]

In the United States, 'metropolitan export plans' have been proposed as a way to boost the impact of exports on the national economy (see Box 3.3). The idea behind this is that local companies in large cities enjoy a specific advantage in seizing opportunities for exports. Backing metropolitan-led exports is seen as a bottom-up policy to counter-balance macro policies designed specifically to improve export performance – via trade agreements, export credit and exchange-rate management.[184] A coordinated framework to expose SMEs to international practice and innovation is part of the internationalization process.

An international strategy for trade and investment therefore offers some metropolitan areas a route to longer-term attractiveness, rather than simply a short-term boost to employment. Research from United States cities such as Portland and San Antonio suggests that outcomes tend to be more visible when intentional and committed efforts to enter global markets last more than one political cycle and become a priority for all governments and authorities in the metropolitan area.[187]

## BOX 3.3 THE GLOBAL CITIES INITIATIVE

In Northern America, the impact of the financial crisis triggered a new set of approaches to address urban problems that did not just rely on the action of the federal government. This 'metropolitan revolution' has seen local governments, civil society, business leaders and urban planners start to work together to find new paths to job creation and long-term economic growth.[185] The results of this in some cities include expansion of public transport systems, improvements to the supply chain in advanced manufacturing, and metropolitan initiatives to integrate immigrants more effectively. More than 25 United States metropolitan areas have also begun to create trade and investment plans as part of the public-private sector Global Cities Initiative[186] whose goal has been to change metropolitan economic development practice to be more focused on international competition and higher-quality jobs. Reviews of this ongoing scheme highlight the fact that metropolitan export strategies need a long-term horizon, and that basic inputs – namely skilled labour force and transport infrastructure – are critically important, though effective actions in this direction have been few and far between.

### *Spatial strategy for a changing metropolitan economy*

Cluster specializations are essential in providing metropolitan areas with the ability to drive exports and attract investment. Many identify an urgent need to rationalize locations of different actors and clusters and, if need be, shift the centre of gravity of economic growth away from traditional and established centres to new business districts, or new gateway cities, close to airports and ports, for example. Several patterns, on the other hand, seem to guide the location and shaping of clusters: the Randstad region in the Netherlands, which includes Amsterdam, Rotterdam, The Hague and Utrecht, is a classic example of a polycentric cluster structurally different from those of Paris or London, whose activities and functions have historically been far more concentrated.[188] This debate is prominent in metropolitan areas such as Sydney, Seoul, other Asian cities, and Birmingham (United Kingdom).[189]

For fast-growing metropolitan areas, especially in developing countries, this process often involves large-scale expansion of subway systems, higher-capacity transport corridors, and the creation of alternative city centres or second Central Business Districts (CBDs) as part of a polycentric approach. In smaller and more developed metropolitan areas, more targeted approaches to cluster scientific and technology SMEs around leading universities have become visible in the past decade, for example in Boston, Hamburg and Manchester.

**A key challenge to incentivize people and firms to relocate to new metropolitan centres is the sequencing of a critical mass of infrastructure and amenities**. Integrated planning that provides education, infrastructure, quality of life and culture in new districts is usually needed to make this rebalancing work.[190]

Regeneration is sometimes an opportunity to experiment with more collaborative planning. Seoul's Cheonggyecheon district, which has been redeveloped to support the city's transition towards creative and services industries, is one prominent example. A citizens' committee composed of the general public and experts helped achieve a greater degree of participation. Furthermore, a joined-up approach across sectors – economic development, road management, civil engineering, urban planning and welfare – was coordinated by a dedicated vice-mayor of the Seoul Metropolitan Government. When collaboration is not sought, however,

regeneration programmes can cause inflation and exclusion and reduce access to public space.[191]

### *Knowledge-sharing and networking platforms*

Many metropolitan areas look to improve cooperation between companies by providing forums for dialogue and cross-fertilization between previously siloed sectors. Some choose to set up a 'growth forum' platform that includes municipalities, companies and research institutions in order to improve the framework conditions for innovation and business development. When organized collaboratively, these can incubate long-term plans for sector growth and agree on targets for projects that need investment from national or supranational institutions.[192] An example of this collaboration is metropolitan planning organizations (MPOs) in the United States. Seattle is one example where civic, business and community members lead collectively on the regional economic vision, creating alignment between the players that influence economic and labour force development, and public investment in education and infrastructure.[193]

Collaboration in school education and training is also important in improving the metropolitan skills system. School education performance and employability in some metropolitan areas have improved more quickly than in the rest of the country as a result of active collaboration and sharing of best-practice among teachers. **International evidence increasingly highlights the value of school autonomy, data-driven leadership and well-motivated teachers.**

Evidence from the United States shows that higher skills attainment does not only benefit individual workers, but also leads to greater prosperity at the metropolitan level, given the large number of alumni from colleges and universities who remain in the local area.[194] Meanwhile in China, Suzhou is an example of a city whose strategy to become a knowledge-intensive economy has relied on higher education to diversify sources of entrepreneurship, beyond reliance on overseas expatriates. Universities' role in creating a new generation of entrepreneurs has enabled Suzhou to become a highly specialized nano-technology and bio-medicine cluster.[195]

### *Catalysts: 'branding' and international events*

Some metropolitan areas have sought to use international events to raise their profile for international attractiveness and bring forward infrastructure development. From high-profile global events such as the Olympic Games and World Cups, to political assemblies, sporting championships and cultural exhibitions, well-

**Regeneration is sometimes an opportunity to experiment with more collaborative planning**

Photo: xiquinhosilva - Kathmandu (Nepal).

managed events in certain cases can accelerate public and private investment, creating new capacity in a metropolitan area, and increasing international visibility of its economy. Successful and sustainable event hosting may leave a substantial physical, social and institutional legacy that can improve the future ability and appetite to deliver major projects collaboratively and coherently.

International events, however, also fuel global competition between metropolitan cities, and need to be considered carefully.[196] Host cities may witness some infrastructure and tourism benefits, but with lower figures than expected (e.g. Cape Town in the 2010 World Cup).[197] Many events may also involve considerable community displacement and securitization of low-income districts (e.g. Rio de Janeiro for the 2014 World Cup and 2016 Olympics).[198] Not all events are appropriate or successful and so require close cooperation between governments to ensure the major projects are completed on time, technical standards are met, benefits are distributed and visitor experiences are positive.

**Cycles of growth within a metropolitan area, if well-managed, give rise to new or enhanced opportunities in subsequent cycles**

For metropolitan areas in developing countries, there are also important opportunity costs when choosing to host an event, and these should be factored in to future decision-making.

### *Financial and capacity support for small and medium-sized enterprises and the promise of social and collaborative economies*

Small and medium-sized companies that are already located in the region are sensible targets of metropolitan areas' policy focus. A higher rate of business creation and successful scaling of these businesses is key to metropolitan economic development, but there are common challenges for smaller firms such as high costs, a lack of suitable real estate, and a shallow financing pool.

Integrated policies can help incentivize smaller firms to upgrade their business processes, whether through equipment, training or new forums for exchange – cities such as Hamburg, Lyon, Oslo and Shenzhen have made steps forward in this respect.[199] A single metropolitan body to centralize all SME assistance functions is one option favoured by well-organized metropolitan areas. Research foundations, infrastructure authorities and development agencies are all key partners for capacity-building with SMEs and entrepreneurs, and for ensuring the region has the right amount and kinds of business space. As the local agency of Barcelona's City Council for 30 years, *Barcelona Activa* is an example of a successful business incubator whose infrastructure and advisory support has achieved a low mortality rate for new firms. The agency works as a mediator between the public and private sector, and has created large investment forums to encourage the participation of investment funds to support early stage growth SMEs. Several Portuguese municipalities have also successfully supported the internationalization of their local firms and, in particular, SMEs.[200] Other tools include equity co-investment funds to leverage private sector equity investments into early-stage growth SMEs, as they emerge from private accelerators and support programmes, an approach tried in London.[201]

### *Metropolitan areas' multi-cycle approach*

Sustainable economic development takes place over not one cycle but many. Singapore is one of the clearest example of a deliberate cyclical approach developed over the last 30 years, while Barcelona, Munich and Seoul have also seen their economies develop in 10 to 15-year cycles. Cycles of growth within a metropolitan area, if well-managed, give rise to new or enhanced opportunities in subsequent cycles. Successful economic development usually involves adjusting between one cycle and another, for example to 'move up' the value chain of the industries a metropolitan area hosts.

For metropolitan areas to adjust in this way they need to be able modify their economic development arrangements so that they can deal with the opportunities and changes of the new cycle, and not be oriented towards the preoccupations of the previous cycle. Low-value industry and advanced science and manufacturing need different framework conditions, tools and strategies. Others that initially promote tourism as a growth industry may need to move on to boosting creativity and other type of enterprises, as Barcelona is doing. **Each adjustment requires sustained collaboration between actors in the public, private and civic sectors**.

The reasons why some metropolitan areas experience prolonged economic decline are always complex in nature. Agglomeration economies alone will not solve all growth challenges, not least because some metropolitan areas inherit unfavourable industrial structures from previous economic cycles.[202] In general, however, top-down imposition of pre-packaged sectors and models do not tend to be effective.[203]

# 3.4 THE PROMISE OF ALTERNATIVE APPROACHES TO ECONOMIC DEVELOPMENT

## *Social and collaborative economies*

The **sharing or collaborative economy** is already having a disruptive impact on metropolitan areas, which function as laboratories for the experimentation of new technologies and business models. Although it is most synonymous with large multinational firms such as Airbnb, Lyft and Uber (which many do not consider collaborative initiatives), the sharing economy also encompasses smaller-scale, low-profit or non-profit social entrepreneurship.[204] The impact of recent recessions and growing income inequality has accelerated the spread of sharing innovations across many cities and sectors – such as mobility (e.g. bike and car-sharing), accommodation (e.g. couch-surfing), skills (e.g. TaskRabbit), agriculture, collaborative financing (e.g. crowdfunding), collaborative production (e.g. DIY, Fablabs, maker spaces), free-access cultural products, and many more.[205] Sharing activities and initiatives have been particularly embraced in the United States, South Korea, and Europe (see Box 3.4). Collaborative consumption is nurturing the demand for more efficient services and on-demand information, resulting in higher levels of entrepreneurship in this domain in many metropolitan areas.

Many metropolitan areas, however, have so far adopted a rather piecemeal and reactive approach to the sharing economy that risks absorbing scarce resources rather than strategically advancing urban sustainability. In spite of its association with innovation and efficiency, **local governments should maintain a certain regulatory caution to ensure new disruptors do not turn previously stable, skilled long-term employment into precarious activities**. Addressing the regulatory challenges that stem from this friction is one of the key responsibilities of local and regional governments.[208]

## *The informal economy*

Informal employment in metropolitan areas continues to grow and emerge in new forms and places. According to Women in Informal Employment: Globalizing and Organizing (WIEGO),[214] the 'informal economy' – which is not exclusive to developing countries – concentrates more than half of non-agricultural employment across most of the developing world. At the city scale, it constitutes, for example, around 80% in Abidjan, Dakar, Niamey and Bamako, 59% in Lima, 54% in Ho Chi Minh City and 45% in Buenos Aires.[215] Informal activities cover a broad range of economic sectors. Women are disproportionately represented in the

### BOX 3.4 SHARING: A NEW TYPE OF ECONOMY?

The sharing economy is a disruptor to nearly every sector of the economy and is challenging many established business and organizational models. One city that has embraced its promise is the Seoul metropolitan government (SMG) through its Seoul Sharing City initiative.[206] The SMG is working in partnership with NGOs and private companies to connect people to sharing services, and together recover a sense of trust and community, reduce waste and over-consumption, and activate the local economy. It combines grassroots citizen-driven sharing (e.g. lending libraries), with official support for tech start-ups. To reform the outdated regulation that used to hamper sharing initiatives (e.g. car insurance and home-sharing policies), the Sharing City initiative is working with insurance providers and regulators to develop alternative solutions. Others cities in Korea, like Busan and Gwangju, are following this example.

In Northern America, Vancouver is an early adopter of a strategic approach to the sharing economy in many sectors (car-sharing, tool-sharing, space for community-sharing, leveraging under-used assets, creating social connections, and reducing waste and consumption). Other cities such as Toronto, Montréal, Houston and Philadelphia, have long supported co-working initiatives, car-sharing companies, Fix-it Clinics to repair goods, bike-sharing systems, shared spaces for start-ups, businesses, charities and social enterprises, and data-sharing. A few municipalities are leading the way through legislation, policy and programmes that facilitate sharing of municipal equipment and services for public safety, transportation, recreational and social services among different local institutions (between New York City and the state of New York, for instance) and with citizenship (parks, transit stations, schools, community centres, hospitals, libraries and post offices). Finally, some community-shared energy projects are being launched by municipally-owned utilities, or with government-operated utilities as key partners.[207]

informal economy, and in its lowest paying and most precarious jobs, especially in Sub-Saharan Africa and Latin America.[216] In Liberia, for example, 72% of women are informally employed, compared to 47.4% of men.[217]

**The vulnerability of informal workers lies, above all, in their lack of legal rights and social protection**. Metropolitan areas have not always adopted a positive stance towards the informal economy, although many recognize that it is linked and contributes to the overall economy, Moreover, supporting and ultimately formalizing informal workers and activities is key to inclusive growth and a crucial step towards the reduction of poverty and inequality (see Box 3.6). The challenges impeding informal workers in their ability to generate decent revenues are many and varied. Examples include – but are not limited to – home-based workers (e.g. shoemakers, craft producers, etc.) who often lack access to expensive basic services and infrastructures (this subject is developed in the next section). Others include high transport costs; street vendors who are evicted, fined and whose stocks are confiscated; and waste pickers who lack permission to access waste as well as space for sorting and storage.

Some cities, however, have made important progress in the recognition of informal workers. In Belo Horizonte (Brazil), the municipality has long had a formal partnership with waste pickers' organizations, 63% of whom said they have experienced support from the city.[218] In eThekwini (Durban) in 2012, informal employment accounted for over 270,000 workers - 24% of all those employed. The municipality has pushed for institutionalizing and formalizing their economic activity, with dedicated urban spaces and training programmes.[219] The social economy (see Box 3.5), especially in metropolitan contexts, has helped the informal sector significantly by offering a more reliable organization of its activities as well as representation through associations and cooperative collaboration.

### *The imperative to reorganize metropolitan economic development*

Metropolitan economic development operates over longer timeframes and broader geographies, and relies on wider institutional collaboration than is usual for local government services or regulatory roles.[221] Uncoordinated strategies waste resources and may fail to achieve desired outcomes.

Many of the economic stakeholders in a metropolitan economy do not exercise a vote in elections. These include businesses, commuters, investors, immigrants, students, infrastructure and logistics providers. Engaging with these stakeholders in economic strategies and reconciling their interests with those of citizens through visioning and

## BOX 3.5 THE SOCIAL ECONOMY

The last few decades have also witnessed an increase in the activities of the 'social economy' – often defined as the 'third sector'. The social economy encompasses a range of voluntary activities that provide certain sections of the population with services that are often either neglected by public providers or unprofitable for private actors. These initiatives are promoted by a diverse landscape of groups, associations, charity organizations and cooperatives.[209] Their impact is particularly critical in metropolitan areas, characterized by high inequality, unemployment and lack of inclusive service provision.

The social economy has become consolidated and institutionalized within national and supranational frameworks. In Europe, the social economy is officially recognized and defined by the European Commission. In France, for example, in 2011, the *économie sociale et solidaire* ('social and solidarity economy') included over 2.3 million jobs and 166,442 enterprises (10.3% of employment).[210] In Spain, the *Confederación Empresarial Española de la Economía Social* (CEPES), the national consortium of third sector enterprises, today encompasses 28 associations and local organizations and accounts for around 10% of national GDP and about 2.2 million jobs.

Latin America, Southern Asia and Africa cooperatives and associations have played a massive role in the expansion of the social economy, supported by microcredit activities.[211] For example in India, the cooperative movement brings together 600,000 cooperatives and 250 million members in urban and rural areas, making it the largest cooperative movement in the world.

Ongoing financial constraints on the public service performance of local and national governments and increased social polarization means that the social economy is more relevant than ever (in France, for instance, between 2008 and 2011, employment in the social economy grew by 1% relative to a -0.5% decline in the private sector).[212] In many metropolitan areas around the world, the social economy will be an essential ally in achieving inclusive and sustainable growth, poverty reduction, job creation and the institutionalization of informal activities.[213]

agenda-building are some of the key tasks of city and metropolitan leaders. This task is rarely straightforward, due to perceived and real trade-offs and tensions between economic growth and quality of life in most metropolitan areas.

**Local governments, business leadership groups, chambers of commerce, universities, business schools, cooperatives, associations of informal workers, CSOs, informal economy representatives, and even the local media can all be proactive partners in economic leadership and development**. Overcoming competition between different governments, ministries and sectors is essential to making metropolitan areas more productive, attractive, inclusive and flexible to economic and population change.[222] International evidence indicates that fragmented metropolitan areas especially stand to benefit from a partnership approach that limits destructive competition.[223]

### *Building a more collaborative economic approach within metropolitan areas*

Metropolitan areas around the world have been working to make this distributed system of leadership more coherent through common strategies, partnerships and coordination and coalition-building. Sometimes these processes are led by the national or state government but more usually they are driven internally by actors within metropolises. Metropolitan areas can reorganize their economic development functions in several different ways:

- **Integrated economic development functions**. Recent institutional mergers across parts or all of some metropolitan areas can result in a more robust set of agencies for supporting domestic and foreign companies, and for longer-term economic goals. Integration is often a solution when economic development and cluster actions are piecemeal and disconnected, allowing the metropolitan area to pool all its expertise. A strengthened metropolitan agency tends to take more strategic decisions to try and attract firms that fit in with the region's future economic direction. In Paris, the new *Paris Region Entreprises* is one such example.[224] Implementation-oriented agencies often have a lean staffing and financing structure, and may be supported by working groups convened around sectoral or issue-based areas (see also Box 3.7 on Cape Town).

## BOX 3.6 SUPPORTING THE INFORMAL ECONOMY

At an annual meeting of the International Labour Organization (104th session) on 12 June 2015, the international community adopted Recommendation 204. This supports the transition, from an informal to a formal economy (while warning against destruction and forced eviction in the formalization process), the creation of decent jobs and enterprises in the formal economy, and emphasizes the need to prevent the informalization of jobs.

According to WIEGO, to address informality and maximize the potential of informal workers, cities should make the most of their available resources and focus on creating jobs through labour-intensive growth, as well as registering and taxing informal enterprises and jobs. The latter requires a simplification of registration procedures; the provision of benefits and incentives in return for taxes paid; and adequate regulations to discourage employers from hiring workers informally, encouraging them instead to give employer contributions for health and pensions, for example.

It is also important to provide low-income housing, promoting mixed residential and business use areas, to recognize the role urban infrastructure plays in supporting livelihoods at the base of the economic pyramid, and to ensure the participation of informal workers in urban planning and policy-making. In addition, it is recommended that social and legal protection is extended to informal workers by, for example, adapting social and private insurance, providing fiscal incentives and adapting existing legal regimes. Cities should also develop supportive measures to increase the productivity of informal enterprises and the income of informal workers, through for example financial and infrastructure services, enterprise support, and technical and business training.[220]

- Many metropolitan economies seek to combine leadership and management functions in a **dedicated development agency**. This is to ensure efficiency and public accountability. Some agencies help oversee major redevelopment when they benefit from political support and access to finance, for example from public land sales. Others have become efficient in helping cities manage multi-party ventures. Bilbao Ría 2000 is one example where a not-for-profit agency has successfully managed large-scale revitalization and expanded its remit to other municipalities in the

## BOX 3.7 METROPOLITAN ECONOMIC LEADERSHIP: WESTERN CAPE'S ECONOMIC DEVELOPMENT PARTNERSHIP

Cape Town's system for solving structural development and employment challenges across the whole functional economy has been strengthened since 2012. The Economic Development Partnership (EDP) is a new kind of collaborative, cross-sector and private oriented organization that acts as intermediary in order to build a unifying narrative around Cape Town's economy.

With a small core staff, and steered by a 14-member board, the EDP uses partnerships with municipalities, companies and non-governmental bodies to distribute knowledge through the metropolitan economic development system and incentivize job creation. Having been endorsed by the provincial government and the city of Cape Town, the EDP has acted on its mandate to develop much stronger market intelligence and pursue the shared vision of OneCape 2040.[225]

metropolitan area, resulting in tangible outputs in the form of new parks, public spaces, roads and cycle paths. Other successful examples, such as HafenCity Hamburg GmbH, illustrate the importance of strong working relationships, a high degree of public control and shared agendas with local governments.[226]

- **Delivery-focused boards.** Some metropolitan areas look to create advisory bodies with a streamlined focus on delivery, rather than pursuing larger institutional change. By specifically focusing on financing the delivery priorities that will maximize job creation, this helps metropolitan areas set clear targets for all public and private stakeholders and is effective in allocating resources to deliver core priorities. Recent examples include the London Enterprise Panel and Hong Kong's Economic Development Commission.
- **Cross-border cooperation** for specific economic development activities among different local authorities has become more common. There are many examples of inter-municipal leadership alliances overcoming siloes. In Denver, a metropolitan Economic Development Corporation has a code of ethics that is binding upon local governments to promote regional rather than self-interested economic development. Transparent information-sharing about site selection has also helped build trust and buy-in among municipalities. In metropolitan areas without established leadership, alliances can become the main driver of municipal cooperation, especially if they have cross-party representation. Other examples involve business agencies from the central city and other local and regional governments working together on international promotion, marketing and real-estate (e.g. Vienna, or Zurich in Box 3.8).

### *The role of business leadership organizations*

Businesses are also important stakeholders in the success of metropolitan development. Mechanisms to ensure their voices are heard and understood are necessary for effective and sustainable metropolitan management. In some cases, a well-regulated private sector can also bring an ethos of efficiency and innovation to dialogue between a wider group of stakeholders within the metropolitan development system. This can in turn contribute to stronger corporate social responsibilities, ethical standards, and the respect of both national and international norms, particularly as regards decent work (see, for example, regulation ISO 26000, which provides guidelines on social responsibility, and the UN Global Compact).[228]

Business leaders have a long history of engaging in cities' development, but there is new evidence that leadership and membership groups are now contributing to metropolitan development in a more proactive way. Managed accountably and with transparency, this can contribute to stronger urban governance.

The membership size and composition of business leadership and membership groups in metropolitan areas varies widely. The newly established ProBogotá Región was set up by 32 members. On the other hand, the Paris-Île de France Chamber of Commerce and Industry represents over 800,000 firms. Some organizations, such as London First, have small concentrated memberships that consist mostly of high status firms. Others such as Hong Kong's General Chamber of Commerce draw significant membership from SMEs. It is common for these organizations to invite civic institutions and NGOs to participate, and nearly all of them share a metropolitan outlook, even in cases when they were originally established to

support the central city (e.g. the Cape Town Partnership).

Because they are often organizationally lean, business organizations can overcome constraints faced by local and metropolitan governments. They are able to think beyond electoral cycles and look further than political boundaries in the interests of the whole metropolitan area. **Their members' experience in activities such as branding, sales and agenda-setting are important in helping metropolitan areas raise awareness about housing supply, airport capacity or immigration, for example.**

The participation of business networks can, however, have mixed effects on democracy in metropolitan areas. In some cases, they help revitalize local democracy by fostering a more plural and inclusive approach to policy-making. But business networks may also concentrate political power in a narrow business elite at the expense of civil society and local governments.[229] However, the most successful business leadership organizations form horizontal relationships with local governments and work together to build shared approaches to a metropolitan area's most urgent development challenges.

## BOX 3.8 THE ZURICH METROPOLITAN REGION

The eight cantons and 120 cities and municipalities of the **Zurich** metropolitan region have been cooperating much more fully on economic development in the last decade. The Zurich Metropolitan Conference is a new strategic body designed to present the region's needs more coherently and to a wider audience. It meets twice a year in an event open to the public and led by the President of Zurich City. The Conference is a platform for networking and information exchange, and promotes a large-scale integrated development perspective. The voting power of individual members reflects their population size, and the Canton Chamber and Municipalities Chamber share an equal number of votes.

Subsequently the Zurich Metropolitan Area Association was founded in 2009, with responsibilities for the economy, traffic and social cohesion. Its main aims are to improve access to know-how and new technologies for high-skilled workers, while ensuring the region is green and sustainable. It has played an active role in bringing forward important rail projects, such as the Brüttenertunnel and the Zimmerberg Base Tunnel II, and exploring new financing mechanisms such as user fees.

Social cohesion and cultural diversity are also part of Zurich's drive to be competitive. In 2015, the Conference initiated a large public relations campaign about the domestic supply of skilled workers, to address shortages in technical, healthcare and mathematics skills. Its 'Immigration and Population Growth 2030' project also highlighted a growing recognition of social imbalances and the need for cooperation and preparation in order to address some of the less conspicuous outcomes of growth. This will be developed later on in this section.[227]

# 3.5 COMBINING ATTRACTIVENESS WITH INCLUSIVENESS: ARE THERE ALTERNATIVES FOR MORE SOLIDARITY WITHIN AND BETWEEN METROPOLITAN AREAS?

The analysis above highlights the positive and negative externalities of globalization for metropolitan areas, and the risks of socio-spatial fragmentation and polarization within and beyond them. Metropolitan leaders need to innovate and explore alternative pathways in order for major cities to take the lead in fostering a new socio-economic logic for more inclusiveness (and sustainability, which is discussed in the next section).

The agenda of inclusion is neither optional nor secondary to the pursuit of economic growth and efficiency. Indeed, there is growing international evidence of a relationship between high levels of metropolitan inequality and lower growth, because of the effects on social cohesion, insecurity and the metropolitan area's ability to absorb investment and withstand shocks. Large disparities between cities and suburbs are also associated with shorter spells of growth during economic booms.[230]

In this context, **growing inequality should not be viewed as an unfortunate and inevitable by-product of a competitive metropolitan economy.**[232] Policy interventions, at national, metropolitan and local levels to reduce inequalities and increase solidarity are possible and desirable. Indeed, they

can harness the dynamism of metropolitan economies much more productively to reshape the territorial relationship within and beyond metropolitan areas.

Local governments need to leverage some of the benefits of on-going disruption to production and consumption models, and their impact on metropolitan job markets and socio-economic dynamics, through an integrated management of metropolitan assets and economic strategies. These include innovation, open technologies and economic models that are more locally based. Increasingly, supply chains are adapted to the demands of consumers and based on innovation and new technologies. The rise of consumer services has also stimulated the integration of various stages of the product cycle (e.g. production, consumption and maintenance) and created new market opportunities for certain functions that were traditionally performed in a household environment (e.g. elderly care).[233]

These transformations have, at the same time, promoted a 'two-speed' labour market in developed economies – between demand for high-skill jobs and the progressive de-qualification of the traditional workforce. There is growing exclusion of younger and older workers from labour markets and increased demand for alternative forms of economic activity (social and collaborative initiatives, but also underground or illegal economies). In developing countries, informality continues to expand as a huge structural (and survival) alternative to the conventional, limited expansion of formal labour markets.

The future of metropolises is not just about performing 'advanced' or 'strategic' functions. To ensure cohesion within society, and counterbalance the threat of fragmentation, metropolitan areas have to anticipate and take part in waves of innovation and support locally-based alternative economic activities. New urban management skills, in both the public and private sector, are widely needed to both integrate and regulate these different urban economies, capture their added value for public policies, and manage the spatial repercussions and social tensions that arise.[234]

Local and metropolitan governments should also take account of local demands and explore alternatives to the competitiveness imperative that globalization stimulates, in dialogue with business representatives and civil society (see Box 3.9). Citizen pressure can likewise affect political and planning decisions and shape them according to broader societal interests.[235] Today this can be seen in movements such as those that ignited the 'Arab Spring' in Northern African and Middle Eastern cities; the *indignados* in Spain; massive demonstrations about transport in Brazilian cities or in Istanbul (Turkey) in 2013; recurrent urban disturbances in France; and race riots in American (2015-2016) and in Indian and English cities (2011).[236]

At the same time, these developments necessitate a **rethink of national urban policies (NUPs) and a more comprehensive approach that locates metropolitan dynamics firmly within the whole national urban system**. Metropolitan prosperity generally

## BOX 3.9 TOWARDS INCLUSIVE ECONOMIC GROWTH (WORLD ECONOMIC FORUM)[231]

The issue of inclusive growth was addressed by the World Economic Forum in a 2015 report. It argues that while there is no inherent incompatibility between economic growth and social inclusion, the extent to which economic growth leads to greater inclusion and prosperity for all depends upon a number of institutional and structural requirements. These include, but are not limited to:

- an enabling environment that provides quality, accessible and inclusive educational opportunities for all, including the most vulnerable and marginalized;
- strong job creation and a good balance between productivity and the compensation of workers to make sure that the benefits of economic growth are evenly shared;
- accessible and affordable credit for the poor and marginalized, as a key to providing economic opportunities for all;
- strong anti-corruption policies to avoid undue concentration of wealth, promote fair competition and encourage individual initiatives and entrepreneurship;
- wide availability and quality of basic services and infrastructure as a prerequisite for poorer communities to engage in economic activities, enhancing quality of life and standards of living;
- well-balanced tax systems that minimize loopholes, prevent market inequalities and make sure the tax burden is fairly spread, levying taxes on those most likely able to pay.

has a positive effect on national development and other settlements and territories, but without proper policies its impact can be negative. Through different mechanisms (e.g. public expenditure, collaborative policies), metropolises can weave a stronger fabric of solidarity between territories – and especially between cities – at the national level as well as on a continental and even global scale. **Metropolitan growth is essential to a fundamental reshaping of the relationship between the different components of an urban system, based on criteria that are not exclusively competitive or economic**. Some of these insights are developed further in Chapter 2 on Intermediary Cities and Chapter 3 on Territories.

**The interests and power relations at play, however, are extremely diverse**. Many metropolitan areas are learning from the experience of a first cycle of projects which failed to achieve social inclusion or sustainability targets. In others, large infrastructure projects have intensified segregation and long-term environmental risks. But there are promising signs that, in the right institutional and political contexts, **policies less conducive to spatial polarization and more consistent with the principles of human rights and the 'Right to the City' are having a positive effect**.[239]

## BOX 3.10 POLITICAL REGULATION OF 'COMPETITIVENESS' IN THE CITY OF LYON[237]

The city of Lyon stands out as an example because of the way in which the metropolitan government (*Grand Lyon)* and the business community have shared a narrative about the implementation of competitiveness measures.

However, delegation of responsibility to the private sector has been limited, in spite of the fact that competitiveness was introduced into the public agenda with the active participation of organized economic interests, e.g. the Chamber of Commerce and employers' associations.

At a strategic level, *Grand Lyon* maintains firm control over the political initiatives of its institutional economic partners through strong regulation, as was the case with the city re-branding project, 'ONLY LYON', for example.

However, this does not mean that larger enterprises, especially those located within the agglomeration, have not been allowed to participate in the development of urban policies. They enjoy more direct and exclusive relationships with relevant actors and local authorities such as *Grand Lyon* and the region.

This is greatly influenced by the political leadership of these institutions and the direct participation of the Presidents of both the Rhône-Alps Region and Lyon's Metropolitan Authority.[238]

Photo: Frédéric Chateaux - Lyon (France).

### 3.5.1 Policies and solidarity within metropolitan areas[240]

One of the main questions for local authorities, practitioners and civil society is whether there are alternative ways to create metropolitan areas that enhance attractiveness and inclusiveness, and at the same time respect the 'Right to the City' for all, fostering cooperation and solidarity between territories. The evidence from this chapter suggests that policies intended to combine prosperity with inclusion should take the following into consideration:

**Urban policies should be designed to maximize the positive economic effects of critical mass and diverse resources that metropolises are able to mobilize**

- characteristics of metropolitan growth that directly or indirectly engage all territories in a dynamic of inter-dependence;
- the ongoing transformation of the global economy into a model of open innovation and, with this, the need to strengthen locally-based economic activities (this in turn demands stronger mobilization of metropolitan resources);
- the enabling role played by higher tiers of government in promoting and integrating such changes.

In line with these criteria, urban policies could be more consistent with the needs of the population and the core principles of spatial equity. When they are not dismissed as being simply 'surrogate' policies, they do actually address issues of social exclusion and growing territorial inequalities. Three levels of public action are relevant in this regard: policies that shape urban systems (be it at the regional, national or continental level); policies that shape systems at the metropolitan level; and urban policies at the project level.

#### *At the level of the urban system*

The interconnectedness of urban systems seems to contradict the notion that metropolitan areas are becoming detached from their surrounding territories and settlements. Growing metropolitan areas are able, through diffusion effects, to drive growth in the entire national system. This calls into question the validity of 'anti-metropolitan' or de-concentration policies to reduce the relative socio-economic strength of metropolises in favour of smaller cities and rural areas.

Similarly, given that the competitive advantage of metropolises rests on their economic diversity, it can be counter-productive to obey a strict logic of economic specialization within the urban system, and pursue excessive 'complementarity' among metropolises and other cities.[241]

Instead, urban policies should be designed to maximize the positive economic effects of critical mass and diverse resources that metropolises are able to mobilize. This is only possible through integrated metropolitan policies. This strategy would also be coherent with the New Urban Agenda and SDG 11.a (to 'support positive economic, social and environmental links between urban, peri-urban and rural areas by strengthening national and regional development planning').

#### *At the metropolitan level*

At the metropolitan level the main priority has to be allowing as many citizens as possible to access the economic resources of the urban region, while preserving economic efficiency, social equity and environmental sustainability. Policies towards the realization of this should consider:

- **Facilitating urban mobility**
  This can be achieved by means of infrastructures that ensure metropolitan connectivity at different levels (local, regional and extra-metropolitan). While airports, international railway stations, and high-speed transport networks are clear examples, they are by no means enough. Short-range circulation within the metropolitan core should be a priority not only for reasons of spatial justice (e.g. making the city accessible to the largest number of users possible), but also to ensure economic efficiency. This is critical to the achievement of SDG 11.2 ('By 2030, provide access to safe affordable, accessible and sustainable transport system for all…'). Worldwide connectivity should not be limited exclusively to 'strategic' economic functions, as is the case with global cities. The cross-level connections and movements – of goods, people, ideas, capitals and cultures – triggered and channelled through metropolises demand specific policies to guarantee fluid interconnectedness, maximizing the diverse resources available at the metropolitan scale.

- **Building an 'open' and inclusive urbanism**
  Metropolitan actors in their efforts to mobilize a range of diverse urban economic resources need also to rethink

'open urbanism' and reaffirm the collective nature of the public space (in accordance with SDGs 11.3 and 11.7). This counters urban forms that are based on enclosures (e.g. the disruptive urbanism of gated communities described earlier in this section). It is driven by two complementary goals. On the one hand, there is a need to help sustain economic activities which, in spite of being economically viable, cannot withstand the centrifugal pressures of property and land competition in the metropolitan environment. On the other hand, it is vital to lay the groundwork for a metropolitan economy whose future builds on association, sharing and individual resources (in accordance with SDG 8, to 'promote sustained, inclusive and sustainable economic growth'). Two policy areas are extremely valuable in the pursuit of these goals: those aimed at the reduction of socio-economic negative externalities of planning and, in particular, urban renovation projects; and those that aim to limit the social consequences of land and property competition.

- **Reducing the negative externalities of urban regeneration programmes**
  The reliance on stand-alone catalytic regeneration projects should be reduced and a more sequenced metropolitan approach pursued. Although access to private and institutional capital will remain important given local financing limitations and diminished national transfers, a robust metropolitan approach would prioritize improved safety nets for affected communities, firm regulation of speculative investment capital, and accountable and professionalized urban governments.[242]

- **Reducing competition in the property market**
  Limiting the effects of competition in the property market enhances the mobility of citizens, especially those 'locked' into badly serviced settlements because of spatial mismatches. These measures are also necessary to promote social and functional diversity by preserving the proximity between residence and work places (see Box 3.11).

These goals cannot be attained without the political will to promote land value capture and reinvestment in social/subsidized housing programmes in accessible and well-connected areas. Several initiatives in this direction have been implemented:

- Following the failure of competitiveness policies to support cities in demographic and economic decay, the city of Cleveland put into practice a strategy of 'planned de-growth'. This included, among other measures, the creation of a **land-tenure bank** to exclude certain properties (especially the lots and buildings that had remained vacant following the sub-prime crisis of 2008) from capital accumulation mechanisms;[244]
- Rosario's (Argentina) **municipal urban regulation** allows the municipality to retain the added value created by private property investments, especially in coastal areas, and to select areas for social housing;

## BOX 3.11 FACTORS THAT HAVE ENHANCED SOCIAL DIVERSITY IN LIMA[243]

The analysis of socio-spatial divisions in Lima (Peru) shows that certain 'buffer zones' - for example planned zoning for middle-income households - are necessary to reduce such divisions whilst also promoting the development of shared public spaces. Middle-income zoning, for example, usually features land 'parcels' that are too small to include a private front or backyard, thereby forcing the population to look for available public spaces such as gardens, plazas and playgrounds.

At the same time, while most middle-income households may have a private car or other transportation, alternative planning strategies could make these unnecessary by providing adequate proximate spaces or connectedness to other areas.

In Molina, a peripheral neighbourhood of Lima, middle-income residential neighbourhoods are very well connected by a number of transit lines, as well as having many small well-maintained green spaces. These benefits have allowed many households of this area, despite their average income, to afford the costs of education in local schools, which are largely private institutions. It is worth noting, however, that in spite of the 'planned' social diversification and the shared public space provided, there has not been a proportionate increase in cross-class relations between middle and low-income residents. Socially diverse planning, therefore, does not automatically imply overcoming social divisions and splits.

- São Paulo (Brazil) has doubled the area dedicated to social interest, especially in the city centre, where 55,000 new houses were built in renovated former industrial areas, following a **revision of the planning master plan;**
- In an unusual intervention, Johannesburg (South Africa) has established a development bank together with a private actor, the Affordable Housing Company (AFHCO), rather than with other public authorities, for **projects of rental housing** – the reconversion of abandoned commercial facilities – aimed at marginalized low-income populations who are not able to access national subsides. Planning these areas closer to existing job pockets should enhance the economic dynamism of the area, raise revenues and improve work accessibility.
- In France the 'solidarity and urban renewal' law (2000) made it obligatory for each municipality of over 3,500 inhabitants to reach a 25% quota of social housing in their building stock; if municipalities fail to comply they must pay a fine.

Questions related to housing policies are critical for the achievement of SDG 11.1 ('access to adequate, safe and affordable housing…'), and will be analyzed in more depth in Section 4.

Photo: McKay Savage - Lima (Peru).

# 4.

# SUSTAINABILITY AND QUALITY OF LIFE IN METROPOLITAN AREAS

It is now universally agreed that our current patterns of production and consumption are unsustainable. In a rapidly urbanizing world, cities – and metropolitan agglomerations in particular – have an unprecedented responsibility to adopt more sustainable patterns of development to prevent resource depletion, environmental degradation and uncontrollable disruption of the planet's climate.[245] These measures include steps the global community has already taken and institutionalized to increase urban resilience to disasters – the 2015 Sendai Framework for Disaster Risk Reduction deployed by the UN Office for Disaster Risk Reduction (UNISDR) – and the collective commitments adopted at the 2015 Paris COP 21 meeting, to 'keep the increase in the global average temperature to well below 2°C above pre-industrial levels and to pursue efforts to limit the temperature increase to 1.5°C above pre-industrial levels'. Given that metropolitan areas are some of the greatest contributors to GHG emissions and, at the same time, extremely vulnerable to the increasing intensity and frequency of natural disasters, they will have a prominent role to play in meeting the goals of sustainable development, environmental preservation and social inclusion.

For these reasons, **sustainability has become a central reference point for urban policies**. However, by overlooking the social dimension of sustainability, the concept has gradually moved away from its original meaning, which integrated the three (subsequently four) pillars of sustainable development – social, environmental and economic[246] – to which culture was added by UCLG. **This is why there is an urgent need to treat sustainable prosperity, social inclusion, environmental protection and cultural dynamism as mutually re-enforcing goals in the development of public policies**. The focus of this section will be on initiatives developed by metropolitan areas for environmental sustainability, linking them to social and environmental justice and to the cultural dimension of sustainability, as well as to the concept of the 'Right to the City'.

## 4.1 METROPOLITAN AREAS AND ENVIRONMENTAL ACTIONS

The institutional framework of the United Nations Environment Programme (UNEP) has pushed the specific agenda of an enhanced role for urban settlements in economic de-coupling – cities, in other words, can do much to achieve economic growth without proportionally increasing pressure on resources and the environment.[247] While de-coupling is a key principle underpinning the 'green economy', cities and in particular metropolitan areas have a whole array of instruments available to them to design, manage and maintain their urban infrastructure. The way key urban infrastructure (e.g. water, sanitation, waste management, processing and disposal, electricity and energy, mobility for people and goods) is designed, constructed and managed has a direct impact

**In a rapidly urbanizing world, cities have an unprecedented responsibility to adopt more sustainable patterns of development**

on how efficiently resources are extracted, introduced into the urban production system and disposed of.[248] Efficient networks and connections lower emissions, pollution, by-products, inefficiencies and bottle-necks, contributing to positive social, economic and environmental impacts. All cities in both developing and developed economies can incentivize and foster effective de-coupling measures. Intelligent and consistent infrastructure design and performance is essential if sustainable cities are to reduce inefficiency and fight the impacts of climate change.

Numerous action models have been, and are being, developed in metropolises in order to face environmental challenges and encourage sustainable development. For example, C40, a network bringing together metropolitan areas, reports that the number of members developing climate actions has doubled from 36 metropolitan cites in 2011 to 66 in 2015.[249] Exchange between metropolitan areas is being promoted by Metropolis through the Climate-Metropole+ project, a cooperation and knowledge exchange platform that promotes an integrated and participatory approach to environmental action in cities, linking Barcelona, Berlin, Liverpool and Lyon, as well as several city networks.[250]

As demonstrated in the COP 21 preparation process, cities and their networks are strongly committed to fighting climate change and reducing GHG emissions, as illustrated by the Global Covenant of Mayors for Climate and Energy, a global coalition of city leaders mobilizing hundreds of cities (see Box 4.1).

Local governments can earn revenue from the sale of reductions in GHG emissions (so-called 'carbon credits') on the national or international carbon markets.[251] However, despite the use of these mechanisms and the scale of the challenge – according to the Cities Climate Finance Leadership Alliance 'global demand for low-emission, climate-resilient urban infrastructure will be in the order of USD 4.5 trillion to USD 5.4 trillion annually from 2015 to 2030'[252] – cities' climate finances remain insufficient, and how to maximize them is the subject of open debate.

**Environmental sustainability requires a radical revision of our production and consumption patterns**, one that affects the way we think and manage our housing, energy, transportation and waste policies, amongst others. Because of their impact on the global effort to increase the sustainability of urban life, certain policy areas have tended to elicit positive change and drive innovation in proactive metropolises. The following sections look at some of these policy areas in more detail, focusing in particular on climate plans and urban infrastructure, mobility, energy, public and green spaces, waste management, the circular economy, and urban agriculture.

### BOX 4.1 GLOBAL COVENANT OF MAYORS FOR CLIMATE AND ENERGY

With the ambition to establish a common platform to assess the impact of cities' climate actions through standardized measurement of emissions and climate risks, as well as consistent public reporting of the progress made, C40, International Council for Local Environmental Initiatives (ICLEI) and UCLG – with the support of UN-Habitat and UN Special Envoy Mike Bloomberg – launched the **Compact of Mayors** at the 2014 UN Climate Summit. To date, 447 cities - representing more than 390 million people worldwide - have committed to the Compact of Mayors. It is now the world's largest coalition of city leaders tackling climate change by committing to reduce GHG emissions and tracking their progress in mitigating and adapting to climate change. One of its main tools is the 'Global Protocol for Community-Scale Greenhouse Gas Emission Inventories (GPC)' which many cities now use for their strategic planning. Every year it releases a report that allows cities to adapt their strategies using information on different implemented measures and their outcomes. Similarly, the **Covenant of Mayors** for Climate and Energy, supported by the European Commission, is a European coalition of local and regional authorities working together to fight climate change. More than 6000 signatories have pledged to reduce $CO_2$ emissions by at least 40% by 2030.

To raise awareness further and to gain visibility and access to the agenda-building process (and challenges) in the years to come, both institutions decided to join forces in 2016 and merge into the **Global Covenant of Mayors for Climate and Energy**.

## 4.1.1 Ongoing initiatives

The integration of the principle of environmental sustainability in metropolitan agendas has given rise to a myriad of initiatives – some of which were presented at the Climate Summit of Local Leaders in Paris, during the proceedings of the COP 21 on December 4, 2015. While environmental actions have certainly resulted in significant progress in terms of metropolitan sustainability, some of the effects of their implementation call for a more in-depth evaluation.[253]

Advocacy for – and interest in – a 'green economy' has perhaps never been stronger than today. The quest for a greener production and consumption system has emphasized the economic aspects of this 'greening' approach. The de-politicization of the issue – or 'greenwashing'[254] – has focused attention (and resources) on the competitiveness and affordability of the 'green' paradigm, neglecting the social and spatial issues that this may engender at the metropolitan scale.[255]

For a comprehensive global sustainability agenda to be effective, **environmental and 'green' provisions should never be decoupled from social inclusion and equality, territorial cohesion and interconnectedness and thriving diversity, all of which define a resilient and sustainable metropolitan area.**[256] Provisions that promote an approach where the environmental, the economic and the social are equally important are valuable examples of the way in which metropolitan areas can achieve several relevant SDGs, such as Goal 11 on cities, Goal 6 on clean water and sanitation, Goal 7 on affordable and clean energy, Goal 12 on responsible consumption and production, and Goal 13 on climate change.

### *Climate plans and urban infrastructure*

Cities' climate plans can greatly contribute to reducing emissions and building resilience by creating new developments and shaping existing ones in a systematic, coordinated and delivery-focused way. As well as integrated approaches developed by cities such as Paris ('*Plan Climat*') and New York ('A stronger, more resilient New York' or #ONENYC), Box 4.2 illustrates other examples from the Global North (Tokyo, Copenhagen). Metropolitan climate plans for sustainability and resilience are not, however, limited to cities in developed countries; cities such as Dakar, Phnom Penh and Quito have also developed such initiatives.

Dakar's integrated territorial climate plan includes a vulnerability diagnosis to develop territorially adapted actions.[257] Quito is experiencing a rise in the frequency of landslides, floods and droughts and increasing problems with water resources, and so developed a climate strategy that focused both on adaptation and mitigation, including sustainable infrastructure, power production, drinking water supplies, ecosystems, biodiversity and public health amongst others. As a result, a first Climate Change Strategy was approved in October 2009, after which the city began developing its Climate Action Plan (2012-2016).[258]

At the same time, cities such as Cairo are developing plans for the climate adaptation of informal areas. Plans to control climatic risks such as flooding or storms are many and varied and place a particular emphasis on the most vulnerable populations.[259]

An integrated approach has allowed cities (e.g. Hong Kong, Stockholm and Copenhagen) to combine economic growth with a drastic reduction in their GHG emissions through efficient land use and sustained investment in public transport. For example, Stockholm's economy grew by 41% between 1993 and 2010, while its emissions dropped by 35% in the same time period. Since 1990, Copenhagen has reduced its carbon emissions by more than 40%, while its economy has grown by 50%.[260] Others cities have adopted different sectorial approaches (e.g. eco-mobile cities, low-carbon cities, green cities, energy efficient cities, etc.).[261]

## BOX 4.2 CLIMATE PLANS IN TOKYO AND COPENHAGEN[262]

Within the framework of the Tokyo Metropolitan Environmental Masterplan, the city of Tokyo has implemented a specific project (the Tokyo Cap-and-Trade Program) to reduce $CO_2$ emissions through improving the energy efficiency of its buildings. Owners of the buildings included in the project must measure their annual emissions and commit to lowering them. Since its implementation in 2010, the project has resulted in a 13% reduction in GHG emissions in 2010, and a 22% cumulative reduction in 2011.[263]

The city of Copenhagen is implementing an ambitious policy (including the promotion of renewable energy and cycling as a transportation mode) to become neutral in terms of $CO_2$ emissions through a series of innovations and a climate plan.[264] The city has already reduced its emissions by 21% between 2005 and 2011. The first 'bicycle highway', for example, was launched in 2012 and allows commuters to link the central district with the periphery by bike. Three quarters of future reductions in $CO_2$ emissions must come from the transition to new means of heat and electricity production, notably through the use of biomass, wind (wind power produces 30% of the electricity used in Denmark), geothermal and solar energy.

### *Sustainable mobility*

Models of sustainable mobility[265] have long promoted 'multi-modality', 'interconnectivity', and 'soft mobility' to improve public transport, reduce congestion and air pollution, and encourage alternative transport by limiting reliance on private vehicles.[266] Access to mobility – and to the beneficial effects on health and quality of life – has long been a litmus test for equity in today's cities and metropolises.

**Basic sustainable mobility centres on public transportation systems. The Bus Rapid Transit (BRT) was initially implemented in Curitiba (Brazil) in the 1970s, before the idea was successfully exported to cities such as Bogotá and Johannesburg**[267] and more recently to Teheran and Amman,[268] amongst others. Sustainable mobility relies on efficient light rail systems (Addis Ababa is the first of its kind in Sub-Saharan Africa),[269] tramways or similar technologies in cities of the Global North,[270] or cable car lines adapted to specific geographies to foster inclusion and development of neighbourhoods that would otherwise remain isolated and disconnected from the rest of the urban area, as in Medellín. Cities such as Guangzhou (China) have developed BRT, new metro lines and greenways for bicycles (2,000 km of cycling lanes) as part of a multi-modal urban transport system. Lima (Peru) is working on the 'NAMA' project to reduce reliance on car transportation through the expansion of the metro, cycling routes and a unified fare system.[271] Electric vehicles play an important part in this transition: today Oslo has three times as many electric private cars as it did in 2005.[272]

Photos: Mariordo59 - BRT Curitiba (Brazil).

At the same time, traffic-free zones,[273] 'car-free days',[274] and shared-mobility platforms are successfully tackling urban pollution concerns whilst raising awareness of sustainable mobility goals. The backdrop to many of these achievements is **an extensive use of technology in the urban fabric**: sensors to measure air quality,[275] traffic, and urban behaviour; GPS and mobile communication; real-time crowd-sourced information; and bike and car-sharing[276] – all of which are increasing the awareness and connectedness of urban citizens both in the Global South and North. **Sustainable mobility policies all over the world rely increasingly on strong citizen engagement and participation**.[277] Sustainable mobility has also been a key lever in the promotion of dense, **multi-polar cities** – where services, amenities, homes and workplaces are located in greater proximity to reduce motorized transport, create a walkable public space and curb the overall environmental footprint of urban life. **Global cooperation frameworks among cities** have also helped, such as ICLEI's Eco-Mobility Alliance and Cities for Mobility. Sustainable mobility has proven to be one of the areas where metropolitan cities are most likely to exchange best practices, knowledge, and expertise. Guangzhou, Shanghai (China), Jakarta (Indonesia), Rio de Janeiro (Brazil), and Shiraz (Iran) took part in an Urban Transportation Policy training programme, organized in Seoul by Metropolis' International Training Institute (MITI)[278] in March 2016 to share best practices and lessons learned from different urban policies and laboratories from around the world.[279]

### *Efficiency and energy transition*

Cities, and metropolitan areas in particular, are the core of wealth production, innovation and opportunity. The resources necessary to feed the economic, social and cultural engine of large cities is perhaps the price to be paid for their enhanced role in today's world and economy. Following the recommendations of the last report of the International Panel on Climate Change (IPCC), and the agreements endorsed at the COP 21, cities are increasingly mobilized to reduce energy consumption and increase the use of renewable energies - in other words, to do more with less.[280] Cities, in their daily functioning, are currently consuming energy at unsustainable rates. Accordingly, many actions undertaken so far have involved the reduction of energy consumption in public buildings and the construction of 'low energy' or 'positive energy' buildings. Pune (India) and Shanghai (China), for instance, have already implemented strict limits and criteria for public buildings built in the future. San Francisco (United States) committed to a near-zero carbon electricity supply by 2030. The building sector has a significant impact on energy efficiency: it accounts for an average 20-30% of global $CO_2$ emissions[281] and has long been a central part of the European Union's policy regulatory framework in this field.[282] Whilst being key to sustainable energy policies, energy-inefficient housing also raises concerns about social equity and energy poverty,[283] a challenge that cities must be ready to face.

In Cape Town, smart electricity meters (Automated Meter Reading or AMRs) have been installed in 26% of the city's large municipal buildings. Real-time data, combined with a behavioural change programme have resulted in significant energy savings.[284] The city of Paris is implementing a thermal renovation plan for schools and social housing (saving 500 gigawatt/hour) and has installed several energy management systems in municipal buildings and facilities as part of its plan (2004-2020) to reduce GHG emissions and energy consumption by 25%.[285] Tshwane (formerly Pretoria, South Africa) launched a 20-year project with a 2 million $tCO_2$ emission reduction target through the use of renewable energy generators. Changwon (South Korea) was selected to trial a new smart grid project for small and medium-sized enterprises, promoting energy efficiency while also integrating renewable energy resources.[286]

Efficient urban refurbishment also includes **street lighting**. Technologies (e.g. LEDs or CFLs) applied on a massive scale in a metropolis can yield significant results. The city of Melbourne (Australia) deployed a city-wide lighting renovation scheme, reducing $CO_2$ emissions by about 8,000 $tCO_2$ per year.[287] Los Angeles and Paris have adopted similar strategies. Amsterdam's Smart City Programme has adopted a smart switching technology to adapt lighting to weather or even traffic conditions. **Efficient water management** – for example upgraded infrastructure, leakage prevention, etc. – has been another key policy field with a strong environmental impact. The challenges faced by Mexico City are a good example of the importance of this sector in the struggle for a more sustainable city.[288]

Other initiatives in this field, for example eco-cities and eco-neighbourhoods, have placed a strong emphasis on energy efficiency and the development of renewable energies. However, these schemes are still nascent and somewhat controversial in terms of their impact on social inclusion (see Box 4.3).[289]

### BOX 4.3 ECO-NEIGHBOURHOODS: SOCIAL AND ENVIRONMENTAL IMPACT[290]

Eco-neighbourhoods and eco-cities are designed as spaces that allow for the experimentation of diverse solutions in terms of urban density, energy, biodiversity, soft mobility and citizen participation. They are new urban forms that directly respond to the demands of sustainability, promoting a new way of living.[291] However, their development is not free from pitfalls; designed as technical tools to preserve the environment, eco-neighbourhoods tend to overlook the need for social sustainability and are used in a quest for competitiveness and 'world-class status'.

For example, in the **Kreuzberg** eco-neighbourhood in Berlin, green roofs tend to suffer subsidence and leaks due to an oversized green layer and the incorrect installation of isolation membranes by construction companies.

In the 'car-free' eco-neighbourhood of **GWL-Terrein** in Amsterdam, parking was reduced to one space for every five homes, creating problems of illegal parking and conflicts between neighbours as people started to park in surrounding neighbourhoods.

### *Public and green spaces*

**Public spaces are all around us, they are our 'open-air living room'**.[292] Sustainable Development Goal 11.7 aims to 'provide universal access to safe, inclusive and accessible, green and public spaces (...) by 2030', as urban public and green spaces play a key role in improving the quality and liveability of urban agglomerations (see Box 4.5 on the Habitat III Thematic Meeting on Public Spaces). Public squares, streets and gardens, while being part of the urban design, mostly have explicit social, cultural and citizenship functions. They enhance inhabitants' wellbeing and health, foster social cohesion, increase recreational space, and provide neighbourhoods with an identity. Public space in a neighbourhood acts as an *agora*, a space for citizenship development where a local market can be a driver of economic vibrancy. Public spaces also bring considerable environmental benefits through reduced energy consumption for cooling, air pollution and the urban heat-island effect. They also protect biodiversity, intercept rainwater and prevent flooding. Today, however, **urban growth, privatization and the invasion of sectorial interests are putting unprecedented pressure on the provision of public spaces**. Limited access to former public spaces, once these are privately acquired, has become a common occurrence in many countries.

Various types of green spaces and green infrastructures are being promoted for sustainable objectives in many cities. Berlin has devised a Biotope Area Factor to monitor the ecological effectiveness of its public green spaces. In the United States, the iTree system operationalizes the value of trees in terms of energy savings, atmospheric $CO_2$ reduction, improved air quality, storm water run-off and aesthetic considerations: New York's 600,000 street trees provide an annual benefit of USD 122 million - over five times their maintenance cost. Durban has initiated a large scale Community Reforestation Programme to pair environmental benefits with job creation, improved food security and educational opportunities.

## BOX 4.4 A METROPOLITAN APPROACH TO THE CREATION OF GREEN SPACES

*Green Works* ***Philadelphia*** is adding 500 acres (202 hectares) of accessible green space as city government and neighbourhood residents transform empty or underused land into parks. The **New York** High Line linear park contributed to the regeneration of many areas and the engagement of communities along its course. In **London**, the construction of the Queen Elizabeth Olympic Park includes provision to support biodiversity: and London's government has also committed to building 100 new small (pocket) parks. **Madrid**'s Rio project created a linear green park along the Manzanares River (most of it on top of a large road tunnel) with provision for sport, leisure and cultural facilities. The Post Office Park in **Boston** was created from the conversion of a 4.6 hectare car park into a park with underground parking, whose revenues fund the park's maintenance. In **Montréal**, a huge limestone quarry was converted into a 1.9 $km^2$ park, including a waste sorting centre and a power station that transforms biogas into electricity.

In order to mitigate hazards such as landslides or floods and their economic and social costs, the city of **Bogotá** has been planting trees and building green spaces as part of a programme that identifies high risk zones and establishes land use restrictions. In **Melbourne**, one project aims to plant 3,000 trees per year to double the city's tree canopy by 2040. In **Kampala**, a city where urbanization is out of control and where green spaces can only be found outside the city, plans are being implemented to restore some urban wetlands in order to create city parks.

### *Waste management and circular economy: from pollution to zero waste*

Waste management is an essential part of the reduction of urban environmental impacts, as acknowledged in the key targets of SDG 11.6. More than 11 billion tonnes of solid waste are collected annually across the globe, and latest statistics indicate that waste management contributes to 3.3% of global GHG emissions.[293] An increasing number of cities are turning to zero-waste, 'cradle-to-cradle' strategies for solid waste management and waste-to-energy schemes (see Box 4.6). Ambitious recycling and material recovery programmes have been successful at increasing the amount of waste diverted from landfill. While contributing to greener management, the innovation-driven development of technologies and tools for recycling has created new qualified employment – around 12 million people in Brazil, China and the United States alone in 2011.[294] In many developing countries, on the other hand, waste management is still problematic for many municipal administrations: its challenges are

inextricably linked with issues of equality, social inclusion, education and awareness, health and socio-economic informality.

An alternative approach to waste management can be found in the **circular economy**, or the search for production models based on recycling as a systemic mechanism to mitigate climate change and reduce resource depletion.[297] Today's urban settlements live and produce off a 'linear metabolism' that extracts resources from beyond its boundaries, uses and transforms them within its core, and emits waste in a number of forms, including landfilled waste, emissions, pollutions, and heat – again outside its limits. Cities whose productive infrastructure is conceived along this linearity are net wasters, and would need infinite resources and infinite waste allocation capacities to survive.[298] A circular economy approach can tackle the unsustainability of this linear metabolism. San Francisco, for instance, has achieved selective waste sorting for 80% of its

## BOX 4.5 THE 2016 HABITAT III THEMATIC MEETING ON PUBLIC SPACES, BARCELONA

In preparation for Habitat III in October 2016, a thematic conference on public spaces took place in Barcelona on April 4-5, 2016 to advocate a central role for public spaces in the New Urban Agenda as key to achieving sustainable development. The declaration that emerged emphasized – amongst other things – the need for a human-scale and people-centred approach to planning to ensure that public spaces are sustainable and inclusive; the importance of a citywide network of connected public spaces and streets; the need to foster formal and informal economic activities in public spaces to improve the livelihoods of local producers and workers; the necessity for public space and surrounding buildings to be economically, socially and environmentally sustainable; and the need for public space to be sufficiently flexible to local geography, climate and culture, allowing for cultural and artistic activity.

Photo: Francesc - Barcelona (Spain).

total waste production, through the tax system and financial incentives to lower waste production. A compulsory and well-established organic waste recycling system produces compost for the region's farmers.[299] In Geneva, where the concept of circular has already been included in the Canton's constitution, a collaborative platform was developed to allow enterprises to exchange methods and resources.[300] The city's linear metabolism is unsustainable to the extent that it forcibly extracts resources from outside its territory and economy that are then consumed within the urban economy and production cycle, eliciting a structural imbalance. Extending these practices requires strengthening mutual collaboration and learning (e.g. supporting recycling and reuse clauses in public procurement).

### *Food security and urban agriculture*

Urban agriculture is another theme that deserves attention in that it too simultaneously generates socio-economic and environmental benefits in metropolitan areas. This activity – referred to by some as 'ruralizing' urban settlements – has been under increasing scrutiny in recent years. Estimates suggest that around 1 billion people undertake farming and fishing activities in cities, meaning that 15 to 20% of the world's food supply comes from urban agglomerations.[301] In Detroit, where the population has shrunk significantly (1,850,000 inhabitants in 1950 compared to 680,000 in 2014) – mainly due to the automotive industry crisis – a number of urban wastelands have been revitalized and transformed into individual or communal vegetable gardens. A similar initiative took place in Rosario, Argentina (see Box 4.7).

## BOX 4.6 INNOVATIVE WASTE MANAGEMENT IN DURBAN, BELO HORIZONTE AND VANCOUVER

In 2004, the city of **Durban** developed innovative solutions to improve waste management and use it to produce electricity, transforming methane from waste fermentation into clean electricity while reducing the environmental impact of urban landfill sites.[295] Since then, it has built 103 collection wells connected to a power plant that burns the methane to produce electricity. This project has created employment in sorting and recycling centres, reduced the city's annual $CO_2$ emissions by 54,000 tons, and converted some old landfill sites into green public spaces.

**Belo Horizonte** in Brazil implemented a social policy to improve the structure of informal employment and raise the standard of living of the urban poor, which at the same time led to the development of an integrated solid waste management strategy (ISWM). In the 1990s, local legislation was changed to promote the collection of recyclables by cooperatives of informal waste-pickers. Seeing that a partnership with the city would further improve their productivity and help meet both environmental and socio-economic goals, the city decided to further integrate the informal sector into municipal waste management. This helped achieve the four main objectives of the ISWM; namely, to increase recycling waste, social inclusion, job creation and income generation. Since the introduction of this policy, the waste sector has substantially improved. In 2008, around 95% of the urban population and 70% of the population in informal settlements (*favelas*) received a collection service. In 2013, around 600 waste-pickers worked for these cooperatives, with a total of 80 sorting warehouses.[296]

**Canada's National Zero Waste Council** is an initiative led by Metro Vancouver, with support from the Federation of Canadian Municipalities and other groups. It seeks to reduce the generation of waste and increase recycling rates in Canada's third largest metropolitan area (2.3 million residents). The Council focuses on designing using a 'cradle-to-cradle' approach that will result in less material and energy being used and eventually discarded. The approach will reduce or eliminate the use of toxic chemicals and will lead to the manufacture of products that can more easily be disassembled into reusable and recyclable components. Metro Vancouver's Integrated Solid Waste and Resource Management Plan (ISWRMP) has set aggressive waste reduction and diversion targets. At this point in time, most of its work falls within the jurisdiction of Metro Vancouver and its member municipalities. The National Zero Waste Council reaches beyond the local jurisdiction, influencing the design of products in favour of cradle-to-cradle approaches, and creating greater public awareness of the need to reduce and prevent waste.

## 4.1.2 Densification[304]

As mentioned previously, one of the steps towards sustainable metropolises is to promote functional mixing and density. Due to the fast pace of urbanization, the lack of urban planning in many metropolitan areas, as well as the liberalization of the land market, cities have tended to expand, with the appearance of new districts on their fringes. Old 'extensive' models of urbanization were a result of an increasing reliance on cars and a preference for individual houses, with a quality of life associated with low-density spaces. In Mexico, since the 1990s, gigantic individual housing lots have increasingly been favoured (more than 500,000 housing units have been built, with some developments containing up to 20,000 units, many of them unoccupied).[305] Cairo is likewise a paradigmatic case of urban expansion: between 1996 and 2006, Cairo's population increased by 3 million, but the surface built or under construction doubled, spreading to the desert hinterland.[306] Urban development in desert areas for the middle and upper classes attracted a third of overall investment while only one tenth of the 'new' inhabitants eventually settled there.[307] In Tunis, the whole built environment (both formal and informal) follows a horizontal settlement pattern, consuming a lot of space. Urban sprawl leads to higher $CO_2$ emissions, as suggested by Table 4.1 below which shows two metropolises with similar wealth levels and population, but very different areas, densities and $CO_2$ emissions.

Besides excessive land consumption, urban sprawl also creates accessibility problems, particularly for the working classes, leading to congestion, air pollution and public health issues.

### BOX 4.7 ROSARIO: URBAN AGRICULTURE AS A GLOBAL SOLUTION[302]

In 2001, in response to the severe economic crisis, the city of Rosario (Argentina) developed an alternative ecological solution - the use and revitalization of agricultural gardens and park gardens. The aim was to improve the food supply for inhabitants, who could develop their own seeds and were supported in the commercialization process. 2,500 families now contribute to the production and commercialization process. The municipality works with households to promote exchange using a circular economy model - for example recycling in return for organic vegetables. Other initiatives have followed: productive gardens on private properties, production of medicinal plants, the signing of a cooperation agreement with other cities such as Guarulhos in Brazil.[303]

The urban density model can potentially solve some of these problems (see Box 4.8). According to a report by the New Climate Economy (2014), '[m]ore compact, connected urban development could reduce global urban infrastructure requirements by more than USD 3 trillion over the next 15 years (2015–2030)'.[308] The compact city and the 'Smart Growth' concept are often seen as models of sustainability because of the way in which they reduce land consumption and transit needs (and thus reduce $CO_2$ emissions and reliance on cars), while encouraging the use of public transportation, cycling and walking, as well as limiting socio-spatial segregation.[309]

Table 4.1 **Comparison in $CO_2$ emissions between dense and sprawling metropolises.**
Source: Demographia World Urban Areas 2015, Global Commission on the Economy and Climate (2014).

| | Atlanta, United States (2015) | Barcelona, Spain (2015) |
|---|---|---|
| **Population** | 5,015,000 | 4,693,000 |
| **Urban area** | 6,851 $km^2$ | 1,075 $km^2$ |
| **Density** | 700 inhab./$km^2$ | 4,400 inhab./$km^2$ |
| **Tons of $CO_2$/inhabitant** | 7.5 | 0.7 |

## BOX 4.8 HONG KONG'S MODEL: AN EXCEPTION?

When it comes to dense urban development, Hong Kong is a frequently cited example. It has built efficient public transport systems and achieved very low transport-related $CO_2$ emissions and car ownership through high densities of residencies, workplaces and public transport nodes. The city has – among other things – strictly defined where development can take place and prioritized the regeneration of existing urban areas rather than expansion into non-urbanized areas. As a result, 43% of Hong Kong's population (3 million people) live within 500m of a Mass Transit Railway (MTR) station, and the majority lives within 1km of an MTR. Partly due to the high level of density (average of 21,900/km$^2$), 45% of trips are on foot, and the estimated $CO_2$ emissions from passenger transport/person is 378kg, compared to, for example, 5,000kg in Houston, United States.[310] Accommodation, on the other hand, is some of the smallest in the world, highlighting the disadvantages (in terms of poor quality of life) of over-densification and high land and property prices.

**Metropolitan cities are generally more exposed to catastrophic natural disasters than they were in the past**

In cities of the Global South, densification is increasingly taking place, although its implementation has not always been optimal. Densification has been facilitated by a decline in internal migration and urban growth, along with a decline in the saturation of the land market. Many residents have begun to settle in the city centre, leading to the revitalization of central and peri-central districts – a phenomenon which can be seen in Latin America. In São Paulo, for example**, urban growth largely takes place in existing neighbourhoods (both informal and formal) through the densification of the built environment.**[311] In Lima, old two-storey housing units, which were characteristic of the city centre 50 years ago, are being replaced by 10, 15 or 20-storey buildings.[312] This kind of densification has highlighted both its advantages and its potential shortcomings.[313] Densification prioritizes environmental and economic dimensions, often at the expense of a more social dimension. Denser, more active, more attractive neighbourhoods tend to elicit higher property prices, often marginalizing those low-income communities that had previously lived in these areas for decades. The link between densification and exacerbated congestion problems and lower quality of life is likewise proven.[314]

Densification policies (see also Box 4.9), particularly in cities of the Global South, all too often consist of the creation of housing units for middle and upper classes, or the most advantaged lower classes (as in the case of the MIVIVIENDA SA fund in Peru), at the expense of the least privileged. Especially in central and peri-central districts, these plans stimulate gentrifying dynamics, land and property speculation, and the relegation of the most vulnerable populations to peripheral, under-served areas,[315] making it more difficult to address issues related to inadequate housing, sanitation and access to basic services for all. Density, conversely, has been problematic in the case of informal settlements. People living in crowded environments are exposed to complex social, environmental and health challenges. These scenarios highlight the challenge of promoting the densification of middle-class areas, with an ambition to foster greater social integration, while at the same time supporting the de-densification of crowded, under-served informal areas.

The inadequacy of some densification policies – particularly in terms of their social impact – by no means invalidates the need to counter urban sprawl, a trend which has led to an over-consumption of agricultural land and to social, economic and environmental costs that our planet can no longer afford.

### 4.1.3 Metropolitan areas in the face of risk: resilience, actions taken and prospects[316]

As a result of urban growth and climate change, metropolitan cities are generally more exposed to catastrophic natural disasters than they were in the past. As rising sea levels from global warming and man-made climate change are increasingly a worldwide threat, coastal metropolises are now facing unprecedented risk of flooding. **Climate change has also weakened the natural, technical and financial resources that societies have at their disposal to react to such impacts** – a dynamic which is all the more serious in developing economies. Larger metropolitan areas are even more vulnerable to such events, given the ongoing expansion of urban agglomerations in risk-prone areas. These risks are hydro-climatic (storms, heat waves, heavy rains) as much as they are geological (tsunamis, earthquakes, volcanic eruptions) and are often cumulative. Metropolitan areas such as Phnom Penh, Bangkok and Manila are built

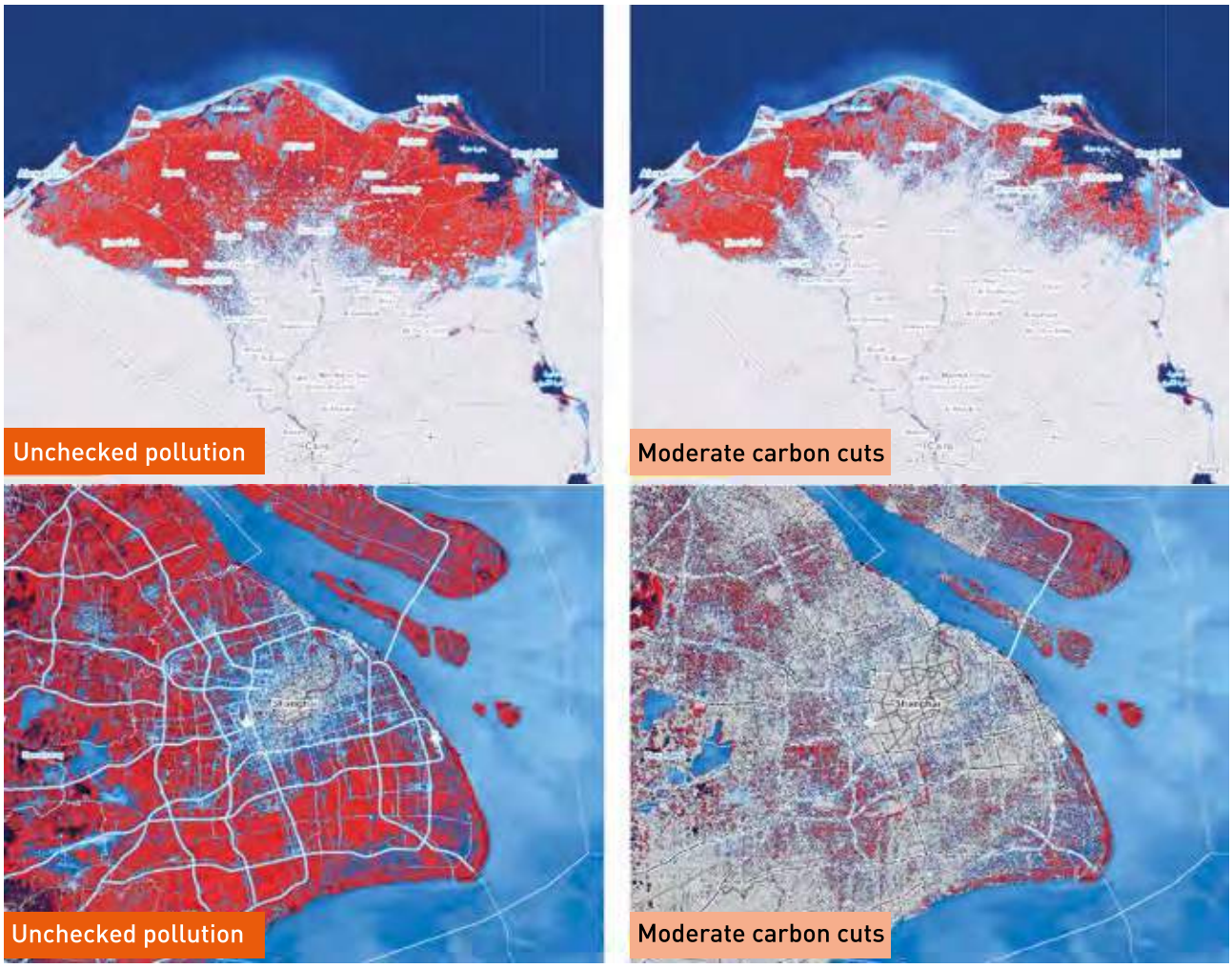
on river floodplains. Some national and local governments have been more receptive to risk reduction plans to increase city resilience. For example in Manila (Philippines), a resettlement plan was introduced in 2010 to remove informal settlers living in vulnerable areas along the city's waterways.[317] Even though some of the more worrying examples are located in the Global South, wealthier metropolises such as New York, London and Amsterdam, amongst others, are not exempt from possible danger.[318]

In light of this, resilience has become a core policy principle on which to build sustainable metropolises (one of the targets of SDG 11.5), and it is a principle that goes well beyond adaptation capacities.[319] Resilience is generally defined as a city's ability to react and adapt to natural catastrophes in an attempt to bring back normal life,[320] or restore the equilibrium and preserve the system's qualitative structure.[321]

The degree of urban resilience is not just affected by geography. Metropolitan contexts, and large agglomerations in particular, have to take into account a plurality of factors (technical, socio-economic, psychological, etc.). Historically, precarious and marginal

Figure 4.1 **Impact of sea-level rise over the next 100 years on the Nile Delta area (above) and the city of Shanghai (below).**

Source: Climate Central (www.climatecentral.com), data of the United States' Department of Commerce's National Oceanic and Atmospheric Administration (NOAA, www.noaa.gov/)




**Prospective flooded areas are visualized in shades of red.**

settlements have tended to concentrate in the most risk-exposed areas, more often than not the only land available, accessible or affordable by the most disadvantaged groups and communities.[322] This is why resilience can only be developed collectively and systematically with citizens, seeking viable solutions even when financial and coordination capacities are lacking.[323]

At the same time, **urban resilience cannot be thought of exclusively in relation to natural disasters or climate events. It is also linked to factors such as peace, security, basic services provision, social inequality, youth unemployment, and disease outbreaks**, amongst others. Outbreaks, for example, are particularly acute in metropolises, where higher density makes epidemic spread and contagion faster and less controllable. Cities such as Monrovia (Liberia) and Freetown (Sierra Leone) were significant breeding grounds for the 2014 Ebola virus outbreak, which led to the death of 8,761 people across Liberia and Sierra Leone, according to the World Health Organization.[324] According to UN-Habitat's chief technical adviser, the outbreak would not have reached such a scale had the city of Monrovia, for example, been more organized and had more accurate information on its demographics been available to authorities and operators.[325]

Accordingly, resilience has also been developed as a toolkit to react to the fragility as well as the structural and inherent challenges that arise in the daily functioning of any large urban settlement. Social exclusion, inadequate transit, health and education, crime and insecurity[326] and a poor quality of life all increase the fragility of urban settlements and, in particular, of those communities most exposed to risk – the poor, the disabled, the elderly, women, children and minorities. Since they impoverish and debilitate a city's social and human capital, these chronic ailments threaten and weaken the ability of cities – both in developed and developing countries – to respond to the challenge of long-term sustainability – either socially, administratively, or financially.

Interventions at different levels of government, however, seem to have been unable to foster dialogue and interaction as part of a more systemic approach. Lack of inclusion and transparency for marginalized populations and vulnerable neighbourhoods have affected large capital cities like Jakarta (Indonesia), where top-down responses have been limited to crisis management, with no consistent involvement of local actors and interlocutors.[327]

Africa, in particular, has witnessed both harsher climatic events and the proliferation of informal settlements in areas exposed to flooding and soil erosion. Ouagadougou (Burkina Faso), Niamey (Niger), Dakar (Senegal) and Accra (Ghana) have all experienced multiple deadly events in areas where more than 60% of inhabitants have neither stable household income nor access to basic services and infrastructure.

Cities that have invested more heavily in sustainable development tend to have competent, empowered local governments.[328] Given the number of economic and financial issues which cities face, citizen involvement is an essential precondition for the establishment of efficient local resilience systems. A study by the United Nations International Strategy for Disaster Reduction

## BOX 4.9 SURAT PREVENTION STRATEGIES[330]

In Surat (India), two disasters – a plague epidemic in 1994 and a very serious flood in 2006 – contributed to reshaping the city government's social and environmental policies.

In response to the plague, the city government considerably increased the priority given to the provision of cleaner water and the management of excreta and solid waste. In 1995, a new Commissioner committed to transforming the quality and coverage of solid waste collection and management, the cleaning of streets and the municipality's public health care system. By 2010, 95% of the municipality's population had access to the piped water system and 86% had access to sewers. Many 'slums' were upgraded, with provision of water, sanitation and solid waste collection much improved. Surat is now considered one of the cleanest cities in India.

Since 1979 there have been five major floods in Surat. In response to this, the municipality has improved delivery of essential services. During the monsoon in particular, the municipality clears its drainage and sewer systems to increase the capacity of the system to manage flood waters. Evacuation procedures have been enforced and some of the residents most at risk from flooding have been relocated. Water levels are also monitored from the reservoir behind the Ukai dam, in order to give more time to issue flood warnings. The warning system has also been improved, including warnings now being sent via SMS to mobile phones.

(UNISDR) and the Centre for Urban Disaster Risk Reduction Resilience (CUDRR+R) found variations in the ability of local government authorities to undertake resilience actions, particularly in relation to societal capacity and stakeholder participation – indicating a regional capacity gap in this area.[329]

Adopting measures to boost resilience is becoming more and more common in local government management systems across the world.[331] Improvement of infrastructure, more accountability and transparent decision-making, involvement of all actors and stakeholders, education and awareness-raising have been key components of resilience policies in many urban areas.[332]

**Cooperation frameworks for knowledge exchange and prevention schemes have also grown significantly**. Networks and consortia such as the UNISDR, the ICLEI–Local Governments for Sustainability group, the Making Cities Resilient campaign, or the 100 Resilient Cities network (promoted by the Rockefeller Foundation)[333] are just some examples. As recently as March 2015, the UNISDR led the third UN World Conference on Disaster Risk Reduction in Sendai, Japan. The conference gathered representatives from 185 UN member states, including a strong delegation of local authorities. It produced a framework document that highlighted the goals needed for the next few decades to foster resilience in the face of disaster. These priorities include understanding disaster risk, strengthening disaster risk governance, investing in disaster risk reduction and enhancing disaster preparedness for effective response.[334]

To foster resilient, environmentally sustainable metropolitan areas, alternative trajectories must be developed that transform production and consumption patterns to simultaneously promote green, low carbon, socially integrated and resource-efficient urban areas. To increase resilience to natural or man-made disasters, the identification of the most vulnerable areas and population groups (e.g. slums) should be supported by the development of preventive infrastructures (against flooding and similar phenomena, for example), adequate housing and resilience mechanisms integrated across all urban policies.

# 4.2 SOCIAL SUSTAINABILITY AND QUALITY OF LIFE IN METROPOLISES

The analysis conducted so far shows that the key dimensions of environmental sustainability and social inclusion should be addressed within a comprehensive, holistic framework of action. To promote cities that are sustainable, accessible and inclusive – as mentioned in the introduction of this chapter – both dimensions should be linked to the 'Right to the City' in order to guarantee that 'citizenship rights' are an integral part of metropolitan policies.[335]

Four of these rights are examined in the following sub-sections: the right to land, the right to housing, the right to universal access to basic services and the right to culture. Current available data illustrates the pressing demand for decent housing: '[t]he expected urban global population increase of 1,023 billion by 2030, combined with the existing housing deficit (currently around 880 million people live in inadequate housing in cities and this number could well be an underestimate)[336] implies that approximately two billion people will require housing by 2030'.[337] The figures on access to water and sanitation are similarly worrying (see Section 4.2.3 below). If these issues are not adequately addressed, two out of five urban dwellers will not have access to decent housing and will have to resort to informal settlements by 2030 – mostly in metropolitan areas. Access to decent and affordable housing, as well as to water and sanitation and an adequate standard of living are recognized as human and social rights.[338]

**Alternative trajectories must be developed that transform production and consumption patterns to simultaneously promote green, low carbon, socially integrated and resource-efficient urban areas**

## 4.2.1 Access to land: the first step towards decent housing[339]

**The concept of right to land focuses on issues of social exclusion and discrimination (notably gender-related) which are linked to land use**. Access to land and its regulation – cornerstones of housing and of the 'Right to the City' – implies better control of land use, easier access for the most vulnerable communities, and the regulation of those market forces which can lead to excessive housing costs, restrict the supply of affordable housing, and thus penalize millions of underprivileged city dwellers.

In the 1960s and 1970s, in the first phases of urbanization of the most dynamic metropolises, access to land was relatively easy. However, in the past 20-30 years, and particularly in developing countries, access has become more complex, with a general shortage of affordable housing. Some fast-growing metropolitan areas have seen the spread of informal settlements alongside a process of liberalization and commodification of the land market. In cities such as Abidjan (Côte d'Ivoire) and Cairo (Egypt), customary land rules or practices have been replaced by land grabbing and commodification, resulting in rising land costs and increasingly difficult access for the least advantaged citizens.[340]

Security of tenure is a major issue in most metropolitan areas of the developing world. According to UN-Habitat, two thirds of slum dwellers do not hold legal titles. In many countries, women are particularly subject to discrimination (no legal right to inheritance, high vulnerability in the event of divorce or widowhood, etc.). Additionally, the illegality of slums means limited social safety nets and family protection, particularly in the face of violence.[341] In some countries, the universal norm of individual property rights goes against the customs of indigenous communities, which are founded on collective or communal tenure rights.[342]

**The right to housing involves recognizing the right to a decent and healthy place to live for everybody**

Effective legalization of property tenure for the most disadvantaged comes up against different barriers in different metropolises (e.g. institutional blockage in Cairo and interest groups or 'mafias' in Ouagadougou, Bamako and Mumbai). Strategies to introduce tenure security have focused on two different approaches: property rights recognition and usufruct rights. Those who support the latter argue that property rights recognition tends to lead to rising prices and more marginalization, especially for those households that are not able to benefit from legalization processes and remain in the 'grey' areas of property management.[343]

Some countries have chosen to distribute property titles to facilitate access to mortgages and investments in housing improvements. For example, Peru and Brazil have developed a large-scale securitization process, with more than one million titles distributed (however there are backlogs in each, e.g. difficulty accessing cadastral registers in Peru and building-permit systems and weak management of vacant public land in Brazil).[344]

Recognition of land tenure is often considered more efficient and fairer than legalization. Some programmes have adopted a 'hybrid approach', for example using tax payment records, recognition by neighbours or by peers of 'real tenure', or traditional modalities (e.g. contracts based on oral agreements or *Hujja* in Amman).[345] Access to land for the more vulnerable could be facilitated by using public land and better regulation of the land market.

### 4.2.2 The right to housing[346]

Along with the right to land, **the right to housing is an essential dimension of social sustainability, given the importance of the home and residential attachment for wellbeing**.[347] Nevertheless, the global sums dedicated to social housing is currently insufficient to achieve SDG Goal 11.1 ('ensure access for all to adequate, safe and affordable housing and basic services and upgrade slums').

Throughout the 2000s housing has become a global and often opaque financial instrument – as seen in the United States sub-prime crisis – often at the expense of middle and low-income households. As mentioned above, in recent years, institutional investment in properties has increased dramatically (see Section 3.2).[348]

Whereas in developing countries an increasing number of people have resorted to living in slums (55.9% of Sub-Saharan Africa's urban population in 2014),[349] in developed countries property inflation has pushed middle and low-income households towards the peripheries. In almost all cities, this trend has been aggravated by the reduction of available social housing. In fact, 'over 100 million people in the Global North suffer a housing cost overburden, spending 40% or more of their household income on housing'.[350] The percentage of available social housing has been declining in the last few decades due to the disappearance of regulated tenancies (35,000 state-sponsored social housing units have been 'lost' in New York since the 1990s) or to privatization policies (in England but also in China, social housing stock reduced by 90% over the past 15 years).[351] In England, more than 1.8 million households were on social housing waiting lists in 2014 and the United States is currently short of 5.3 million affordable housing units.[352]

The right to housing involves recognizing the right to a decent and healthy place to live

for everybody, as acknowledged in the UN's Habitat II Summit and at the heart of the debate for Habitat III (see Box 4.10).

Although countries such as France and South Africa have included this right in their legislation, its implementation has hardly ever been straightforward. France's 'solidarity and urban renewal' law (2000) made it obligatory for each municipality to have a 25% quota of social housing in their building stock: many municipalities have failed to comply.[354] Furthermore, certain renewal policies of urban social housing in Northern America and Europe, which led to the demolition of old social buildings as an alternative to spatial segregation and discrimination, have been criticized because of the lack of adequate social criteria.[355]

In emergent or developing countries, while housing policies can successfully address the lack of adequate and affordable housing, some of them have led to the transfer of populations to isolated areas and to a spatial concentration of the poor. In Brazil and Morocco, programmes such as *Minha Casa* or 'cities without slums' offer alternatives to the *favelas* (slums) but often in areas remote from jobs and services.[356] At the same time, private real estate companies (e.g. in Mexico, Turkey, Morocco and Egypt) have developed affordable housing projects but in many cases on the peripheries, thereby encouraging urban sprawl.[357]

On the other hand, many countries have also supported in-situ municipal and national slum upgrading programmes, even if there is still strong resistance to the recognition of informal settlements. Rehabilitation policies frequently focus on improving basic services, sometimes coupled with land redistribution (e.g. through 'developed plots') and urban standardization through a grid street plan to 'normalize' the urban frame.[358] The concept of self-construction is often disregarded, while relocation in new urban areas, in association with developers, is increasingly relied upon. However, success stories based on the strong involvement of community organizations should also be highlighted. In Recife, slums have been included in 'economic areas of special interest' (ZEIS). In Lima, the '*Barrio Mío*' programme subsidised basic infrastructure and services for residents of upgraded areas. In Medellín, the parks department improved the linkages of self-built neighbourhoods with the rest of the urban fabric. In Mexico City, the neighbourhood improvement programme (PMB) has supported the development of

## BOX 4.10 HABITAT III THEMATIC MEETING ON INFORMAL SETTLEMENTS

In April 2016, a Habitat III thematic meeting on informal settlements took place in Pretoria, South Africa. The declaration that emerged from this reiterated 'the right to an adequate standard of living, including the right to adequate housing [...]' and emphasized the dual characteristic of slums as both a cause and a consequence of poverty, social exclusion and environmental degradation. It stressed the need for a New Urban Agenda that – among other things – 'strengthens local government and improves urban governance and management [...]' to 'foster a collaborative, participatory process to improve living conditions in informal settlements, incrementally upgrading existing and preventing new slums', and 'adequately equips national, sub-national and local authorities, as well as slum dwellers, with strategic partnerships for sustained and affordable financing strategies for participatory incremental sustainable slum upgrading and prevention'.[353]

Photo: UCLG - Maputo (Mozambique).

local infrastructure and basic services. Alliances between organized citizenship and local government have been essential for successful rehabilitation initiatives in Thailand, the Philippines, India and several other countries.[359]

Civil society initiatives can also contribute to the production of affordable housing (e.g. community land trusts and housing cooperatives - see Box 4.11). Numerous housing cooperative initiatives have emerged – as varied in number as in name[360] – and some have been, or are being, institutionalized.[361]

The generic term 'slums' trivializes the diversity of human settlements.[368] In metropolitan areas characterized by extended slums, these informal settlements should be recognized as legitimate and historical means of urban production, and their formalization and integration into municipal management systems should be supported. Metropolitan areas should adopt measures other than demolition (still frequently used) to tackle slums. Globally, between 1998 and 2008, at least 18.6 million people had been affected by forced evictions.[369] In New Delhi, between 1990 and 2008, 221 precarious neighbourhoods were destroyed in order to clean up the city[370] – a process sped up by the approaching Commonwealth Games.

In light of this, it is important to have **strong public policies for affordable housing and adequate support for civil society initiatives concerned with the production and management of housing, particularly in collective and communal developments, preserving tenants' status,**[371] preventing vacant housing and promoting fair and equitable access to housing as well as their proximity to basic services.

**The right to housing means including citizens in governance bodies that plan and build social housing**, as well as avoiding 'electoralization' or politicization in housing allocation. Metropolitan areas that successfully manage their housing policy can be replicated at other levels of government, thus fostering integration and ensuring efficiency.

### BOX 4.11 COMMUNITY LAND TRUSTS (CLT) – NEW YORK AND BRUSSELS [362]

CLTs are instruments of protection against gentrification and the displacement of local residents. They give power to communities that have historically been powerless, prioritizing use value over exchange value,[363] and looking at housing as a human right more than a market commodity. CLTs are non-profit community organizations that own pieces of land reserved for affordable social housing. They collaborate with non-profit housing associations that let housing units according to specific profiles. Widely developed in the United States, this model has proved the efficiency and relevance of land used as social heritage, promoting wider access to housing.[364]

In New York, for example,[365] a CLT has been set up using expertise gathered from an organization combatting homelessness (Picture the Homeless), academics (Columbia University), a community organization (New Economy Project) and inhabitants of East Harlem.

In Brussels[366] the 'Brussels Community Land Trust Platform' was created in 2009. In 2012, the City of Brussels decided to develop a CLT (incorporating, for example, affordable housing production, loans for low-income households and prevention of unoccupied housing) which is financially supported and legally protected by public authorities (integrated into the housing code under the Regional Land Alliance) and is recognized as an efficient instrument for the production of affordable housing.[367]

## 4.2.3 Access to public services

Severe deficiencies in service provision (e.g. fresh water and sanitation, energy, transportation, waste management, healthcare and ICT connectivity) affect the urban fabric and infrastructure in many countries and economies around the world. This prevents a large number of people from living with dignity and perpetuates large-scale and systematic inequality. **Across developing countries, there are still 2.4 billion people lacking access to improved sanitation facilities and 1.9 billion people using unimproved or potentially contaminated water sources**. Global figures indicate a decline in access to such services in urban areas of Sub-Saharan Africa.[372] In the Global North, the issue of affordability creates unequal access to basic services, often leading to energy poverty (e.g. 10.8% of the European Union population – about 54 million people – were unable to adequately heat their homes in 2012).[373] These numbers are all the more alarming as local governments will have to expand service provision in the face of rapid urban growth: estimates suggest that 667 million more people will be living in the world's metropolises by 2030.[374]

Inclusive metropolises that respect the human rights and basic needs of their population – and especially those of women of all ages – need to re-asses their governance systems and explore adequate models for the management and financing of the services they deliver to their citizens. Women in particular have different patterns of use of basic public services. With respect to public transport, for example, gender-aware mobility policies should consider not only the specific safety needs of the female population, but also the impact of the persistent gender pay gap, which significantly affects the spending capacity of female service users and customers.

In most decentralized countries, the responsibility for basic service provision has been devolved to local governments or special purpose authorities (e.g. the Metropolitan Transit Agency of New York or water districts in the United States). In many countries, however, service provision and its management have been dominated by public or private utilities (generally structured as joint ventures) often controlled directly by central government (e.g. Buenos Aires in Argentina or in large agglomerations of Northern and Western Africa) or by regional governments (e.g. Brazil). Utilities are normally organized on a sectorial basis at corporate level, with limited accountability at the local level. Provided that most urban services cross municipal boundaries, **a unique metropolitan structure to coordinate provision would, in most cases, be ideal so that loss-making and profitable services are progressively equalized**. In fact, some countries have successfully implemented a model of local multi-service enterprises, owned by local authorities (e.g. Germany's *Stadtwerke* or the *Empresas Públicas de Medellín* consortium of public utilities in Medellín, Colombia).[375]

The concentration of tasks and responsibilities into one large metropolitan authority, however, can also reduce efficiency incentives, limit the attention paid to local needs and demands, and hinder the ability to adapt to variable economic conditions. Moreover, this potential drop in efficiency of basic service provision tends to translate into higher service costs, lower quality and poor accessibility for the least favoured citizens.[376]

While a combination of tariffs, taxes and transfers[377] can, under certain circumstances, sustain maintenance, in most developing countries the revenues they generate have been insufficient to finance service expansion to unserved areas. This has excluded many urban areas from service provision altogether. Cost effectiveness has also not been properly balanced across the services that are provided: some have been consistently loss-making (e.g. transport and sanitation), whilst others have been profitable (e.g. electricity and communication). Even if central governments remain a major source of financing for basic services, local governments are expected to provide an increasing proportion of it, mostly in high and middle-income countries.

### *Service provision and the issue of affordability*

Finding a balance between affordability and financial sustainability is a central challenge for public services,[378] although the two goals are not mutually exclusive. Affordability is particularly critical in low and middle-income countries, with a large presence of informal settlements. The affordability debate is usually considered from two different perspectives: a) a market approach, assessing household incomes and setting tariffs that poorer groups can afford; or b) a human rights approach, especially for water provision, implying that access to a minimum level of consumption should be free and guaranteed.[379] In South Africa, for instance, the poor are guaranteed minimum levels of free access to water, electricity and solid waste collection,[380] a strategy that has substantially increased access over the past 15 years, though it has not yet provided universal access to drinking water. In the European Union, the treaties recognize affordability as an important value in the provision of all services. The law protects poorer households and warrants minimum access to essential services. Newly-adopted rules on 'energy poverty', for instance, have gone as far as to prohibit service disconnection in critical circumstances.[381]

Price differentiation, however, has generally been more common. It tends to be implemented through cross-subsidization, to support low-income households.[382] Alternative options include direct subsidies, through targeted income support or cash transfers, as in Chile and Colombia. However, policies that keep tariffs low for all users are not necessarily increasing inclusiveness, failing sometimes to either involve poorer recipients or ensure the system's financial sustainability, or both. In Africa, for instance, about 90% of the recipients of subsidies for piped water or electricity services belong

**Affordability is particularly critical in low and middle-income countries, with a large presence of informal settlements**

to the richest 60% of the population.[383] Affordability is even more of a critical issue for those underserved households that rely on informal vendors and providers. They are often charged more than they would be if they could access the network, with a dramatic impact on their household incomes. It is up to local governments to monitor this situation and its effect on the overall system performance.

### *Basic services management: the role of bottom-up participation*

**No ideal one-size-fits-all model for the management and financing of basic services is yet available**. The optimal choice between outsourcing and direct management can only be made on a case-by-case assessment by public authorities, who need the freedom to adopt their management model of choice to increase flexibility and adaptation to local contexts.[384] In any case, an effective, well-enforced regulatory framework is essential to empower local governments to guarantee universal access to quality basic services and protect the commons.

As a response to the increasing challenges of service provision over the last two decades, many countries and international institutions have promoted reforms that sought to outsource provision to private operators. As a result, an increasing participation of the private sector in basic service provision, through Public-Private Partnerships (PPPs) has become popular in the last few decades, as they have often been able to reduce costs (see also Section 2.3.1). As stressed by the United Nations Department for Economic and Social Affairs (UN-DESA), however, the hope that private sector participation and concession schemes would bring new investments in and broaden access, particularly in low-income countries, has not always been fulfilled.[385] A trend towards the re-municipalization of basic services, on the other hand, has been reintroduced by some European cities in the last decade,[386] while new PPP models based on knowledge-sharing have also emerged, showing interesting results in terms of improving access to public services (e.g. a PPP between the public water company in Algiers and an international company in order to strengthen management and professional capacities).[387]

Other partnership systems are also being used to strengthen public services delivery, such as Public-Public Partnerships (PUPs), involving decentralized cooperation between different public bodies, or Public-Private-People Partnerships (PPPPs), including citizens and civil society in a bottom-up participative approach to infrastructure planning and policy making. User participation in monitoring and evaluation also helps improve the quality of public services (e.g. community score cards in many cities in Malawi and Sri Lanka or an eco-solidarity observatory in Dunkerque, France, created to evaluate the affordability of access to water).[388]

Small private enterprises in both the formal and informal sectors play an important role where the quality and extent of provision by official service providers is lacking, providing a high proportion of the urban population with basic services.[389] Small providers can be a 'second-best solution', for example with public standpipes or dry sanitation, or the use of environmentally safe methods for processing wastewater, or street lighting and solar lanterns (e.g. in Kenya). There are many examples in African countries, resulting in a 'hybrid' model of provision, especially in peripheral urban areas where small autonomous systems (with well pumps, storage and piping systems) ensure distribution of water to a

Photo: Patty Ho - Colombo (Sri Lanka).

group of houses or neighbourhoods.[390] The share of the population with water provided by such operators in major urban centres in Africa ranges from 21% in Dakar to 80% in Khartoum. Levels of informal provision of electricity in the region are similar.[391] Municipal authorities have also partnered with small private entrepreneurs to provide toilets or sanitation (in Suzhou, China, and in Mumbai, in partnership with a federation of women slum-dwellers). Such initiatives have produced better quality, cheaper, and better managed solutions.[392]

In most cities of Africa, Asia and Latin America, small-scaled informal transit modes (e.g. minibuses, scooters, tricycles or shared taxis) are central to the efficiency of transport systems. In Latin America, up to 30% of journeys are made using informal transport, with a much higher proportion used by low-income groups. The lack of formal solid-waste management services, similarly, has also often led to the emergence of cooperatives, micro-enterprises, NGOs and informal workers catering to households and businesses. In Latin America, these providers represent an estimated 3.3% of activity in the sector, rising to 7.8% in larger cities, being especially active in slums and informal settlements.[393] In many cities of Asia and Africa, tens of thousands of people make a living through waste collection,[394] sometimes competing with formal systems and challenging the capacities of weaker municipalities.

In many low and middle-income countries, there is also a long tradition of local communities playing a role in basic service provision, often with support from NGOs and community organizations. Infrastructure for basic services takes a long time to reach these areas, and many inhabitants will continue to depend on community provision for the foreseeable future.

Although these alternatives to the conventional service network often go unrecorded and untaxed, and may be more vulnerable, they have the advantage of being easier to implement, more flexible and responsive. They can more easily adapt to low incomes, rapid urban growth, changing economic activities and land-use changes, and – particularly in the Global South – represent a way to promote access without the costly deployment of conventional networks that are unaffordable for many local governments and often ill-adapted to the rapid growth and changing dynamics of cities.

In the same vein, other types of decentralized production of services, sometimes called 'off-grid' or 'post-network' formulas – mostly found in industrialized countries, and particularly in Europe – are made possible through renewable and accessible techniques and affordable prices (solar panels, small wind turbines, small sewerage treatment plants, etc.). Although 'off-grid' formulas are not new (there are millions of diesel and gasoline generators in use across the world),[395] those based on renewable energy can create a 'prosumer' trend that transforms users' reliance on providers and turns the provider/user relationship into a user/co-producer one in which the user is a potential supplier, thus disrupting the economic model of universal networked infrastructure.

**The role of local governments in regulating and overseeing these different alternatives is crucial because of the potential consequences for human and environmental safety**. Given the complexity of the task at hand, the 'conventional' debate on the best model for the management of basic services in metropolitan areas is arguably obsolete, particularly when applied to low-income countries and even more so to informal settlements, where there are diverse issues related to the lack or absence of public services (health, water, sanitation, waste management, transport, electricity, public lighting, etc.) and where universal provision is often not foreseeable – at least through conventional infrastructure and financing and management methods. In this context the failures of, and unequal dynamics generated by, most conventional, centralized means of services provision (as well as the absence of basic services or the inability of residents to access them) have led to the search for alternative, more sustainable means of structurally differentiated provision. These measures – still nascent and subject to debate – involve a diversity of socio-technical systems of accessibility, actors, institutional structures and range of services – many of which are informal.[396] Although not without risks (e.g. fragmentation, social polarization), with further study and a careful examination of local contexts and their socio-spatial dynamics, **such measures could represent a significant step towards achieving sustainable and universal access to basic services in metropolitan areas around the world.**[397]

**There is a long tradition of local communities playing a role in basic service provision, often with support from NGOs and community organizations**

# 4.3
# AN EMERGING FIELD: THE CULTURAL DIMENSION OF METROPOLISES

In the last few years, increasing attention has been paid to the cultural dimension of sustainable development. While the connections between culture and sustainable development are visible at different levels, specific effects can be observed at the local level, for example the impact of rapid urbanization on the preservation of cultural heritage sites and the erosion and loss of traditional knowledge; the need for metropolitan areas to reflect on access to cultural venues; the attention paid to an increasingly diverse population; the increasing role played by the cultural and creative economy in generating employment and in contributing to broader economic development; and the planning of decentralised systems of cultural infrastructure, etc.

**The recognition of culture as a space of diversity and the affirmation of the right to take part in cultural life have inspired some metropolises to establish models for cultural governance**

In this context, new reflections and standards have been adopted by intergovernmental institutions and forums,[398] as well as by local governments, including metropolitan cities. Since the adoption of the Agenda 21 for Culture in 2004,[399] UCLG has adopted the Policy Statement on 'Culture as a Fourth Pillar of Sustainable Development'[400] in 2010, and a toolkit entitled 'Culture 21 Actions' in 2015.[401]

## *The affirmation of cultural policies*

The strengthening of the cultural dimension in approaches to sustainability in metropolises relies on an understanding of the specific meaning and policy implications of its core components. These include the protection and promotion of tangible and intangible heritage; the recognition, protection and promotion of cultural diversity as an essential component of co-existence and a positive factor in urban dynamism; and the acknowledgement and promotion of creativity as an aspect of human experience and a source of progress.

**These values lie at the core of cultural policies designed by metropolitan governments**. Measures adopted at the metropolitan level include the establishment of governmental departments and participative councils in charge of the design, implementation and evaluation of cultural policies; the adoption of cultural strategies and policies which take inspiration from cultural rights, including the right of all citizens to take part in cultural life; the mapping of elements of tangible and intangible cultural heritage as a basis for adopting safeguarding and promotion measures; and the organization of cultural events, including festivals, fairs and exhibitions.

A commitment to ensure the exercise of cultural rights by as many citizens as possible – including those in peripheral or disadvantaged areas who are often not able to access city-centre cultural venues – has led many cities around the world to establish decentralized cultural facilities. New cultural venues at the neighbourhood level can either be part of broad, extensive networks (e.g. community centres, libraries, theatres, auditoria, etc.) or be specialized institutions that respond to specific local needs or emerging challenges at the metropolitan level. Among the good practices identified are the four Factories of Arts and Jobs (FAROS) set up by Mexico City to encourage creativity and the reconstitution of the social fabric in four peripheral neighbourhoods.[402] Similarly, the City of Bogotá has established an extensive network of local arts centres for children and young people (CLAN) as part of its ambition to integrate artistic, cultural and sports education within the educational system, in close cooperation with local cultural actors.[403] Finally, with the aim of giving a new use to former industrial sites and unique venues and providing artists and creative professionals with opportunities to develop creative work and foster innovation, the City of Barcelona established the Art Factories programme, with venues spread across different city districts.[404]

## *The transversality of culture*

The integrated nature of sustainable development is visible in the synergies that exist between cultural aspects and the economic, social and environmental pillars of sustainability. Policies adopted by metropolitan areas around the world include integration in curricula of cultural skills and knowledge related to intercultural dialogue and diversity; facilitation of citizen initiatives for the sustainable use of public spaces; consideration of the cultural economy in local economic development strategies; involvement of cultural institutions that receive public support in their work with disadvantaged groups and neighbourhoods; integration of culture in programmes for

the renovation of historic urban centres; and recognition of public spaces as key resources for cultural interaction and participation. Among the challenges faced by metropolitan areas in this field are the lack of appropriate cross-departmental or 'joined-up' policy structures, limited understanding of the meaning and policy implications of cultural aspects in other policy areas and scarcity of appropriate tools for analysis (cf. Culture 21 Actions toolkit).

### *The governance of culture*

The recognition of culture as a space of diversity and the affirmation of the right to take part in cultural life, including the right to contribute to priority-setting and policy design and management, have inspired some metropolises to establish models for cultural governance that integrate the voices of public, private and civil society stakeholders and seek to foster dialogue and collaboration.

Several cities and metropolitan areas are increasingly establishing mechanisms for a wider range of stakeholders to contribute to the public discussion, design and evaluation of policies in the field of culture. This includes the broader analysis of local cultural dynamics and the interaction between cultural aspects and other spheres of metropolitan life. These mechanisms may be either specific to the cultural field or integrated within broader schemes fostering participative governance. Among the examples identified in this area is the use of participatory budgeting in Belo Horizonte, which enabled citizens in several of the city's districts to identify the establishment of local cultural centres as a priority. As a result, an extensive network of community cultural centres now exists across the city.[405] Beyond decision-making, initiatives that enable cooperation throughout the implementation of programmes and contribute to the emergence of a dense network of public, private and civil society agents across the city are also necessary. The city of Lyon has defined its approach to cultural development as 'a culturally cooperative community', which recognises citizen mobilization and engagement as one of the engines behind local cultural development. Through the adoption of tools such as the Cultural Cooperation Charter, it has fostered collaboration between small and large civil society and cultural institutions in the city centre and its neighbourhoods.[406]

**The cultural dimension is also relevant in terms of spatial development, through the construction of cultural facilities and the creation of public spaces**. These should be seen as essential meeting spaces to encourage cultural activities and diversity. Many metropolitan areas are experimenting with territorial and peri-urban planning by developing projects based on cultural, architectural, urban and natural heritage. In this way, culture and heritage become catalysts of territorial unity and shape economic, social and environmental policies. The natural parks of the Île-de-France region illustrate how the peripheral spaces of metropolises build themselves using heritage as a dynamic development tool.

Photo: Fezile Njokweni - Durban (South Africa).

# 5.

# CONCLUSIONS: SHAPING THE AGENDA FOR METROPOLITAN AREAS

**The 'Right to the City' as a cornerstone for urban policies**

As outlined in the introduction to this chapter, our world is moving towards the peak of a 'metropolitan age', characterized by large, growing urban agglomerations with unprecedented complexity and diversity. As metropolises today encompass 41% of the world's urban population and contribute significantly to the wealth of nations, a transformative approach has become necessary to ensure the prosperity, inclusiveness and sustainability of the metropolises of the future. This will take place in the context of significant uncertainties – possible extensive economic stagnation, large-scale regional conflicts and violence, environmental risks, and socio-political polarization – that will require decisive and firm action.

Through a comprehensive analysis of the literature and contributions from different metropolitan leaders, this chapter highlights some of the stark contradictions of the 'metropolitan age'. **Metropolises play a central role in our societies yet have not resolved key issues relating to governance and democratic management**. Many metropolitan areas host massive concentrations of wealth and offer promising opportunities for growth whilst, at the same time, facing critical difficulties in delivering decent housing and access to quality basic services. Many cities are competing for growth and investment in a globalized world but, at the same time, are experiencing inequality, which exacerbates social segmentation and territorial polarization. Areas that have the promise of an improved quality of life risk jeopardizing this through the irreversible depletion of their natural resources and life-support systems.

This chapter, however, also shows how metropolitan actors, through different policies and initiatives, can successfully tackle many of these challenges and actively support sustainable growth, social inclusion and environmental protection as mutually re-enforcing goals – respectful of the principles that inform the Sustainable Development Goals (SDGs), the COP 21 agreements, and the New Urban Agenda. These experiences reaffirm the critical role of metropolitan areas in the fulfilment of these international agendas, beyond the goals of SDG 11. Based on these lessons and examples, and with reference to the 'Right to the City' as a cornerstone for urban policies, this section puts forward a set of key policy recommendations.

## 5.1 TRACKS FOR RESHAPING METROPOLITAN GOVERNANCE

However pressing the need to strengthen the governance of many metropolitan areas and megacities, the experiences of metropolitan governance presented in Section 2 demonstrate that there is no 'one-size-fits-all' solution. All

existing models need, to a certain extent, to be adapted and re-invented.

Many metropolitan governance systems are, in fact, being reformed and upgraded around the world. Reforms, however, are rarely flawless and often involve trade-offs on different issues; in general, they seem to have a higher chance of success when they are based on collaborative processes, with the involvement of different levels of government, than when they are top-down. Some basic principles that tend to bolster **democratic and collaborative metropolitan governance systems include local democracy, accountability, subsidiarity, effectiveness, adequate resources and financing instruments to foster a polycentric and balanced development**, together with 'equalizing' financial mechanisms for more cohesive, harmonized metropolitan areas.

A thorough reform of financing systems is urgently required in many metropolitan areas, in both developed and developing countries. As mentioned above, many metropolitan areas operate in a 'low-investment, low-return' equilibrium, and lack fiscal resources to be able to invest in the infrastructure required for long-term growth. Although metropolitan areas must advocate strenuously for sustained and enhanced intergovernmental transfers, this report suggests that metropolitan sustainability will increasingly rest on the ability of local and metropolitan governments to become more **revenue self-sufficient**. This goal, however, will require a critical, comprehensive revision of fiscal frameworks and the deployment of innovative financial tools – so as to broaden the ability of metropolitan areas to capture the value of the economic growth they generate, while also improving access to responsible borrowing. These ambitions are very challenging in developing economies, where the financial options available to cities are limited, in the face of a growing urban population with soaring needs and demands for quality services**. At both the national and global level, therefore, a deep rethinking of traditional financing approaches is needed to empower metropolitan authorities in the context of widespread financialization and privatization of urban public goods and property markets.** This would make it possible for metropolitan areas to reconcile financial constraints with long-term sustainable development, and counterbalance the growing wealth inequalities both between and within cities.[407]

The success of metropolitan areas has a fundamental impact on national development in most countries. As such, metropolitan governance should be defined by a **collaborative and effective multilevel governance framework**. This report calls for a new deal between metropolitan areas and other tiers of government, to ensure a clear recognition of the role of cities and, in particular, of metropolitan areas. It recommends strengthening national policies to support reform processes in metropolitan governance and enhancing the linkages between metropolises and other cities, settlements and territories.

As regards governance within the metropolitan area and its relations with civil society, the report insists on **the democratization of metropolitan governance** and a larger role for both local organizations and citizens, well beyond formal electoral channels. A buoyant local democracy is a pre-condition for the emergence of a new form of metropolitan governance, able to recognize and mitigate the tensions and contradictions inherent in complex urban societies. It should be supported by clear participatory mechanisms that facilitate the active engagement of civil society, especially excluded and disenfranchised groups, including immigrants. The gender perspective must also be integrated into the design, execution and evaluation of public policies **through the systematic application of the principle of equal treatment and opportunities for women and men in all public policies**.

New technologies facilitate access to data and create opportunities for new forms of participation. The ability of information to flow freely is key to the transparency and openness of the new systems and methods that metropolises can establish within their own institutional arrangements.

**Empowered and well-organized local communities**, able to develop their own initiatives, can and should participate in the co-production and implementation of city policies (e.g. planning, slum upgrading and service delivery) through responsible partnerships.

As part of the transformative shift in metropolitan governance, Section 2 calls for a change in the mindset of city governments in the form of a metropolitan leadership that embraces experimental alternatives and seeks new management and cooperation paradigms; and leaders that move from

**As metropolises today encompass 41% of the world's urban population and contribute significantly to the wealth of nations, a transformative approach has become necessary to ensure the prosperity, inclusiveness and sustainability of the metropolises of the future**

fragmented sector-specific decision making to a strategic approach that takes into account the systemic tensions between inclusion, environmental policies and the need for sustained growth. Although not entirely new or risk free, the strategic planning approach presented here is a promising model on which to build such an integrated vision for the whole metropolitan area, joining together the different dimensions of urban sustainable development. It offers an opportunity to plan and decide collaboratively across the many territories that are involved, preserving a participatory approach that includes local stakeholders and civil society. Citizens and their effective participation can ultimately help overcome the asymmetric distribution of power that is inherent in the policy-making arena and the productive ecosystem of metropolitan areas.

# 5.2
# THE PARADOX OF THE METROPOLITAN STRUGGLE FOR COMPETITIVENESS

**A pattern of winners and losers tends to emerge within metropolitan areas**

Whether they are recognized as 'engines of growth', 'expressions of globalization processes', or 'archipelago economies', most metropolitan areas will continue to function as drivers of national and even international economies. Section 3 analyzes the positive and negative externalities of metropolitan areas – involved as many are in a global competition to attract business and investors – and highlights the tensions that this competitive framework creates.

On the positive side, metropolitan areas provide critical advantages and externalities to the local and national economies in which they are embedded. Their role has been central to the economic transformation of many emerging and developing countries in recent decades. The report introduces several of the strategies that metropolitan areas have developed to boost their economic development and also highlights how these strategies would not be feasible without a distributed system of leadership and power-sharing, partnership and coalition-building. This often leads to new institutional arrangements (development agencies, advisory bodies, and diverse alliances) able to marshal economic sectors, levels of government and also civil society behind the same shared goals.

The question the report raises is how to ensure and regulate the participation of private and financial sectors, in a transparent and accountable manner, to strengthen metropolitan governance without weakening democratic institutions. Section 3, specifically, argues in this regard that strong and visionary local leaders can manage this delicate equilibrium and improve cities' room for manoeuvre. In any case local democracy should be at the centre of any metropolitan development policies.

With regard to those negative externalities linked to the 'imperative of competitiveness' and fuelled by the financialization of urban economies, the report highlights the risks and realities of increasing inequalities, the fragmentation of urban space, and social exclusion. A pattern of winners and losers tends to emerge within metropolitan areas, due to phenomena of gentrification and marginalization that affect the most socially fragile communities. This could lead to the emergence of a 'two-speed' city that excludes whole portions of the urbanized space, with on the one hand prosperous areas, characterized by a demand for a highly-qualified workforce, and on the other hand areas with disadvantaged population badly affected by increasing unemployment and poverty.

Similarly, in the metropolises of the Global South, informal neighbourhoods and economic activities struggle to cope with the devastating effects of competition for land use. Certain negative externalities can even counterbalance the positive effects mentioned above, consuming resources and intensifying imbalances between territories at the expense of the rest of the country.

One of the biggest challenges for metropolitan areas, as argued at the end of Section 3, is how to **combine 'attractiveness' strategies with an agenda that preserves inclusiveness and sustainability**. It is argued that inclusion and sustainability are neither optional nor secondary to the pursuit of economic growth and efficiency. There is growing international evidence of a relation between high levels of metropolitan inequality, congestion and pollution and lower economic growth rates because of their effects on social cohesion, insecurity, health and the environment, and the ability to attract investment and withstand external shocks.

Accordingly, a combination of strategies to engage metropolitan areas in a territorial

dynamic of solidarity and in an inclusive and sustainable pattern of development should comprise: i) urban policies that shape urban systems as a whole (be it at the national or the regional level); and ii) metropolitan policies and actions supported by more localized, targeted urban projects adapted to the needs of local communities.

As regards the first dimension, in particular, national governments need **to redefine national urban policies (NUPs)** to shape inclusive and collaborative urban systems. They should strengthen the interconnections between metropolitan areas, intermediary cities and territories, as well as foster a more balanced **polycentric development approach**. This would maximize positive economic effects and diffuse the advantages of metropolitan growth throughout the territory. Metropolitan areas should not develop in competition with, or detached from, their surrounding territories. On the contrary, their development should be in solidarity with them, both at the national and the regional level – with clear channels of cross-border cooperation.

At the metropolitan level, policies should facilitate the access of citizens to the urban region's economic resources, while preserving economic efficiency, social equity and environmental sustainability. This can be made possible by:

- **taking advantage of the ongoing transformations of the global economy, in order to support a model of open innovation and place-based factors and foster improved job creation and economic opportunities**. Local governments need to participate in the development and regulation of such socio-economic dynamics through an integrated management of metropolitan economic strategies and assets, fostering its human capacities, and supporting the collaborative and social economy as well as informal activities;
- **imagining an 'open' and inclusive urbanism**, as opposed to a fragmented or 'splintered' one characterized by the privatization of urban spaces and gated communities. An open urbanism should aim to reduce the socio-economic negative externalities of 'urbanism by projects' (the approach based on urban renovation projects with exclusionary purposes) and promote a 'multipolar' or 'polycentric city', limiting the social consequences of land and property competition;
- **facilitating universal access to basic services and urban mobility**, to ensure equitable access and interconnectedness for all metropolitan inhabitants, including its peripheral zones, and to develop housing policies and market regulations that can ensure access to land and decent housing;
- **promoting effective financing models to counterbalance the financialization and commodification of urban economies, as well as the volatility of the land market**. This should be accompanied by a **well-balanced tax system**, which ensures that the fiscal burden is fairly distributed, and **metropolitan equalization funds**, to ensure a just distribution of investments and resources within the whole metropolitan area.

These strategies should be complemented by environmentally sustainable policies as integral parts of metropolitan strategies, to promote cities that are sustainable, accessible and inclusive.

Photo: UCLG - Jeepnee Taxi, Manila (Philippines).

# 5.3
## SUSTAINABLE AND RESILIENT METROPOLITAN AREAS CAN LEAD THE TRANSITION TOWARDS LOW-CARBON CITIES

Sustainability has become a cornerstone of metropolitan policies. Section 4 of this chapter shows how metropolitan cities – both individually and through their participation in global networks (e.g. the Global Covenant of Mayors for Climate and Energy) – are leading climate change mitigation and adaptation initiatives, without waiting for, or depending on, the initiative and agendas of national governments. From 'climate plans' to a diversity of sectoral policies, cities all around the world are contributing, at different scales, to the achievement of these goals. Cities have also been active in advocating a sustainable lifestyle for their citizens and reducing their own urban GHG emissions. **Some metropolises** – such as Stockholm or Copenhagen – **have shown that it is possible to make economic growth and de-carbonization policies compatible**.

**Some metropolises have shown that it is possible to make economic growth and de-carbonization policies compatible**

With regard to sectoral policies, Section 4 advances a number of examples in different areas: urban mobility, energy, public and green spaces, waste management and the circular economy, food security and urban agriculture. Although the mainstreaming of these actions is still generally limited, their potential has been demonstrated. However, committed local governments are still confronted with a number of obstacles: funding, institutional settings, regulations and legislation, technology, information, knowledge, and political commitment have all, to a certain degree, represented a constraint to these kind of initiatives. These challenges, ultimately, cannot be addressed unilaterally by cities. Evidence highlights that all levels of governments, the private sector and civil society need a stronger collaboration framework for these goals to be feasibly achieved.

In line with the principles of compact cities and 'smart growth' to reduce urban sprawl and prioritize the environment, the report questions the adequacy of certain densification policies – particularly in terms of their social impact. The report recognizes the advantages of compact cities but acknowledges that, without adequately defining its goals and features, densification policies could lead to gentrification processes, land and property speculation, and the relegation of the most vulnerable groups and communities to peripheral, under-served areas.

Moreover, in light of the increasing exposure of metropolitan areas to catastrophic natural disasters – and other compelling factors such as security and safety, urban violence, and disease outbreaks – resilience has become a key policy principle for building sustainable metropolises. Although a number of networks have been developed over the last few years to engage local authorities, the report stresses the need for a more proactive role from local governments to catalyze those innovations that are essential for effective resilience policies at the metropolitan level. The underlying risks of not having resilience frameworks are particularly acute and visible in Sub-Saharan Africa and Southern and Eastern Asia, regions which will host a large share of the expected urban population growth in the near future.

Finally, Section 4 proposes a conceptual shift towards the idea of sustainable development being inextricably linked to both social and environmental justice as well as to the concept of 'Right to the City', to ensure that social sustainability, human rights and democracy lie at the heart of the urban development debate.

# 5.4
## A PARADIGM SHIFT IN OUR UNDERSTANDING OF SUSTAINABILITY: TOWARDS THE 'RIGHT TO THE CITY'

Social sustainability should be central to any public policies and linked to a rights-centred approach. Section 4 examines four key rights: to land, to housing, to basic services, and to culture. These rights are recognized and codified in several documents endorsed by the international community (see footnote 338).

The report highlights the critical situation that metropolitan areas and cities in general will face in the provision of housing and basic services, if current trends and growth figures

continue. Without a strong policy shift, by 2030 around 2 billion people - two out of five of them urban dwellers - could be living in slums or other informal settlements with limited or no access to basic services. This does not include figures of those likely to be living in deprived or marginalized neighbourhoods in developed countries.

As this report has highlighted, there is evidence of this problem in the form of land and housing policies implemented in most contexts over the last few decades. These have led to a structural shortage of affordable land and housing. The report's analysis also underlines that, while the global funds dedicated to sustainable housing have been insufficient (making the achievement of Goal 11.1 of the SDGs unlikely), throughout the 2000s housing has become a global and often opaque financial instrument (as the subprime crisis in the United States has eloquently shown) at the expense of middle and low-income households, and the number of people living in informal settlements in developing countries has risen steadily.

Section 4 also gives examples of pro-poor housing policies that have produced positive outcomes, mostly through the strong involvement of beneficiary communities in both their definition and co-production – as well as other examples which have had mixed results, often due to biased approaches that have made integration more difficult (insufficiently equipped housing isolated from jobs or services, systematic spatial concentration of poorer groups, etc.).

T**he report highlights how robust policies to facilitate access to land and housing – the cornerstones of the 'Right to the City' – must include more control over land use and real estate regulation by local governments**. This can help reduce speculation and contain market forces. For land use, especially in developing countries, this implies the recognition of different forms of tenure and fighting discrimination, in particular towards women, indigenous communities, and other minorities. For slums and informal settlements, policy control involves the avoidance of forced eviction policies and the recognition of informal settlements as a legitimate urban form – acknowledging the potential of self-built housing, promoting their formalization and integration into the urban fabric, and gaining the support of municipal management systems. For housing, the implementation of strong public policies, social housing programmes and innovative

**By 2030 around 2 billion people could be living in slums or other informal settlements with limited or no access to basic services**

Photo: Tuana Neves - Porto Alegre (Brazil).

civil society initiatives for the co-production of housing should become a priority. All urban projects (both renovation and urban extensions) should include a percentage of social housing in their plans to support social mixing.

As regards access to basic services, the report proposes the re-evaluation of governance systems, as well as both current and potential new models of management and financing of services. The report suggests promoting a metropolitan structure or mechanism to ensure that both the management and delivery of public services is performed in a coordinated manner. This mechanism should also support the progressive equalization or balancing out of both loss-making and profitable services – without resorting necessarily to a unified service provision, which could reduce efficiency and the focus on local needs. The report also looks for ways to strike a balance between service inclusion and financial sustainability, in particular in low and middle-income countries. It recommends, besides traditional solutions of price differentiation and cross-subsidization, a minimum level of free and guaranteed consumption for poorer households (a measure that has substantially increased access to services in South Africa over the past fifteen years), or at least some protection against total service disconnection for vulnerable groups. Other options, such as direct subsidies to the poorest households or support for network access, should also be systematically taken into consideration.

The report also analyzes the trend, over the last few decades, of outsourcing service provision to improve delivery. It highlights the fact that the bulk of private sector investment has been concentrated in developed and emerging countries and, in particular, in the most profitable sectors (e.g. communication, transport), but that its impact in low-income countries has been limited at best. In this regard, local governments should be empowered to develop different types of partnerships for the provision of basic services, including recent, ground-breaking approaches such as Public-Private-People Partnerships (PPPPs). Local governments have an opportunity to empower small private enterprises, the informal sector and

Photo: Lars Plougmann - Dubai (United Arab Emirates).

community initiatives in the delivery of basic services, even more so where official service providers are ineffective or lacking altogether.

Even though these alternatives to conventional service provision are, more often than not, either unreported or untaxed, they are generally easier to implement, more flexible and more responsive to the communities' needs. **The role of local governments in regulating and overseeing alternative service provision is crucial, since they have a significant impact on human and environmental safety**. A similar approach should be taken to support new forms of decentralized service production (i.e. 'off-grid' activities) in certain fields, for example renewable energy. Although mostly available in developed countries, this can disrupt the conventional economic model of universally networked infrastructures.

When calling for the revision of the management model for basic service provision in metropolitan areas – especially in low-income countries, and even more so in informal urban settlements – the report highlights the need for viable alternatives to include a range of socio-technical accessibility systems and to involve all actors in both institutional and informal structures. Many of these key elements are still informal in their functioning and development, and this should be taken into account when planning their integration into economic strategies and more institutionalized schemes of service provision.

Finally, Section 4 stresses the inherent connection between the role of culture and other dimensions of urban and metropolitan sustainability, recognising it as an integral part of citizens' rights. Metropolitan policies should facilitate access to cultural assets, promote and democratize the different cultural practices and traditions that nourish the diversity of a metropolitan area, and protect tangible and intangible heritage and the involvement of citizens in the definition and governance of cultural policies.

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**Cumulative tensions built up in the race for competitiveness, environmental challenges and increased inequality experienced by metropolitan areas have all prompted the search for alternative approaches to, and models of, production and consumption**. This has prompted a search for a set of alternative socio-economic priorities and a more inclusive relationship among local governments, between local governments and their communities, between metropolitan areas and other cities, as well as between cities and their surrounding environment. At the heart of the challenge is the need for people, and a respect for fundamental human rights, to be central to the agenda, together with the valorization of solidarity rather than competitiveness.

In the context of growing difficulties for central governments to preserve their welfare systems, the notion of local governments – and metropolitan governments in particular – as key actors in the 'regulation' of an urbanized society is attractive, given their growing responsibilities for the social, economic, environmental and cultural dimensions of urban life.

In a short space of time, a number of different, co-existing approaches have developed: people-centred positions in the development agendas (e.g. the SDGs at the global level); a stronger focus on rights and quality of life at the city level (for example the Charter of Medellín);[408] the adoption of the 'Right to the City' principles in many Brazilian cities or in the Constitution of Mexico City; and the development of 'principles for better cities' embodied in Metropolis' 'Prepcity' initiatives.[409]

These approaches have fed the demand for a 'Right to the City',[410] a claim for a collective space where residents can directly participate in the co-creation of the city they aspire to be part of. The term has become a touchstone for social movements, NGOs and government officials to articulate numerous demands and hopes for urban settlements to be more inclusive, harmonious and united. The 'Right to the City' approach offers a comprehensive framework to integrate recognized social rights for all urban inhabitants with the different expectations and goals set by the SDGs and the New Urban Agenda. Supported by a deeper local democracy and a stronger involvement of citizens in the co-production of the city, the 'Right to the City' can become the foundation for a 'new social contract' for more sustainable, inclusive and safer cities.

**The role of local governments in regulating and overseeing alternative service provision is crucial, since they have a significant impact on human and environmental safety**

# 5.5
# KEY MESSAGES

**ESTABLISH NEW GOVERNANCE MODELS TO DEAL WITH THE INCREASING COMPLEXITY OF METROPOLITAN AREAS**. Expanding metropolitan forms – megacities, urban regions and urban corridors – require new governance systems that address the whole urban functional area. This is essential to overcome institutional, social and spatial fragmentation and support prosperous, inclusive, polycentric, balanced and sustainable metropolitan areas. In many cases this will require incremental steps, tackling the most critical deficits first (e.g. transportation systems) on the path to more systematic institutional and collaborative arrangements.

**BASE METROPOLITAN GOVERNANCE ON DEMOCRACY, TRANSPARENCY AND COLLABORATION**. Although there is no 'one-size-fits-all' governance model, experience suggests that legal reforms should build on the involvement and commitment of all cities forming part of a metropolitan area, on close collaboration across levels of government and the strong involvement of civil society in decision-making. A fair metropolitan governance system should encourage polycentric and balanced development, based on the following principles: local democracy, with elected local and metropolitan authorities that are accountable and transparent to an active and demanding civil society that enjoys recognized spaces in which to participate regularly; subsidiarity and effectiveness, with a clear definition of roles and powers across different levels of government and between different local governments; and efficiency, to ensure the rational and sustainable management of resources.

**GIVE METROPOLITAN AREAS ADEQUATE POWERS AND RESOURCES**. Metropolitan and local governments need the powers and capabilities to mobilize local resources more effectively, including a fair and well-balanced tax system to capture more of the wealth created, including economic and property added values. They should also benefit from transfers from other levels of government to deal with externalities. Such reforms will improve local governments' creditworthiness to access national and international financing, both public and private, and promote investment in major infrastructure and services development (including funds for climate-change action) – cornerstones of their attractiveness. Specific metropolitan funds for equalization, fed by local taxes and transfers from municipalities and other levels of government, could serve as levers to mobilize investments and boost solidarity between the different parts of metropolitan areas.

**DEVELOP COMPREHENSIVE ECONOMIC STRATEGIES IN METROPOLITAN AREAS TO DRIVE THE NATIONAL ECONOMY AND CREATE OPPORTUNITIES FOR ALL**. Prosperous and attractive metropolitan areas depend on a strong cooperation framework with other levels of government, the business sector and civil society. This allows local governments to benefit from the ongoing transformation of the global economy, to innovate and promote metropolitan economic development while ensuring social inclusion. A deeper rethink of financing strategies is also needed to reconcile financial imperatives with sustainable development, and to ensure that the management of public goods and public assets is conducive to long-term investment and reduces speculation and socio-spatial segregation. When designing a socially responsible framework for economic development, metropolitan areas should incorporate the concept of 'civic economy', support the collaborative, social and circular economies, create decent jobs – and more opportunities for women and younger people – and, in developing countries, support the transition from informal to formal economy.

**USE VISION-LED STRATEGIC PLANNING TO SUPPORT INCLUSIVE URBANISM.** Metropolitan areas should strengthen their capacity to develop integrated and participatory strategic plans that link the different dimensions of urban sustainable development (spatial, economic, social, environmental, and cultural) together. Long-term strategic plans should be accompanied by flexible and dynamic urban planning that better adapts to an ever-changing socio-economic environment. This can help metropolitan areas manage sprawl and avoid further socio-spatial inequalities. This also requires strengthened capacities to manage land use and regulate real-estate markets in order to tackle speculation. Inclusive urban planning should pursue compactness, multi-functionality and socially-mixed neighbourhoods with a good quality of life, the idea of togetherness or 'living together', closer distances and improved public transport, accessible and safer public spaces, fairer access to basic services and infrastructures, and cultural amenities for all. In developing countries, informal settlements must be recognized and integrated into the urban fabric, with adequate policies for land tenure recognition and slum upgrading.

**ENSURE QUALITY INFRASTRUCTURE AND SERVICES THAT ARE RESILIENT AND ACCESSIBLE TO ALL**. Universal access to quality public transportation and to basic services (water, sanitation, energy, solid waste management, telecommunications, etc.), in addition to policies for housing improvement and the eradication of sub-standard housing (avoiding forced eviction), is not just an issue of urban efficiency but also one of equity and human rights protection. Inclusive and supportive housing policies should consider the public supply of affordable land for housing across the whole territory (to avoid social segmentation), massive public financing for social housing, the promotion of a wide range of alternative housing options (including rental, cooperatives such as community land trusts and coproduction). To better meet local needs and priorities, metropolitan and local governments must develop the skills to choose transparently the best-suited service management models (public, PPP, PPPP, etc.) in consultation with their citizens and guaranteeing universal access. They must improve the efficiency and effectiveness of services (both when managed by the public sector or when entrusted to private providers), strengthening their monitoring and evaluation capacities and establishing regulating or organizing authorities for urban services. In less developed countries, joint basic service provision with communities, together with support and regulation of smaller providers – particularly in the informal sector – should foster coordination between official operators in order to limit gaps in provision.

**LEAD THE TRANSITION TO SUSTAINABLE AND MORE RESILIENT SOCIETIES WITH GREENER AND SMARTER METROPOLITAN AREAS.** To reduce their environmental footprint, local authorities should promote low-carbon urban infrastructures and services, green areas, and invest in resilient infrastructures and smart technologies. They should be active parties in energy transition as well as in climate change mitigation and adaptation. They should foster progress in the reduction of pollutants (air, soil and water), the use of alternative sources of energy and the management of natural resources – e.g. by promoting public transport, efficient public buildings, better wastewater and waste management and recycling. At the same time, they should adopt plans and adapt infrastructures to cope with the increasing impact of natural disasters, taking into account the fact that poor communities are inevitably the most exposed to natural catastrophes.

**PROMOTE 'TERRITORIAL SOLIDARITY' BETWEEN METROPOLITAN AREAS, INTERMEDIARY CITIES AND THEIR HINTERLANDS**. A strengthened collaboration between metropolitan areas, intermediary cities and rural areas located in their hinterlands can encourage stronger developmental synergies, relieve urbanization pressures and reduce environmental impacts. An integrated regional approach should foster access to services and facilities for peri-urban and rural zones. It should also improve local economic opportunities (e.g. food security, shorter economic circuits to strengthen local economies) and protect the area's natural resources, contributing significantly to metropolitan resilience.

**PUT THE 'RIGHT TO THE CITY FOR ALL' AT THE HEART OF URBAN POLICIES IN ORDER TO RENEW THE SOCIAL CONTRACT AND STRENGTHEN METROPOLITAN CITIZENSHIP.** The 'Right to the City' approach combines the need for an advanced metropolitan democracy (participatory democracy and civil society's right to self-organize) with the recognition of essential rights – such as the right to water and sanitation, safe and nutritious food, adequate shelter and secure tenure for all, gender equality, child protection, accessible public services, adequate social protection, respect for immigrants and refugees, safe communities and freedom of conscience and religion. This approach emphasizes the preservation of the cultural and natural legacies of current and future generations. It provides an integrated model that promotes stronger partnerships for the co-production of the city, building a new 'metropolitan citizenship' (see the Global Charter-Agenda for Human Rights in the City).

**RECOGNIZE CULTURE (INCLUDING HERITAGE, DIVERSITY AND CREATIVITY) AS A PILLAR OF FLOURISHING METROPOLITAN AREAS**. Local governments should acknowledge and promote citizens' creativity while respecting the diversity of their identities. Agenda 21 for Culture demonstrates how local culture is key to promoting sustainable development and creating a common cause within metropolises, which are often characterized by high levels of diversity, including minorities and immigrants. Cultural diversity must be at the heart of metropolitan strategies for social cohesion and local development. Cultural heritage must be preserved in urban planning by benefitting from, and partnering with, local communities. All citizens have the right to culture (see the Culture 21 Actions toolkit).

**ACTIVELY ENGAGE ON THE GLOBAL STAGE, AND COOPERATE AND PROMOTE KNOWLEDGE-SHARING AMONG METROPOLITAN GOVERNMENTS**. To reinforce innovation, improve management capacities and facilitate the exchange of new technologies, metropolitan and local authorities must develop appropriate knowledge-sharing and peer-to-peer learning capacities, cooperating to build programmes and tools to manage urban development. To face global challenges and participate in the preservation of the global commons, metropolitan and peripheral cities' networks are critical for building international advocacy for cities and facilitating the implementation and monitoring of the New Urban Agenda, the Sustainable Development Goals (SDGs), the Sendai Framework for Disaster Risk Reduction, the COP agreements on climate change and the Addis Ababa Action Agenda on Financing for Development.

# NOTES

1 Clos, *Towards a New Urban Agenda,* 5; Burdett, Rode, and Shankar, *Governing Urban Futures.*
2 Parilla, Leal Trujillo, and Berube, *Global Metro Monitor 2014. An Uncertain Recovery.*
3 UN-DESA, *World Urbanization Prospects: The 2014 Revision.* UN-DESA most recent statistics for 2016 calculate 512 metropolises.
4 UN-DESA (Ibid.) counts 29 megacities, or 30 if Seoul and Incheon are considered together. The count rises to 35 megacities when including metropolitan areas that have probably surpassed the ten million threshold over the last year: Lima (Peru), Chennai (India), Bogotá (Colombia), Johannesburg (South Africa), and Bangkok (Thailand). City Population, on the other hand, counts 34 megacities.
5 Sustainable Development Solutions Network, *Why the World Needs an Urban Sustainable Development Goal*; Cochrane, McGee, and Zandi, *Global Metropolitan Areas; UNEP-IRP, Options for Decoupling Economic Growth from Water Use and Water Pollution.*
6 UN-DESA, *World Urbanization Prospects: The 2014 Revision.*
7 Clark, Couturier, and Moonen, *Globalisation and Competition.*
8 OECD, *The Metropolitan Century.*
9 Gamper, Ahrend, and Schumann, *The OECD Metropolitan Governance Survey.*
10 UN-Habitat, S*tate of the World's Cities 2012-2013.*
11 Linden and Verbeek, *The Challenge of Metropolitan Governance in the Face of Rapid Urbanization.*
12 LSE Cities, UN-Habitat, and UCLG, *How Cities Are Governed - Building a Global Database for Current Models of Urban Governance.*
13 Clark and Moonen, *The Role of Metropolitan Areas in the Global Agenda of Local and Regional Governments in the 21st Century.*
14 Kantor and Nelles, *Global City Region Governance and Multicentered Development.*
15 Clark, Moir, and Moonen, *Underpowered Cities.*
16 All information about the Metropolis network is available at this address: http://www.metropolis.org/.
17 More information on the latest PrepCity meeting is available online: http://www.metropolis.org/news/2016/05/05/2758 and particularly the *Final Prepcity Report*
18 Habitat III Thematic Meeting, 'Fostering Metropolitan Cooperation for Sustainable Urban Development' – *The Montréal Declaration on Metropolitan Areas*, 7 October 2015, http*s*://www.habitat3.org/file/511152/view/557811.
19 OECD, *Cities for Citizens.*
20 Deboulet, Butin, and Demoulin, *Le Rôle des Aires Métropolitaines.*
21 Federal Law 13.089, known as *Metropolis Statute,* establishes requirements for the formalization of metropolitan regions – including the obligation to formulate an integrated urban development plan (PDUI) - without clearly defining the functional criteria for the identification of metropolitan areas. All metropolitan areas have to approve their PDUIs within three years of the enactment of the Federal Law. See also Campanaro, Klink, and Freire, *Metropolitan Governance in Brazil : Inputs for an Agenda and Strategy;* Compans, *Metropolitan Ungovernability.*
22 OECD, *Revitalizing Chile's Urban Governance Architecture.*
23 OECD, *The Metropolitan Century.*
24 The OECD Metropolitan Governance Survey covers 263 OECD metropolitan areas above 0.5 million inhabitants. There are four main types: informal/soft coordination (52%); inter-municipal authorities (24%); supra-municipal authorities (16%); special status of 'metropolitan cities' (8%). A 2015 UN-Habitat and GIZ GmbH Discussion Paper (*Unpacking Metropolitan Governance for Sustainable Development*) also refers to four models: metropolitan/regional government; bottom-up metropolitan/regional authority; consolidated/amalgamated government; and fragmented governance with some local government coordination.
25 As a caveat, it should be pointed out that some cities, while belonging to this model of organization, are not formally designated as 'special' metropolitan or federal cities. They remain conventional citywide governments that encompass, nonetheless, the functions of the whole metropolitan area.
26 Deboulet, Butin, and Demoulin, *Le Rôle des Aires Métropolitaines.*
27 Poiret, *La gouvernance métropolitaine écartelée entre adaptation économique et spatiale à la globalisation et respect de la démocratie locale, l'exemple de la fusion de Toronto (Canada)*, 509; Fox and Gurley, *Will Consolidation Improve Sub-National Governments?*
28 Slack and Côté, *Comparative Urban Governance*; Town, *Project Auckland.* One variant of this pattern is the model of 'special-purpose agencies'. Some metropolitan areas rely on 'special-purpose vehicles' to manage key infrastructure functions, regeneration and reinvestment more effectively (e.g. 'special districts' in the United States provide shared services across municipal or county boundaries).
29 Abbott, *Collaborative Governance and Metropolitan Planning in South-East Queensland 1990-2010.*
30 Kirkland, *Paris's Future Governance – An Interview with Pierre Mansat.* It incorporates the three neighbouring departments and a total of 126 municipalities, covering the core of the Île-de-France metropolitan region's central agglomeration.
31 Métropole Du Grand Paris; Île de France, Schéma Directeur de La Région.
32 Slack and Côté, *Comparative Urban Governance.*
33 This model offers strong and efficient capacity to coordinate the management of spatial and economic growth, but limits the capacity and budgetary resources of local governments. Leal Maldonado, *Metropolitan Government and Development Strategies in Madrid.*
34 Andersson, *Metropolitan Governance and Finance;* African Development Bank Group, *AfDB Approves USD 141.71 Million for the Dar Es Salaam Bus Rapid Transit System Project.*
35 Slack and Côté, *Comparative Urban Governance.*
36 OECD, *Governing the City.*
37 Salet and Savini, *The Political Governance of Urban Peripheries.*
38 Gjertsen, *Legitimacy in Interlocal Partnerships.*
39 Trent, The *Merger Delusion.*
40 Centre for Human Settlements, Mo*ntréal: Amalgamation to Consortiation.*
41 Boudreau, *Penser La Ville-Région.*
42 Halais, *In the Montréal Area, 82 Municipalities Begin to Think and Act as One.*
43 UCLG and Global Taskforce of Local and Regional Governments, *Financing Urban and Local Development: The Missing Link in Sustainable Development Finance, 3;* Dollery, Kortt, and Grant, *A Normative Model for Local Government De-Amalgamation in Australia';* François Vaillancourt, *Public Finance in Montréal.*
44 Pfeiffer and Krakau, *Urban Development and Metropolitan Governance;* UN-Habitat, *State of the World's Cities 2008/2009 – Harmonious Cities.*
45 Meite, *Gouvernance du transport urbain et mobilité durable dans le district d'Abidjan (Côte d'Ivoire).*
46 Deboulet, Butin, and Demoulin, *Le Rôle des Aires Métropolitaines.*
47 Sylvie Ritmanic, *A la recherche de la métropole solidaire. Contribution pour Habitat III*, intervention recollected *Ibid.*
48 Vanier, *La Métropolisation Ou La Fin Annoncée Des Territoires?*

[49] More information at these addresses: https://www.uclg.org/en/organisation/structure/committees-working-groups/pe ripheral-cities and http://falp.nanterre.net/.
[50] For more information, visit http://www.reseaufalp.com.
[51] The declaration is available at the following address: http://www.uclg-cisdp.org/sites/default/files/Carta%20Canoas%20ENG.pdf.
[52] Bhatkal, Avis, and Nicolai, *Towards a Better Life?*
[53] UN-Habitat, *Financing Sustainable Urban Development.*
[54] Muwonge and Ebel, *Intergovernmental Finances in a Decentralised World;* Farvacque-Vitković, and Kopanyi, *Municipal Finances, 1.*
[55] Égert and Blöchliger, *Decentralisation and Economic Growth - Part 2.*
[56] Bahl, Linn, and Wetzel, *Governing and Financing Metropolitan Areas in the Developing World, 6.*
[57] In India, for example, the states of Rajasthan and Haryana abolished property taxes without consultation with local governments and without providing alternative revenue sources. See Rao and Bird, *Urban Governance and Finance in India.*
[58] Muwonge and Ebel, *Intergovernmental Finances in a Decentralised World, 5;* Farvacque-Vitković and Kopanyi, *Municipal Finances.*
[59] Zimmermann, *Net Fiscal Flows and the Size of Cities;* City of London Corporation, *Economic Development Research Programme. Review of 2014'.*
[60] Wong and Jiang, *Billion-Dollar Dividend Plan to Help Pay for Third Runway at Hong Kong Airport.*
[61] For more information, see: http://www.worldbank.org/en/news/feature/2013/10/24/financing-sustainable-cities-africa-creditworthy (acceded 31 May 2016).
[62] See on this topic Paice, *'Lagos Proves Africa's Property Tax Potential'*; de Gramont, *'Governing Lagos'.*
[63] Bahl, Linn, and Wetzel, *Governing and Financing Metropolitan Areas in the Developing World.*
[64] Ibid., 15.
[65] Bahl, Linn, and Wetzel, *Financing Metropolitan Governments in Developing Countries.*
[66] Note that this is, however, hardly applicable in contexts of low political and fiscal autonomy where equalization mechanisms are generally implemented by the state through additional transfers to less endowed municipalities.
[67] Hamilton, *Governing Metropolitan Areas.*
[68] OECD, *OECD Urban Policy Reviews, Poland 2011.*
[69] Kwon, *The Impact of the Shared Property Tax System on the Localities' Fiscal Capacity.*
[70] Deboulet, Butin, and Demoulin, *Le Rôle des Aires Métropolitaines.* Extract from an interview with Trevor Fowler, CEO of the City of Johannesburg, conducted by Cyprien Butin.
[71] 'In the past sound land value capture mechanisms in developed countries have been largely distorted by the explosive capacity of the banking system to create money in search of speculative profits driven by restrictions in land availability or poor land regulatory decisions. (...) An acceleration of the financialization of urban economic development underpinned by land value capture processes introduces – in the last instance – a serious threat to sustainable development by misallocating scarce productive factors and resources'. Eugenio Leanza, in Gorelick, *Funding Capital-Intensive Urban Projects.*
[72] Allen, *Development Securities Lands TfL Housing Deal.*
[73] Lorrain, *Governing Shangai: Modernising a Local State.*
[74] Jomo et al., *Public-Private Partnerships and the 2030 Agenda for Sustainable Development: Fit for Purpose?*
[75] Ibid.; UCLG, *Basic Services for All in an Urbanizing World.*
[76] FMDV, *Resolutions Europe. Local Innovations to Finance Cities and Regions.*
[77] Gorelick, *Funding Capital-Intensive Urban Projects.*
[78] Compans, *Metropolitan Ungovernability;* Aulich, Sansom, and McKinlay, *A Fresh Look at Municipal Consolidation in Australia.*
[79] Slack and Côté, *Comparative Urban Governance, 17.*
[80] Savini, Majoor, and Salet, *Urban Peripheries'.*
[81] Métro, 'Avant-Propos : Paris 2013, Manifeste Rétroactif Pour La Construction Métropolitaine'.
[82] Deboulet, Butin, and Demoulin, *Le Rôle des Aires Métropolitaines.*
[83] For more information, see: http://transparencia.amb.cat/home.
[84] Most of this sub-section is based on Deboulet, Butin, and Demoulin, *Le Rôle des Aires Métropolitaines.*
[85] Rui, 'Démocratie Participative'.
[86] More information available online at this address: http://www.oidp.net/.
[87] Bacqué, Rey, and Sintomer, *Gestion de Proximité et Démocratie Participative*; Blondiaux, *La délibération, norme de l'action publique contemporaine?*
[88] UN-Habitat, *Gender Responsive Urban Legislation, Land and Governance.*
[89] UN-Habitat, *E-Governance and Urban Policy Design in Developing Countries.*
[90] MIT Center for Civic Media, available online at this address: https://civic.mit.edu.
[91] Frost & Sullivan, 'Strategic Opportunity Analysis of the Global Smart City Market'.
[92] Govela, *City Changer Labs and Digital Civics.*
[93] More information available on the website of the Programme: http://senseable.mit.edu.
[94] More information available on the website of the initiative: http://citilab.eu/citilab/que-es.
[95] More information available on the company's website: http://www.22barcelona.com/content/view/698/897/lang,en/.
[96] General information on the programme is available on their website: http://www.africancentreforcities.net/programme/m istra-urban-futures/citylab/.
[97] Healthy Cities CityLab: http://www.africancentreforcities.net/programme/mistra-urban-futures/citylab/healthy-cities-2/.
[98] Urban Violence, Safety and Governance CityLab: http://www.africancentreforcities.net/programme/mistra-urban-futures/citylab/urban-violence-safety-governance/.
[99] Sustainable Human Settlements CityLab: http://www.africancentreforcities.net/programme/mistra-urban-futures/cityl ab/sustainable-human-settlements/.
[100] The platform English portal is available at this address: http://labcd.mx/labforthecity/.
[101] The open-government platform is available at this address: http://www.gobabiertocdmx.org/. Buenos Aires has developed a similar programme, *Gobierno Abierto,* to foster participation, data collection and use in inclusive, bottom-up policy planning: http://www.buenosaires.gob.ar/innovacion/gobiernoabierto.
[102] More information on this specific type of action is available at this address: http://labcd.mx/provocaciones/.
[103] Bacqué, Rey, and Sintomer, *Gestion de Proximité et Démocratie Participative.*
[104] More information available in http://www.facebook.com/digitalcivix/.
[105] Zérah, *Participatory Governance in Urban Management and the Shifting Geometry of Power in Mumbai.*
[106] Ghertner, *Gentrifying the State, Gentrifying Participation.*

[107] Deboulet, Butin, and Demoulin, *Le Rôle des Aires Métropolitaines.*
[108] Ibid.; Lama-Rewal, *La démocratie locale dans les métropoles indiennes.*
[109] Cabannes, *Les budgets participatifs en Amérique latine.*
[110] Nez, *Le budget participatif: un outil de justice sociale?.* Participatory budgets have typically helped redistribute public resources to those sectors in most urgent need (e.g. schools, sewage treatment, road paving), or into investments that governments had not initially considered a priority.
[111] Langelier, *Que reste-t-il de l'expérience pionnière de Porto Alegre?*
[112] Information facilitated by Deise Martins, Secretary of International Relations and Cooperation of the City of Canoas. See also Allegretti et al., *More Inclusive Cities and Territories.*
[113] Ibid. The Gabinete Digital in Rio Grande do Sul, for instance, engaged more than one million people every year between 2011-2014. The New York City participatory budgeting activities have organized multiple district meetings.
[114] More information on the Voice of the Mayors programme, the Seoul case, and the activities of Metropolis are available online: http://www.metropolis.org/voice-mayors.
[115] Allegretti et al., *More Inclusive Cities and Territories.* Ethekwini (Durban) and Johannesburg, for instance, apply the experience of many other cities to their citizen consultations for integrated development plans. See also Cabannes, *Les budgets participatifs en Amérique latine*; Stoeber, *Une Révolution Douce.*
[116] Allegretti et al., 'More Inclusive Cities and Territories'; EIP-SCC, 'Principles and Enablers for Citizen Engagement'.
[117] Most of this sub-section is based on Deboulet, Butin, and Demoulin, *Le Rôle des Aires Métropolitaines.*
[118] Bacqué and Mechmache, *Pour une réforme radicale de la politique de la ville.* About thirty 'tables' are now reunited in the 'Montréal's Coalition of Neighbourhood Tables', and are now recognized and financially supported by the City of Montréal, the *Fondation Centraide du Grand Montréal,* and the Public Health Office of Montréal's Agency for Healthcare and Social Services. See also: Initiative Montréalaise de Soutien au Développement Social Local, *Des quartiers où il fait bon vivre!*
[119] More information available online at: blog.shadowministryofhousing.org/.
[120] Cités, Territoires, Gouvernance, *Populaire, Précaire?*
[121] More information available online at: http://www.joziatwork.org.za/about/.
[122] Satterthwaite and Mitlin, *Reducing Urban Poverty in the Global South.*
[123] Smith et al., *The Missing Link: Immigrant Integration, Innovation and Skills Underutilization in Vancouver;* Bradford and Bramwell, *Governing Urban Economies,* 263.
[124] More information available on the following websites: http://www.uclg-cisdp.org/sites/default/files/London_2010_en_final_0.pdf; https://www.london.gov.uk/what-we-do/communities/access-and-equality; and https://www.london.gov.uk/WHAT-WE-DO/communities.
[125] Maytree Foundation and Cities of Migration, *Good Ideas from Successful Cities.*
[126] More information available online: http://urbanagendaforthe.eu/wp-content/uploads/2016/04/Eurocities-Refugees-Report.pdf.
[127] UN-Habitat, *Issue Paper on Local Economic Development,* 12.
[128] Salat, *Integrated Sustainable Urban Planning.*
[129] Ministry of Lands, Housing and Human Settlements Development, *Dar Es Salaam Masterplan, 2012-2032.*
[130] Salat, *Integrated Sustainable Urban Planning.*
[131] Deboulet, Butin, and Demoulin, *Le Rôle des Aires Métropolitaines.*
[132] Law 16050/14, available online in the Official Journal of the Prefeitura of S*ão Paulo:* http://gestaourbana.prefeitura.sp.gov .br/arquivos/PDE-Suplemento-DOC/PDE_SUPLEMENTO-DOC.pdf.
[133] More information on the master plan available online at this address: http://gestaourbana.prefeitura.sp.gov.br/master-plan/.
[134] Deboulet, Butin, and Demoulin, *Le Rôle des Aires Métropolitaines.*
[135] Barthel, Deboulet, and Pappalardo, *Le «Caire 2050»: l'entrée dans la compétition globale par le renouvellement urbain.*
[136] Quoted in Deboulet, Butin, and Demoulin, *Le Rôle des Aires Métropolitaines*; Semmoud, *« Clair-obscur » de l'informel. Contrôle des polarités urbaines informelles à Cherarba, périphérie sud-est d'Alger.*
[137] Quoted in Deboulet, Butin, and Demoulin, *Le Rôle des Aires Métropolitaines*'. Van Hamme and Van Criekingen, *Compétitivité économique et question sociale.*
[138] Deboulet, Butin, and Demoulin, *Le Rôle des Aires Métropolitaines.*
[139] Salat, *Integrated Sustainable Urban Planning.*
[140] Parilla, Leal Trujillo, and Berube, *Global Metro Monitor 2014. An Uncertain Recovery.*
[141] Ibid.
[142] Deboulet, Butin, and Demoulin, *Le Rôle des Aires Métropolitaines.*
[143] Ghorra-Gobin, *De la métropolisation.*
[144] UNCTAD, *Reforming International Investment Governance*; UNCTAD, *Transnational Corporations, Market Structure and Competition Policy.*
[145] Clark and Moonen, *The 10 Traits of Globally Fluent Metro Areas.*
[146] Sassen, *The Global City*; Veltz, *Mondialisation, villes et territoires,* quoted in Deboulet, Butin, and Demoulin, *Le Rôle des Aires Métropolitaines.*
[147] Parilla, Leal Trujillo, and Berube, *Global Metro Monitor 2014. An Uncertain Recovery.*
[148] Gordon, *Ambition, Human Capital Acquisition and the Metropolitan Escalator*; Deboulet, Butin, and Demoulin, *Le Rôle des Aires Métropolitaines.*
[149] Clark and Moonen, *The Role of Metropolitan Areas in the Global Agenda of Local and Regional Governments in the 21st Century.*
[150] Meijers, Burger, and Hoogerbrugge, *Borrowing Size in Networks of Cities.*
[151] Duranton, *Agglomeration Effects in Colombia;* Chauvin, Glaeser, and Tobio, *Urban Economics in the US and India*; Combes, Démurger, and Li, *Migration Externalities in Chinese Cities*; Combes and Gobillon, *The Empirics of Agglomeration*; Duranton, Henderson, and Strange, *Handbook of Regional and Urban Economics;* Brenner and Duschl, *Patterns, Processes and Causes of Economic Growth*; Martin, *Rebalancing the Spatial Economy.*
[152] Turok, *The Urbanization/Development Nexus in the BRICS;* OECD, *Promoting Growth in All Regions*; Kemeny and Storper, *Is Specialization Good for Regional Economic Development?*
[153] Savini, Majoor, and Salet, *Urban Peripheries.*
[154] OECD, *Regions at a Glance 2016,* p.134.
[155] Cortright, *Surging City Center Job Growth.*
[156] Deboulet, Butin, and Demoulin, *Le Rôle des Aires Métropolitaines.*
[157] Dijkstra, Garcilazo, and McCann, *The Effects of the Global Financial Crisis on European Regions and Cities*; Guironnet and Halbert, *The Financialization of Urban Development Projects,* quoted in Deboulet, Butin, and Demoulin, *Le Rôle des Aires Métropolitaines.*
[158] Sassen, *Who Owns Our Cities – and Why This Urban Takeover Should Concern Us All;* UNECE et al., *Towards a City-Focused, People-*

*Centred and Integrated Approach to the New Urban Agenda;* Cushman and Wakefield, *Winning in Growth in Cities 2015-2016.*

159 Leanza and Carbonaro, *Socially Inclusive Urban Transformation after the Great Recession.*

160 OECD, *All on Board. Making Inclusive Growth Happen.*

161 Parilla, Leal Trujillo, and Berube, *Global Metro Monitor 2014. An Uncertain Recovery.*

162 OECD, *Regions at a Glance 2016.*

163 Parilla, Leal Trujillo, and Berube, *Global Metro Monitor 2014. An Uncertain Recovery.*

164 OECD, *All on Board. Making Inclusive Growth Happen.*

165 Parilla, Leal Trujillo, and Berube, *Global Metro Monitor 2014. An Uncertain Recovery.*

166 This section is based on Deboulet, Butin, and Demoulin, *Le Rôle des Aires Métropolitaines.*

167 Renard, *La ville saisie par la finance.*

168 Lorrain, *La main discrète.*

169 Graham and Marvin, *Splintering Urbanism.*

170 Gobillon, Selod, and Zenou, *The Mechanisms of Spatial Mismatch.*

171 Barthel, Deboulet, and Pappalardo, *Le «Caire 2050»: l'entrée dans la compétition globale par le renouvellement urbain.*

172 Deboulet, Butin, and Demoulin, *Le Rôle des Aires Métropolitaines.*

173 This can occur especially in centralized nations where political and financial power is concentrated in large capital cities, such as London – see, for example, Martin et al., 'Spatially Rebalancing the UK Economy'.

174 London Finance Commission, 'Raising the Capital'; Tateno, 'Tokyo Gov. Masuzoe to Face Crunch Time Later This Year'.

175 Allmendinger and Haughton, *Post-Political Spatial Planning in England;* Gertler et al., *Attracting and Retaining Talent;* Rosentraub and Joo, *Revitalizing Cities.*

176 Clark, *Business-Friendly and Investment-Ready Cities.*

177 Storper et al., *The Rise and Fall of Urban Economies.*

178 World Economic Forum, *The Competitiveness of Cities.*

179 Bramwell, *The Politics of Coalition Building in a Deindustrialising City: Linkages, Leadership, and Agendas in Hamilton;* McGranahan, Turok, and Martine, *Could a More Positive Approach to Urbanisation in the BRICS Have Facilitated Both Economic Growth and Social Inclusion?*

180 OECD, *Delivering Local Development.*

181 GIZ GmbH and Federal Ministry for Economic Cooperation and Development, *Innovation Systems in Metropolitan Regions of Developing Countries.*

182 OECD, *Delivering Local Development.*

183 OECD, *The OECD Innovation Strategy;* McCann and Ortega-Argiles, *Modern Regional Innovation Policy.*

184 Leanza and Carbonaro, *Socially Inclusive Urban Transformation After the Great Recession.*

185 Katz and Bradley, *The Metropolitan Revolution.*

186 The Global Cities Initiative, launched by the Brookings Institution and JPMorgan Chase is a five-year project that aims to help leaders in 28 United States metropolitan areas re-orient their economies towards greater engagement in world markets. More information available online: http://www.brookings.edu/about/projects/global-cities.

187 McDearman and Donahue, *The 10 Lessons from Global Trade and Investment Planning in U.S. Metro Areas.*

188 Deboulet, Butin, and Demoulin, *Le Rôle des Aires Métropolitaines.*

189 Choe and Roberts, *Competitive Cities in the 21st Century, Cluster-Based Local Economic Development.*

190 McCann and Ortega-Argiles, *Modern Regional Innovation Policy.*

191 Deboulet, Butin, and Demoulin, *Le Rôle des Aires Métropolitaines;* Laborey, *Mainmise sur les villes;* Didier, Peyroux, and Morange, *The Spreading of the City Improvement District Model in Johannesburg and Cape Town.*

192 McCann and Ortega-Argiles, *Modern Regional Innovation Policy.*

193 National Association of Regional Councils and MZ Strategies, *Planning for Regional Competitiveness.*

194 Rothwell, *What Colleges Do for Local Economies.*

195 Liu, Cao, and Xing, *A Tale of Two Cities in Regional Entrepreneurial Policymaking.*

196 Deboulet, Butin, and Demoulin, *Le Rôle des Aires Métropolitaines.*

197 Peeters, Matheson, and Szymanski, *Tourism and the 2010 World Cup*, quoted in Deboulet, Butin, and Demoulin, *Le Rôle des Aires Métropolitaines.*

198 Gonçalves, *Une discipline olympique?*; Braathen, *Settlement Stories II. Communities' Responses*, quoted in Deboulet, Butin, and Demoulin, *Le Rôle des Aires Métropolitaines.*

199 OECD, *Delivering Local Development: New Growth and Investment Strategies*, OECD Publishing, Paris, 2013

200 Castro Teixeira and Barros, *Local Municipalities' Involvement in Promoting the Internationalisation of SMEs.*

201 Weizhen, *SBF Calls for a Single Consolidated Agency for SMEs*; DBS Treasures, *Singapore Restructuring Entering Second Phase;* Perdomo, Alvarez, and Urbano, *Analyzing a Successful Incubator Business Model.*

202 Gardiner et al., *Local Long-Run Growth Evolutions across Britain.*

203 McCann and Ortega-Argilés, *Smart Specialization, Regional Growth and Applications to European Union Cohesion Policy.*

204 Beaufils, *Comment l'économie collaborative va-t-elle transformer la ville?* in Deboulet, Butin, and Demoulin, *Le Rôle des Aires Métropolitaines.*

205 Nobis, *Comprendre L'économie Collaborative*, in Deboulet, Butin, and Demoulin, *Le Rôle des Aires Métropolitaines.*

206 More information available at this address: http://www.shareable.net/blog/sharing-city-seoul-a-model-for-the-world.

207 More information in the full report realized by One Earth, in collaboration with the Urban Sustainable Directors Network: http://www.localgovshar ingecon.com/uploads/2/1/3/3/21333498/localgovsharinge con_report_full_oct2015.pdf.

208 DuPois and Rainwater, *Shifting Perceptions of Collaborative Consumption.*

209 Borzaga and Galera, *The Potential of the Social Economy for Local Development in Africa,* 15.

210 Demoustier et al., *Atlas commenté de l'économie sociale et solidaire 2014.*

211 Pereira Morais, *Social and Solidarity Economy and South-South and Triangular Cooperation in Latin America and the Caribbean.*

212 Demoustier et al., *Atlas commenté de l'économie sociale et solidaire 2014.*

213 Borzaga and Galera, *The Potential of the Social Economy for Local Development in Africa.*

214 Vanek et al., *Statistics on the Informal Economy.*

215 Herrera et al., *Informal Sector and Informal Employment.*

216 Chen, *Inclusive Cities and the Urban Working Poor.*

217 International Labour Organization, *Women and Men in the Informal Economy.*

218 Nyangoro and Lubaale, *Informal Economy Monitoring Study.*

219 See, for more information, the report by Mkhize, Dube, and Skinner, *Social and Solidarity Economy and South-South and Triangular Cooperation in Latin America and the Caribbean.*

220 Alter Chen, *The Informal Economy.*
221 Clark, Huxley, and Mountford, *Organising Local Economic Development.*
222 GIZ GmbH and Federal Ministry for Economic Cooperation and Development, *Innovation Systems in Metropolitan Regions of Developing Countries.*
223 Chen, Feiock, and Hsieh, *Regional Partnerships and Metropolitan Economic Development.*
224 Paris Region Entreprises, *Lancement Opérationnel de L'agence Paris Region Entreprises.*
225 Department of Economic Development and Tourism of Western Cape, *Annual Performance Plan 2014/15*; Borraine, *Building Effective Partnerships for Inclusive Growth.*
226 Clark, Huxley, and Mountford, *Organising Local Economic Development.*
227 More information available on the institution's website: http://www.metropolitanraum-zuerich.ch/.
228 More information available online at this address: http://www.unglobalcompact.org.
229 Boogers, *Pulling the Strings*
230 OECD, *All on Board. Making Inclusive Growth Happen.*
231 Samans et al., *Inclusive Growth Report 2015.*
232 What follows in this section is part of Deboulet, Butin, and Demoulin, *Le Rôle des Aires Métropolitaines.*
233 Ibid.
234 Halbert, *L'avantage Métropolitain.*
235 Deboulet, Butin, and Demoulin, *Le Rôle des Aires Métropolitaines.*
236 Ibid.
237 Ibid.
238 Galimberti, 'Des Variétés de Régulation de La Ville Compétitive', drawn from Deboulet, Butin, and Demoulin, Le *Rôle des Aires Métropolitaines.*
239 Deboulet, Butin, and Demoulin, *Le Rôle des Aires Métropolitaines.*
240 Most of this sub-section is drawn from Ibid.
241 Sassen, *L'archipel Des Villes Globales.*
242 Lorrain, *La main discrète.*
243 Deboulet, Butin, and Demoulin, *Le Rôle des Aires Métropolitaines.*
244 Coppola, 'A Cleveland Model?', quoted in Deboulet, Butin, and Demoulin, *Le Rôle des Aires Métropolitaines.*
245 World Commission on Environment and Development, *Our Common Future.*
246 Deboulet, Butin, and Demoulin, *Le Rôle des Aires Métropolitaines.*
247 UNEP-IRP, *Options for Decoupling Economic Growth from Water Use and Water Pollution.*
248 Ibid., 22.
249 C40 Cities, *Potential for Climate Action.*
250 For more information, see http://www.metropolis.org.
251 Direct investment in low-emission and resilient infrastructure should, at the same time, be part of cities' planning and attractive to external investors. Cities should be able to 'price' climate externalities – i.e. allocate budget according to climate sustainability of policies and policy outcomes – thanks to selective help from donors and investors (see Cities Climate Finance Leadership Alliance, *The State of City Climate Finance 2015*). Climate-bond finance has grown significantly in developed economies, especially in Northern European countries, but collaborative networks have meant these trends have spread into Africa, Latin America and the Caribbean – especially on energy and agriculture-related projects and initiatives. The principles, standards and criteria for green bonds finance are available online at this address: http://www.icmagroup.org/Regulatory-Policy-and-Market-Practice/green-bonds/green-bond-principles/. According to Ibid., 48–49, corporate issuance of green bonds in 2015, up to July, accounted for nearly USD 600 billion in total, up from 2014's USD 95 billion.
252 Cities Climate Finance Leadership Alliance, *The State of City Climate Finance 2015,* 14.
253 Deboulet, Butin, and Demoulin, *Le Rôle des Aires Métropolitaines.*
254 Boissonade, 'La ville durable controversée', quoted in Deboulet, Butin, and Demoulin, *Le Rôle des Aires Métropolitaines.*
255 The German Advisory Council on Global Change (2016) further expands on these concepts in its contribution to the Habitat III debate.
256 In Deboulet, Butin, and Demoulin, *Le Rôle des Aires Métropolitaines*, inspired by the works of Theys, *Le développement durable face à sa crise*; Genestier and Jacquenod-Desforges, *Le développement durable*; Willemez, *De la cause de l'environnement à l'urgence écologique;*
257 Emile Barrau et al., *Territoires Urbains Durables et Adaptation Aux Changements Climatiques*; Quensière et al., *Vulnérabilités de la région de Dakar au changement climatique*; World Summit Climate and Territories towards the COP21, quoted in Deboulet, Butin, and Demoulin, *Le Rôle des Aires Métropolitaines.*
258 Zambrano-Barragán et al., *Quito's Climate Change Strategy.*
259 Emile Barrau et al., *Territoires Urbains Durables et Adaptation Aux Changements Climatiques*; Deboulet, Butin, and Demoulin, *Le Rôle des Aires Métropolitaines.*
260 Global Commission on the Economy and Climate, *Better Growth, Better Climate*, 17.
261 Silvère Tribout, 'Les concepteurs en agence d'architecture, d'urbanisme et de paysage à l'épreuve du développement durable', in Deboulet, Butin, and Demoulin, *Le Rôle des Aires Métropolitaines.*
262 Deboulet, Butin, and Demoulin, L*e Rôle des Aires Métropolitaines.*
263 C40 Cities, *C40.*
264 C40 Cities, Co*penhagen: CPH Climate Plan 2025.*
265 See for example: UN-Habitat, *Planning and Design for Sustainable Urban Mobility*; Catherine Morency, *Mobilité durable*; International Transport Forum, *Low-Carbon Mobility for Mega-Cities.* Some of the following examples have been drawn from Deboulet, Butin, and Demoulin, *Le Rôle des Aires Métropolitaines.*
266 International Transport Forum, *Low-Carbon Mobility for Mega-Cities.*
267 Deng and Nelson, *Recent Developments in Bus Rapid Transit;* Munoz-Raskin, *Walking Accessibility to Bus Rapid Transit*; Lindau, Hidalgo, and Facchini, *Curitiba, the Cradle of Bus Rapid Transit.*
268 Pinel, *Lorsque le Sud innove en matière durable. Le projet de transport en commun d'Amman*; Allen, 'An Integrated Approach to Public Transport, Tehran, Islamic Republic of Iran', in Deboulet, Butin, and Demoulin, *Le Rôle des Aires Métropolitaines.*
269 The Economist, *Sub-Saharan Africa Gets Its First Metro.*
270 Hamman, *La mobilité dans la 'ville durable'.*
271 GIZ GmbH, *TRANSPeru.*
272 International Relations Department of the City of Paris, *Adapt. Curb. Engage. 21 Solutions to Protect Our Planet.* More than 400 recharging stations were installed; electric vehicles benefit from free parking and reserved lanes and are subject to fiscal advantages.
273 Over the last decade, about 30% fewer vehicles have accessed London's city centre, and 20% fewer in Lyon.
274 Jakarta, for instance, has been organizing 'car-free' days to promote environmental awareness since 2014.

[275] Olivier Truc, *Copenhague, laboratoire de la future ville intelligente*.
[276] Montréal combines pay and free systems, but many cities have developed pay systems, requiring the use of a bank card (e.g. Vélib in Paris, Youbike in Taipei). In Copenhagen, only a quarter of daily commuters use a car to get to work: 36% of trips to work or school are made by bike (the goal for 2015 is to increase this to more than 50%). By 2025, the city wants 75% of trips to be made by foot, bike, or public transit.
[277] International Relations Department of the City of Paris, *Adapt. Curb. Engage. 21 Solutions to Protect Our Planet*; Deboulet, Butin, and Demoulin, *Le Rôle des Aires Métropolitaines*.
[278] More information on the institute is available online at this address: http://seoulmiti.org/.
[279] Documentation on the case studies and presentations addressed during the workshop is available online: http://www.metropolis.org/agenda/urban-transportation-policy-training.
[280] Deboulet, Butin, and Demoulin, *Le Rôle des Aires Métropolitaines*. Some of the following examples are drawn from this document.
[281] UNEP and Sustainable Buildings and Climate Initiative, *Buildings and Climate Change*; Deboulet, Butin, and Demoulin, *Le Rôle des Aires Métropolitaines*.
[282] Directive 2012/27/EU on energy efficiency is the last piece in a legislative package that includes legislation on eco-design, labelling and a building's energy performance, and frames energy efficiency within the wider context of Europe's long-term emission reduction and sustainability strategy and goals for 2020, 2030 and 2050. The directive is aimed at publicly-owned or used buildings, as well as new ones. Plans to extend this regulatory tool to private housing and companies are still at an early stage. The final text of the directive was the result of extended negotiations between the European Commission, the proposer of the framework, the European Parliament (which preserved certain consumer-oriented aspects), and the Member States, who were reluctant to forgo any competencies in this field (see Maltby, *European Union Energy Policy Integration)*.
[283] UNECE et al., *Towards a City-Focused, People-Centred and Integrated Approach to the New Urban Agenda, 13*.
[284] City of Cape Town, *Cape Town. State of Energy 2015*.
[285] More information is available on the website of the *Centre de ressources pour les plans climat-energie territoriaux of the Paris municipality: http://www.territoires-climat.ademe.fr/*. See also Deboulet, Butin, and Demoulin, *Le Rôle des Aires Métropolitaines*.
[286] C40 Cities and ARUP, *Climate Action in Megacities 3.0*.
[287] City of Melbourne, *Public Lighting Strategy*.
[288] Joseph, *Megacity Mexico*.
[289] Deboulet, Butin, and Demoulin, *Le Rôle des Aires Métropolitaines*.
[290] Ibid.
[291] Antoine Loubière, 'Grand Paris #Climat. Démonstrations territoriales'.
[292] UN-Habitat, *Global Public Space Toolkit. From Global Principles to Local Policies and Practice*.
[293] Official EU statistics are available online on Eurostat's website: http://ec.europa.eu/eurostat/statistics-explained/index.php/ Greenhouse_gas_emission_statistics.
[294] UNEP, *Towards a Green Economy*.
[295] More information available at: http://carte.afd.fr/afd/fr/projet/produire-energie-propre-a-partir-de-dechets.
[296] Philipp Rode and Graham Floater, *Going Green. How Cities Are Leading the next Economy*.
[297] Deboulet, Butin, and Demoulin, *Le Rôle des Aires Métropolitaines*.
[298] Swilling et al., *City-Level Decoupling*, 51.
[299] Associated Press, 'San Francisco's Fight to Counter Climate Change', example taken from Deboulet, Butin, and Demoulin, *Le Rôle des Aires Métropolitaines*.
[300] More information on: http://www.economiecirculaire.org/. See also Deboulet, Butin, and Demoulin, *Le Rôle des Aires Métropolitaines*.
[301] See also the proceedings of the 2016 Committee on World Food Security's conference, *Urbanization and Rural Transformation: Implications for Food Security and Nutrition, available online at:* http://www.fao.org/cfs/working space/workstreams/urban/en/.
[302] See the interview with Monica Fein, Mayor of Rosario, in Deboulet, Butin, and Demoulin, Le *Rôle des Aires Métropolitaines*.
[303] Mougeot, Agropolis; De Zeeuw, Van Veenhuizen, and Dubbeling, *The Role of Urban Agriculture in Building Resilient Cities in Developing Countries;* Redwood, 'Agriculture in Urban Planning'. This case study is in Deboulet, Butin, and Demoulin, *Le Rôle des Aires Métropolitaines*.
[304] Most of this sub-section is based on Deboulet, Butin, and Demoulin, *Le Rôle des Aires Métropolitaines*.
[305] Souchaud and Prévôt-Schapira, *Introduction*.
[306] Denis, *Du village au Caire, au village comme au Caire;* Sims, 'Egypt's Desert Dreams', developed in Deboulet, Butin, and Demoulin, *Le Rôle des Aires Métropolitaines*.
[307] Sims and Abu-Lughod, *Understanding Cairo*; Barthel, *Relire le Grand Caire au miroir de la densité*.
[308] Global Commission on the Economy and Climate, *Better Growth, Better Climate*, 14.
[309] For analyses supporting densification: OECD, *Compact City Policies;* UN-Habitat, *Urban Patterns for a Green Economy.* Concentrating so many people in dense, interactive, shared spaces has historically provided distinct advantages, that is, agglomeration advantages. Through agglomeration, cities have the power to innovate, generate wealth, enhance quality of life and accommodate more people within a smaller footprint at lower per capita resource use and emissions than any other settlement pattern'); Darley, Zunino, and Palisse, *Comment encourager l'intensification urbaine?*.
[310] Philipp Rode and Graham Floater, *Going Green. How Cities Are Leading the next Economy*.
[311] Souchaud and Prévôt-Schapira, *Introduction*.
[312] Vega Centeno and Lafosse, 'La densification récente de Lima et ses défis en matière de logement et de transport', quoted in Deboulet, Butin, and Demoulin, *Le Rôle des Aires Métropolitaines*.
[313] Gaigné, Riou, and Thisse, *Are Compact Cities Environmentally Friendly?*
[314] Deboulet, Butin, and Demoulin, *Le Rôle des Aires Métropolitaines*.
[315] Benali, *La densification urbaine dans le quartier Vanier*.
[316] This section is partially based on Deboulet, Butin, and Demoulin, *Le Rôle des Aires Métropolitaines*.
[317] This programme has become a tool to tackle exclusionary patterns of development that tend to push the most vulnerable onto the edges of cities' economic, social and political life. See Patino, *Building Resilient and Safe Communities against Poverty and Disaster*.
[318] Consider also the case of New York, where the risk of flooding is increasing. See, in this regard, Doyle Rice, *New York City Flood Risk Rising due to Climate Change;* Justin Worland, *Why New York City Will Be Flooded More Often*.
[319] UN Sendai Framework for Disaster Risk Reduction 2015-2030, available online at: http://www.unisdr.org/we/coordinate/sendai-framework.
[320] Yvette Veyret and Bernard Chocat, 'Les Mégapoles Face Aux Risques et Aux Catastrophes Naturelles', developed in Deboulet, Butin, and Demoulin, *Le Rôle des Aires Métropolitaines*.
[321] Pierdet, *La résilience comparée de Phnom Penh (Cambodge) et Bangkok (Thaïlande) face aux crises hydrauliques*; Deboulet, Butin, and Demoulin, *Le Rôle des Aires Métropolitaines*.
[322] Yvette Veyret and Bernard Chocat (*Les Mégapoles Face Aux Risques et Aux Catastrophes Naturelles)* argue that, in this regard, vulnerability

to climate risk has become an indicator of socio-economic inequality as well.

323 Deboulet, Butin, and Demoulin, *Le Rôle des Aires Métropolitaines*.

324 The World Health Organization (WHO) established a database on the Ebola infection, the data is still available online at this address: http://apps.who.int/gho/data/view.ebola-sitrep.ebola-summary-latest?lang=en/.

325 Lieberman, *Can a New 'Global Alliance' Rethink Disaster Response in Cities?*

326 Metropolises with the highest homicide rate – with some exceptions – are located in Northern, Central and South America, which together contain an astonishing 45 out of 50 world's most dangerous metropolitan areas, according to an indicator of homicide rates per 100,000 inhabitants. For more data and detail, see Sterbenz and Engel, *The 50 Most Violent Cities In The World*.

327 Deboulet, Butin, and Demoulin, *Le Rôle des Aires Métropolitaines*.

328 Gracia et al., *Villes et Atténuation Du Changement Climatique*.

329 UNISDR and CUDRR+R, 2016. Local Government Capabilities for the Implementation of the Sendai Framework for DRR, UNISDR (in process).

330 Bhat et al., Addressing *Flooding in the City of Surat beyond Its Boundaries;* Ghosh, *Urban Environment Management. A study on post-plague initiatives by the Surat Municipal Corporation,* Institute of Social Sciences, Delhi, is available online at this address: http://www.globenet.org/preceup/pages/ang/chapitre/capitali/cas/indsurat.htm.

331 Developed in Deboulet, Butin, and Demoulin, *Le Rôle des Aires Métropolitaines* from the following sources: Agence Française de Développement, *Question de Développement n°18 | Adaptation Au Changement Climatique Dans Les Villes*; Taylor, Cartwright, and Sutherland, *Institutional Pathways for Local Climate Adaptation;* Launay and O'Riordan, *Sistematización de Experiencias Sobre Mitigación Y Adaptación Al Cambio Climático En Once Ciudades de Colombia*; Dodman et al., *Understanding the Assessment and Reduction of Vulnerability to Climate Change in African Cities*. For the Global North, see also Beucher, *La gestion des inondations en Angleterre*.

332 Deboulet, Butin, and Demoulin, *Le Rôle des Aires Métropolitaines*.

333 An initiative such as 100 Resilient Cities, funded by the Rockefeller Foundation with the help of the Arup consultancy, has developed a framework of action for urban resilience which builds on twelve social, economic, and structural indicators of resilience and vulnerability that go beyond the natural effects of climate change. The action aims to identify the inherent and systemic strengths and weaknesses that shape a city's response to long-term sustainability challenges. The framework document on the indicators is available online at this address: http://publications.arup.com/publications/c/cit y_resilience_framework. The 100 Resilient Cities comprises, to date, 66 partner cities and an established cooperation platform of 60 partners from the public, private and non-profit sector. The organisation has concluded another round of discussion and initiative design that will lead to the inclusion of a third group of cities in 2016.

334 Participants at the conference emphasised 'the importance of taking a people-centred approach to urban development' and addressing socio-economic inequality as a key driver of vulnerability and exposure to risk. Several of the 83 voluntary commitments signed up to in the aftermath of the Conference by international stakeholders revolve around capacity-building for cities and urban settlements when facing risk and sustainability challenges. UN Sendai Framework for Disaster Risk Reduction 2015-2030, available online at: http://www.unisdr.org/we/coordinate/sen dai-framework, p. 54.

335 Deboulet, Butin, and Demoulin, *Le Rôle des Aires Métropolitaines*.

336 Lucci, Bhatkal, and Khan, *Are We Underestimating Urban Poverty?*

337 UN-Habitat, *Issue Paper on Housing, 2*.

338 See the Universal Declaration of Human Rights, art. 25(1), and the International Covenant on Economic, Social and Cultural Rights (UNGA A/Res/21/2200), adopted in 1966 and which entered into force in 1976. Both documents recognize the right to an adequate standard of living (including food, housing, and clothing) and access to health, education, social security, and participation in cultural life (Articles 9, 11, 12, 13, and 15 respectively). For Housing, see also UN-Habitat's Istanbul Agreement and Habitat Agenda (paragraph 61). For the right to water and sanitation, see UN Resolution A/Res/64/292, 28 July 2010.

339 Most of this sub-section is based on Deboulet, Butin, and Demoulin, *Le Rôle des Aires Métropolitaines*.

340 Yapi-Diahou, Brou-Koffi, and Koffi-Didia, *La production du sol à Abidjan: du monopole d'Etat au règne du privé*.

341 Datta, Hopkins, and Pain, *The Illegal City*.

342 With regard to the exclusion of Bedouin population in Benin and Jordan, see Lavigne Delville, *La reforme fonciere rurale au Benin;* American University Beirut. *Dr. Omar Razzaz: Why and how property matters to planning*.

343 Ministère des Affaires Étrangères et Européennes DgCID Direction de la Coopération Internationale et du Développement, Agence Française de Développement, and GRET Comité Technique 'Foncier et Développement' (Paris), *Gouvernance foncière et sécurisation des droits dans les pays du Sud*.

344 Fernandes, *Regularization of Informal Settlements in Latin America*.

345 Ababsa, *Public Policies towards Informal Settlements in Jordan*.

346 Most of this sub-section (except UN Data and declarations) is based on Deboulet, Butin, and Demoulin, *Le Rôle des Aires Métropolitaines*.

347 Mathivet, *La Terre Est À Nous! Pour La Fonction Sociale Du Logement et Du Foncier, Résistances et Alternatives*.

348 Sassen, *Who Owns Our Cities – and Why This Urban Takeover Should Concern Us All;* UNECE et al., *Towards a City-Focused, People-Centred and Integrated Approach to the New Urban Agenda;* Cushman and Wakefield, *Winning in Growth in Cities 2015-2016*.

349 UN-Habitat, *Urbanization and Development*.

350 UNECE et al., *Towards a City-Focused, People-Centred and Integrated Approach to the New Urban Agenda,* 17.

351 Dodge, *Right To The City-NYC's Policy Platform and Condo Conversion Campaign : Grassroots Visioning and Policies for the Future of New York City;* Houard, *Le Logement Social En Europe: La Fin D'une Époque?;* Wang et al., *The Maturation of the Neo-Liberal Housing Market in Urban China*.

352 UNECE et al., *Towards a City-Focused, People-Centred and Integrated Approach to the New Urban Agenda*.

353 UN-Habitat, *The Pretoria Declaration*.

354 UNECE et al., *Towards a City-Focused, People-Centred and Integrated Approach to the New Urban Agenda*.

355 Deboulet and Lelévrier, *Rénovations urbaines en Europe;* Goetz, *Where Have All the Towers Gone?*

356 In Deboulet, Butin, and Demoulin, *Le Rôle des Aires Métropolitaines*, Le Guirriec, *Habitat, Inégalités et Dignité*. Similar issues have been raised in the context of Rio de Janeiro, see for instance the video, *JO 2016: quel impact sur la physionomie de la ville de Rio de Janeiro?,* published by French newspaper Le Monde and available online at this address: http://www.lemonde.fr/jeux-olympiques-rio-2016/video/2016/05/05/jo-2016-quel-impact-sur-la-physionomie-de-la-ville-de-rio-de-janeiro_4914257_4910444.html. See also Toutain and Rachmuhl, *Evaluation et Impact Du Programme D'appui À La Réabsorption de L'habitat Insalubre et Des Bidonvilles Au Maroc*.

357 Prévôt-Schapira, *Les villes du sud dans la mondialisation. Des villes du tiers-monde aux métropoles en émergence?*

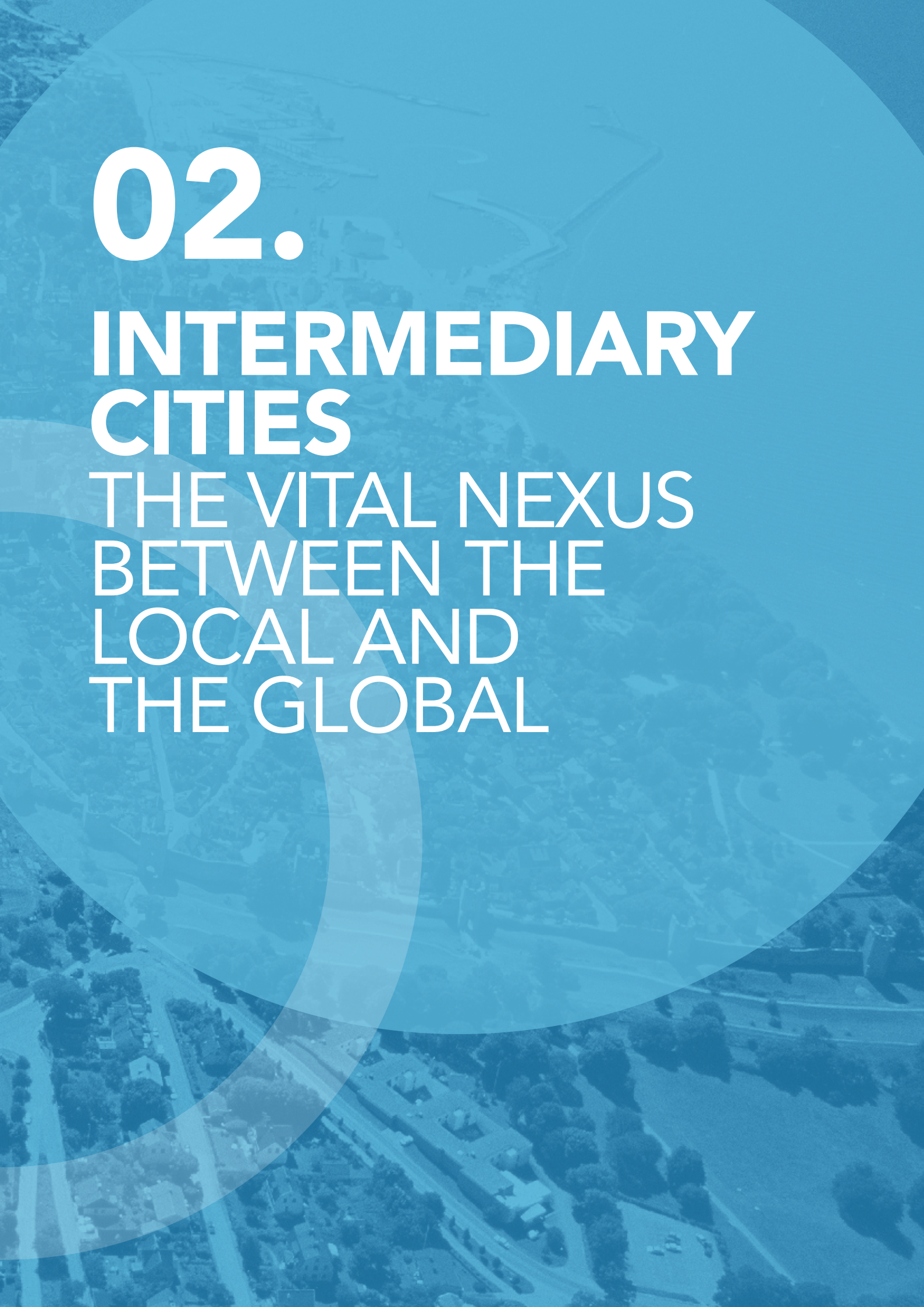
358 Deboulet, *Secure Land Tenure?*

359 See Deboulet, Butin, and Demoulin, *Le Rôle des Aires Métropolitaines*. Sources: Braathen, *Settlement Stories II. Communities Responses*; AFP, *Une Décharge Transformée En Jardin*; Goulet, *Programme 'PMB'*; Boonyabancha, *Baan Mankong*.

360 Carriou, Ratouis, and Sander, *Effervescences de L'habitat Alternatif*.

361 For example, in Quebec, France or Uruguay. See for instance Folléas, *Les Coopératives de Logements En Uruguay*; Bouchard, *L'habitation communautaire au Québec, un bilan des trente dernières années*; Devaux, *De L'expérimentation À L'institutionnalisation*.

[362] Deboulet, Butin, and Demoulin, L*e Rôle des Aires Métropolitaines.*
[363] Angotti, *La lutte pour le foncier et les promesses des fiducies foncières communautaires.*
[364] Attard, *Un logement foncièrement solidaire.*
[365] Krinsky, *Dix problèmes à résoudre pour un futur différent.*
[366] Dawance and Louey, *Le 'Community Land Trust' de Bruxelles.*
[367] For more information, see the *Voice of Mayors,* www.metropolis.org.
[368] Deboulet, Butin, and Demoulin, *Le Rôle des Aires Métropolitaines;* Gilbert, *The Return of the Slum.*
[369] UN-Habitat, *Issue Paper on Housing,* 12.
[370] Dupont, 'The Dream of Delhi as a Global City', quoted in Deboulet, Butin, and Demoulin, *Le Rôle des Aires Métropolitaines.*
[371] Cazenave and Porier, *Propriétaires à tout prix*; Schijman, *Usages, pactes et 'passes du droit'*; ibid.
[372] More information available online at this address: http://www.unwater.org/topics/water-and-urbanization/en/ (last accessed on May 25, 2016).
[373] Pye and Dobbins, *Energy Poverty and Vulnerable Consumers in the Energy Sector across the EU.*
[374] UN-DESA, *World Urbanization Prospects: The 2014 Revision.*
[375] UCLG, *Basic Services for All in an Urbanizing World, 208–9.*
[376] Ibid., 243.
[377] 'Tariffs' are fees paid by service users, 'taxes' refer to funds channelled to basic services by central, regional and local governments, and 'transfers' refer to funds from international donors and charitable foundations. Transfers include grants and concessional loans, such as those given by the World Bank, which include a grant element in the form of a subsidized interest rate or a grace period.
[378] According to UNDP, to guarantee the right to water, tariffs should not exceed 3% of household income. In Europe in 2011, tariffs were a small share of average household incomes (1.7% for water and 4.4% for electricity). These averages, however, tend to hide substantial variation between cities.
[379] A Directive of the European Commission also prohibits disconnection of electricity to 'vulnerable customers' in critical times. Some protections exist for water. See the 'Europe' chapter in UCLG, *Basic Services for All in an Urbanizing World.*
[380] See also the 'Africa' chapter, Ibid.: every poor household receives the first 200 litres of water per day and around 50-100 kWh per month for free. In 2012, the programme reached 86% of all households.
[381] See the 'Europe' chapter, in Ibid.
[382] Some international institutions are critical of subsidies, arguing that they 'undermine efficient management'. See also Komives and World Bank, *Water, Electricity, and the Poor.*
[383] Foster and Briceño-Garmendia, *Africa's Infrastructure*, 11. This policy is also criticized in Eurasia and in some countries in Latin America.
[384] UCLG, *Basic Services for All in an Urbanizing World,* 209.
[385] Jomo et al., *Public-Private Partnerships and the 2030 Agenda for Sustainable Development: Fit for Purpose?*
[386] The Municipality of Paris and forty other French municipalities have decided to re-municipalize part of the water services, as did Budapest, Napoli and several cities in Germany before them. Some other examples include Kuala Lumpur (Malaysia) and Manila (Philippines). In Africa, cases of terminated contracts were recorded in Gambia, Mali, Chad, and cities such as Nkonkobe (South Africa) and Dar-es-Salaam (Tanzania). Most recently, in Morocco, popular demands against private operators in the water sector increased, mostly due to increasing end-user prices. On the principles that guide some of the debate on 're-municipalization', see also Wollmann*, Public Services in European Countries Between Public/Municipal and Private Sector Provision – and Reverse?*
[387] More information available online at this address: https://client.lydec.ma/site/inmae.
[388] See for example Suez, *The First Environmentally-Friendly and Socially Inclusive Water Pricing Scheme in France*. Also, OECD, *Stakeholder Engagement for Inclusive Water Governance;* Allegretti et al., *More Inclusive Cities and Territories.*
[389] Ostrom, *Crossing the Great Divide;* OECD, *Private Sector Participation in Water Infrastructure.*
[390] Paulais, *Financing Africa's Cities.*
[391] Queiroz and Izaguirre, *Worldwide Trends in Private Participation in Roads;* McGranahan and Water, *How Small Water Enterprises Can Contribute to the Millennium Development Goals.*
[392] Burra, Patel, and Kerr, *Community-Designed, Built and Managed Toilet Blocks in Indian Cities.*
[393] Fergutz, Dias, and Mitlin, *Developing Urban Waste Management in Brazil with Waste Picker Organizations.*
[394] Keita, *Building Partnerships for Urban Waste Management in Bamako.*
[395] Kempener et al., *Off-Grid Renewable Energy Systems: Status and Methodological Issues.*
[396] See Appendix II of UCLG, *Basic Services for All in an Urbanizing World.*
[397] Ibid.
[398] See, for instance, UN General Assembly (2013), *Culture and sustainable development*, Resolution A/C.2/68/L.69, 5 December 2013.
[399] UCLG Committee on Culture, *Agenda 21 for Culture.* See also the UNESCO 2005 Convention on the Protection and Promotion of the Diversity of Cultural Expressions, and the focus on cultural liberty in UNDP, *Human Development Report 2004.*
[400] The document was discussed and approved during UCLG's 3rd World Congress, held in Mexico City in November 2010. A policy statement – *Culture: Fourth Pillar of Sustainable Development* – is available online at this address: http://agenda21culture.net/images/a21c/4th-pilar/zz_Culture4pillarSD_e ng.pdf.
[401] UCLG, *Culture 21: Actions. Commitments on the role of culture in sustainable cities, 2015,* available at http://agenda21culture.net/images/a21c/nueva-A21C/C21A/C21_015_en.pdf. The toolkit provides practical guidance to local governments aiming to integrate cultural aspects in their approaches to sustainability, through self-assessment, policy innovation and peer-learning.
[402] Estrada Ortiz, *Factories of Arts and Jobs in Mexico City.*
[403] Toledo Orozco, *Arts, Culture and Sport.*
[404] Caramés, *Barcelona Art Factories.*
[405] de Oliveira, Avelar, and Oliveira Jr., *Belo Horizonte: Network of Regional Cultural Centres.*
[406] Villarubias, *Making Lyon a Sustainable City.*
[407] Leanza and Carbonaro, *Socially Inclusive Urban Transformation after the Great Recession.*
[408] Carlos Alberto Zarate Yepes et al., *La Charte de Medellín.*
[409] Metropolis, Berlin, *PrepCity III, Cities as Actor* (unpublished report, May 2016). The reflection is based on the 'Circles of Social Life' approach, developed by Paul James, and organized around four principles: Economic, Ecology, Politics and Culture.
[410] The *Global Charter-Agenda for Human Rights in the City* was formally adopted by UCLG in 2011 during its World Council in Florence – which was attended by over 400 mayors from all over the world.



# 02.

# INTERMEDIARY CITIES

## THE VITAL NEXUS BETWEEN THE LOCAL AND THE GLOBAL

# 1.
# INTRODUCTION

Over the past few decades, intermediary cities (i-cities) have contributed significantly to the territorial cohesion and integration of their respective regions and countries as regional centres as well as providers of administrative and social services, conventionally linked to local economic activities. These cities play a critical role for the achievement of an 'inclusive, safe, and resilient' urbanism (Goal 11 of the Sustainable Development Goals - SDGs), by strengthening rural-urban ties, promoting more balanced urban systems or providing opportunities for 'human-scale' development and improving the quality of life of their citizens. **Despite their demographic and territorial relevance within their national urban systems, many i-cities are still neglected in development agendas**. They face the challenge of adjusting their own needs and expectations to a global urbanization process that is making urban systems more diverse and complex and increasingly polarized around large agglomerations.

This chapter addresses the issues, concerns and opportunities that affect the development of i-cities, as an essential part of national and global systems of cities.[1] I-cities today are home to 20% of the world's population and one third of the total urban population, and play a major role in migration, administrative, economic and logistics processes. They link the population living in rural areas and small towns to the larger networks of primary and metropolitan cities. In developed economies, particularly in Europe and Northern America, the situation of i-cities varies: while many face economic uncertainty, others have grown into dynamic actors in the new global economy. In many developing economies, on the other hand, i-cities are growing at different paces, and experiencing significant development pressures from urbanization. Until very recently, however, these i-cities had not received much attention in international comparative analyses.[2] In certain regions, i-cities have long been seen as the weakest link in urban systems, and particularly vulnerable in the transformations of global economy and the ongoing process of urbanization.

Faced with a scenario of territorial imbalance and social, economic and environmental uncertainty, governments and the international community now have a historic opportunity to put their i-cities at the core of their policy agendas and regional and national development strategies. If a majority of countries do not swiftly commit to undertake this challenge, it could compromise the prospects of a significant part of the world's urban population, whose empowerment is so important in the creation of the 'New Urban Agenda', and the achievement of the SDGs.

This introduction provides the key definitions necessary for a thorough analysis of the phenomenon of i-cities, and their place in the broader picture of urbanization in an increasingly globalized and complex world. Section 2 investigates in detail **the concept of intermediary cities through analysis of their main facets**. This includes: their scale, functions, location and connectivity; the distinctive governance and financial architecture they have developed to preserve their role in national urban systems; the role of urban planning and design to promote and protect their sustainability; the specific role they play in local economic development, with a focus on the rural-urban linkages they help foster; and the potential benefits they can reap from investment in identity, technology and equality.

Section 3 examines **i-cities in the different regional contexts across the world**. Finally, Section 4 concludes this chapter with a series of **recommendations and key messages for i-cities,** and how they can actively contribute to today's global development and urban agendas, with a special focus on the afore-mentioned New Urban Agenda.

**Governments and the international community now have a historic opportunity to put their i-cities at the core of their policy agendas and regional and national development strategies**

# 1.1 DEFINITION OF INTERMEDIARY CITIES

What constitutes an intermediary city? This is a difficult question to answer, since the terms that describe and classify these cities are still widely debated. Originally incorporated within the definition of secondary[3] or mid-sized cities,[4] the concept has further developed into that of intermediary city,[5] 'satellite towns',[6] 'second-tier city'[7] and, again, 'secondary city'.[8] The terms intermediary, mid-sized and secondary cities are often used interchangeably in the literature. This gives rise to confusion about the way cities are classified in national and global contexts. Intermediary and secondary cities have different roles, functions and scale even though, in certain circumstances, these concepts can overlap.

**Intermediary cities are cities with a population of between 50,000 and one million people that generally play a primary role in connecting important rural and urban areas to basic facilities and services**

This report builds on the definition of i-cities developed by UCLG, a synthesis of different definitions that can be applied to different contexts and regions. Accordingly, intermediary cities are cities with a population of between 50,000 and one million people that generally play a primary role in connecting important rural and urban areas to basic facilities and services. This definition overcomes static and traditional definitions that are based on a hierarchical urban-system approach, adopting a more open, dynamic, as well as interactive concept.[9] This definition, should, moreover, be considered as flexible so as to be equally applicable to i-cities in Asia – where some cities with more than one million inhabitants can be functionally regarded as intermediary – as in Europe, where even some cities with as few as 20,000 inhabitants play intermediary roles. The proposed definition, however, is close to the one adopted during the Thematic Habitat III Conference on 'Intermediate Cities' held in Cuenca (Ecuador), on 9 -11 November 2015.[10] According to this definition, there are nearly 9,000 i-cities in the world, and they are home to around 1.4 billion people (36% of the world's urban population).[11]

I-cities generally fall into one of three broad types:[12]

- **Regional i-cities** that act as sub-national urban centres of administration, manufacturing, agriculture, trade or social and cultural services, and that combine resources for regional development and cohesion;
- **Clustered i-cities** that develop as industrial districts on the periphery of metropolitan or large urban regions, or take the form of new towns, 'spill-over' growth centres, and/or linear cities;[13]
- **Corridor i-cities** that develop as growth poles along major transportation corridors, sometimes expanding across borders and countries.

These three types of i-city play a vital role in wider national and transnational systems of cities. In some cases, their roles and functions may expand across a whole geographic region, or even globally, as primary hubs of business, services, knowledge or cultural activity.[14] There are other ways of segmenting i-cities, some of which will be analyzed in this chapter (by size, for instance, small, medium or large i-cities; or by geographic location, coastal, inland or landlocked i-cities).

**I-cities also play a unique role in providing essential services to both urban and rural populations**. They act as regional market centres or hubs for smaller cities, with predominantly rural resource-based/specialized manufacturing industries. They connect traders and producers with customers and markets in larger metropolitan areas. They may also be providers of government services, education and knowledge resources, as well as of access to a variety of social and specialized services that need not be exclusively local or regional. Many i-cities have gained recognition as global hubs in key aspects of governance, logistics, trade, tourism, technology and social services – not to mention their increasingly central role in adaptation and mitigation strategies against climate change effects or the protection of the biodiversity of their hinterlands.

Table 1.1 presents data on the evolution of i-cities in global and regional contexts. Firstly, it can be observed that i-cities' populations are projected to increase by more than 434 million people between 2015 and 2030. This growth rate is similar to that of metropolises with a population of between one and ten million people (408 million new inhabitants), and almost double the growth rate of 'megacities' (258 million new inhabitants). The highest pace of growth for i-cities is set to be recorded in Sub-Saharan Africa and Asia, and especially in cities of 300,000 or fewer inhabitants (208 million

new dwellers, if including cities of fewer than 50,000 inhabitants too). I-cities with a population of between 500,000 and one million inhabitants are expected to grow by a total 138 million (91 million in Sub-Saharan Africa and Asia). Meanwhile, the group of mid-sized i-cities (between 300,000 and 500,000 inhabitants) will see their population grow by 57 million (45 million of which are in Sub-Saharan Africa and Asia). Europe and Northern America, on the other hand, will see the highest increases in cities with a population of between 300,000 and one million people (15.6 million people).

Table 1.1 **Population estimates by city size and regions, 2015, 2030 (millions)**
Source: UN-DESA, 2015

| GLOBAL REGIONS | METROPOLITAN AREAS | | | | | | INTERMEDIARY AND SMALL CITIES | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | >10 million | | 5 to 10 million | | 1 to 5 million | | 500,000 to 1 million | | 300,000 to 500,000 | | < 300,000 | |
| | 2015 | 2030 | 2015 | 2030 | 2015 | 2030 | 2015 | 2030 | 2015 | 2030 | 2015 | 2030 |
| WORLD | 471 | 730 | 307 | 434 | 847 | 1,130 | 371 | 509 | 262 | 319 | 1,700 | 1,940 |
| Less developed regions | 349 | 604 | 238 | 342 | 649 | 907 | 281 | 408 | 190 | 241 | 1,270 | 1,500 |
| Africa | 43 | 101 | 25 | 74 | 106 | 160 | 40 | 83 | 34 | 42 | 223 | 309 |
| Sub-Saharan Africa | 25 | 77 | 20 | 60 | 88 | 139 | 31 | 67 | 26 | 34 | 169 | 244 |
| Asia | 293 | 457 | 196 | 258 | 429 | 595 | 202 | 283 | 126 | 160 | 867 | 1,000 |
| Europe | 33 | 35 | 11 | 12 | 84 | 96 | 59 | 61 | 43 | 46 | 316 | 316 |
| Latin America and the Caribbean | 70 | 103 | 32 | 25 | 125 | 163 | 40 | 44 | 32 | 41 | 204 | 220 |
| Northern America | 31 | 33 | 43 | 54 | 88 | 105 | 29 | 38 | 24 | 26 | 80 | 83 |
| Oceania | | | | 10 | 15 | 8 | 0.58 | 2 | 2 | 3 | 10 | 11 |

N.B. In this source's database, cities with fewer than 300,000 inhabitants also include cities of 50,000 inhabitants or fewer. In a similar table in this report's introduction, however, data for cities with fewer than 50,000 inhabitants are analyzed separately and only for 2015.

# 1.2
# THE IMPERATIVE TO FOCUS ON I-CITIES

For the past few years, interest in the status and trajectory of intermediary cities has been growing. This has been driven mostly by the concern – both in the academic community and at the governmental level – that the role and importance of i-cities in the development of efficient national systems for cities is not fully understood. It is believed that the potential of i-cities to add value to economies and sustainable development is, therefore, being stifled. Improving the functions and efficiencies of i-cities could lift the performance of national economies: i-cities can act as buffers for rural-to-urban migration and alleviate similar pressures on metro regions, as well as help reduce rising inter-regional inequality in many countries.

There is inadequate understanding of the way in which i-cities fit within national, regional and global systems of trade, investment and development, partially due to a scarcity of information, and this weakens their position in the national economy. This gives rise to a number of strategic questions:

- What kind of strategic infrastructure or enabling environments should i-cities develop to play a more active and diverse role in the development of sub-national regions?

- How can local governments work with business communities and civil society to create enabling environments that encourage investment, foster inclusive development, and generate new opportunities for their inhabitants?
- How could systems of local and regional governance work more effectively, access better information and knowledge, and promote wider community engagement in local decision-making processes?

It is a critical task for governments to better understand the functions of i-cities and how they relate to and interact with larger cities, small towns and regional governments. Their economic and physical development is increasingly shaped by external factors, such as rural-urban migration, structural changes to national economies, increasingly global markets, and rapid changes in technology, energy use and productive processes – which some have already dubbed the 'Third[15] or Fourth Industrial Revolution'.[16] These factors collectively present unprecedented challenges to the future ability of i-cities to maintain their identity and reach their full potential. Surmounting these challenges will be instrumental to the achievement of the SDGs and other related global agendas (on climate change, the Sendai Framework for Disaster Risk Reduction, the Addis Ababa Action Agenda). Most of these goals, ultimately, are inextricably linked to responsibilities and challenges of intermediary cities, as the rest of the chapter demonstrates.

Photo: Natalia Cartolini - Cuenca (Ecuador).

# 2.

# THE PROFILE AND DYNAMICS OF INTERMEDIARY CITIES

The economic, social and cultural relations elicited by urban proximity and human scale are a source of potential competitive advantage to i-cities – even in a rapidly changing and increasingly globalized and connected world.

The quality of life of a city can be measured by its citizens' satisfaction with the economic, social, cultural, environmental and/or institutional factors affecting their daily lives. Proximity to services is one of the indicators that characterizes i-cities the most.[17] Using international measurements of quality of life, i-cities such as Göteborg (Sweden), Trondheim (Norway), Winnipeg (Canada), and Aberdeen (United Kingdom) manage to compete with large global metropolises.[18] Aalborg (Denmark) boasts a 99% level of satisfaction among its citizens.[19] Many i-cities have likewise grown to be leaders in innovation. These include Raleigh-Durham (United States), Leipzig and Karlsruhe (Germany), Bilbao (Spain), Edinburgh and Bristol (United Kingdom), and Toulouse (France), among others.[20]

Many i-cities share these strong qualities and characteristics, taking advantage of proximity and scale and successfully overcoming disasters, risks and challenges. But not all i-cities are as effective. Many regions have experienced a surge in inequality between large, intermediary and small cities and it is not uncommon for i-cities to experience lower levels of employment, health and wages compared with national averages.

This poses a paradox: why are some i-cities able to optimize their role in the wider urban system, while others fall behind, struggling to create decent jobs, attract investment and ensure sustainable development and better lives for their citizens?

The answer to this question is vital to a better understanding of i-cities and their role within their respective national systems. This will be essential if i-cities are to advocate and fight for an improved quality of life for their citizens, and build governance systems that are accountable, resilient and sensitive to the dynamics of change at the local and global levels.

This section highlights those key elements that distinguish i-cities. It does so by analysing the dynamics of change; their governance frameworks and funding mechanisms; their role in planning and shaping territorial and spatial development; as well as their competitive advantage in fostering local economic development.

**A relative advantage of i-cities – and smaller ones in particular – over larger cities is their human scale, a fact that has generally been neglected in development agendas**

## 2.1 THE DYNAMICS OF CHANGE

The way i-cities function and develop is influenced by a number of factors, policies and events, many of which are beyond the control of cities and governments. Structural economic change can be particularly challenging for i-cities – especially those that are dominated by a single industry. I-cities often have a narrow economic base and may be more vulnerable to the dynamic of change that are driven externally. Adverse economic or social conditions force intermediary and smaller

cities to move faster when implementing change or encouraging innovation.[21]

Political dynamics also influence the management of i-cities. A relative advantage of i-cities – and smaller ones in particular – over larger cities is their human scale, a fact that has generally been neglected in development agendas. Human scale has a crucial impact on the ability of local governments to implement policies more efficiently,[22] provided there is strong and accountable local leadership. I-cities need to focus on the priorities that will improve governance, mobilize local communities and develop their human and social capital. Many i-cities also need to understand the strategic value of inclusiveness, preserving their identity, and mobilizing their cultural and environmental assets.

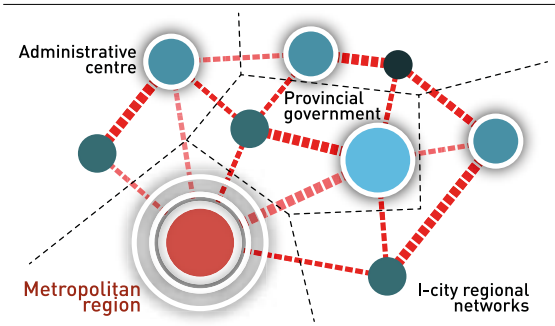
Human scale and proximity are key elements for the development of i-cities, but other variables, such as location and functions within regional and global networks, are also becoming critical. Several of these variables – structure, size, form and function, demographic trends and economies of scale – are analyzed in detail in this section.

### 2.1.1 Structure: size, form and function

The dynamics of globalization and migration mean that i-cities are in a constant state of flux. Twenty-six percent of the whole i-city population live in larger i-cities of between 500,000 and one million inhabitants, and many of these may eventually gain characteristics typically associated with metropolitan agglomerations. Meanwhile, more than half (54%) live in medium-sized i-cities (between 100,000 and 500,000 people), and the remaining 20% live in smaller i-cities, with a population of between 50,000 and 100,000. Section 3 of this chapter evaluates this data in detail for each world region and their respective countries.

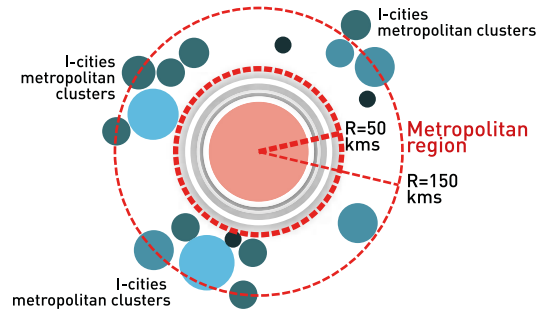
One of the impacts of globalization is the immersion of cities in functional networks rather than strict hierarchies based exclusively on city size or government system. **I-cities exhibit huge variations in size, function, geographic location and the roles they play within wider networks**. The different typologies of i-cities – nodes, clusters and corridors – are described in Figure 2.1.

Figure 2.1 **Typologies of intermediary cities**




**Historical regional nodes**
These are i-cities that play a key role, either as centres of government in provinces, departments or regions; or having been historically relevant industrial poles or economic centres. I-cities of this kind perform a broad range of functions: administrative centres; agriculture, agro-industrial and extractive industries; tourism; and knowledge economy.

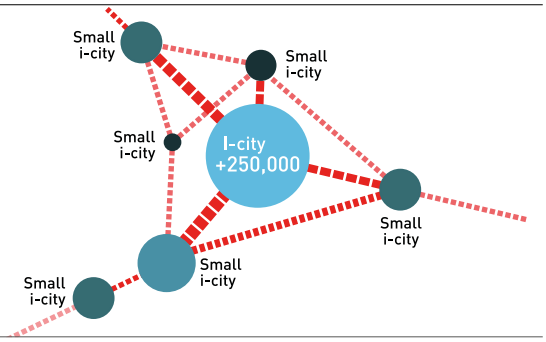
**I-CITY CLUSTERS**




**Metropolitan clusters**
These are i-cities beyond the peripheral zone of metropolitan areas and regions, generally with commuting times of over 90 minutes. Most of these i-cities provide, nonetheless, a broad range of services, food-processing and assembly manufacturing industries. Most range in size from 150,000 to 250,000 inhabitants.

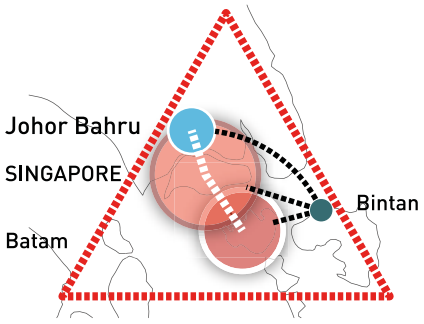
### Regional clusters

These clusters are agglomerations of i-cities defined as 'forms of territorial aggregation between companies operating in the same sector or branch'. This group is usually modelled on the example of furniture, footwear and clothing small and medium-sized enterprises (SMEs) that peaked economically in northern and central Italy during the 1990s. These clusters tend to have a long history in manufacturing specialized goods and services.




### Cross-border clusters

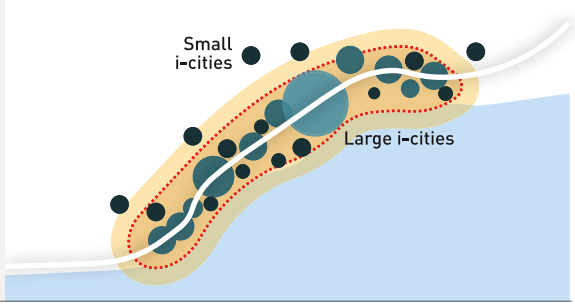
These clusters form when adjacent cities, although located in different countries, create a contiguous sphere of economic influence. They usually have a high level of specialization, due to the concentration of firms that manufacture products or provide services as a whole within an integrated cross-border supply chain. The Singapore/ Johor Bahru/Batam-Bintan growth triangle is one of the most dynamic examples of this type of cluster.




## I-CITY CORRIDORS

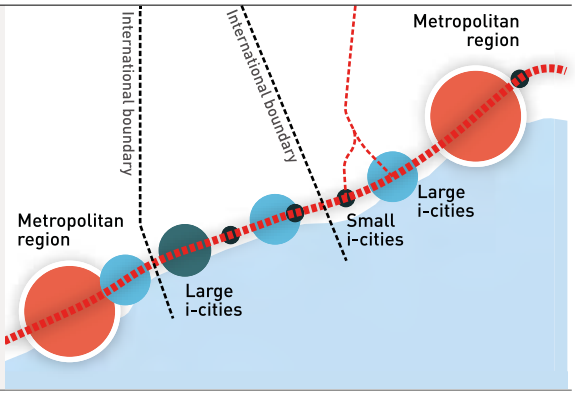
### National corridors

These are networks of large towns and smaller i-cities that have become connected along inland and/or coastal national networks, taking the form of a linear agglomeration up to 50km or more in length. This type of corridor has been widespread in coastal regions of Southern Europe and Northern America, but is now emerging in similar contexts in many countries of the Global South.



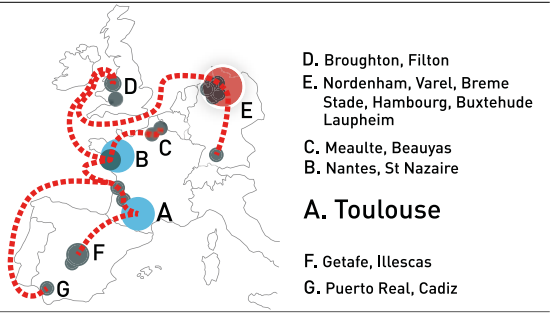

### International corridors

International corridors are networked systems of i-cities that form economic integration and cross-border trade corridors and axes between two or more countries. This type of corridor tends to take advantage of main transport infrastructures across continents and large navigable waterways. They concentrate specialized functions in supply-chain logistical centres. International corridors are common phenomena in Europe, and are increasingly frequent in the most dynamic areas of Africa, Latin America and Asia.




### International networks

These are intermediate cities that play a key role as either centres of government in provinces, departments or regions, or have historically been relevant industrial poles or the centres of enclave economies. I-cities of this kind perform a broad range of functions: administrative centres; agriculture, agro-industrial and extractive industries; tourism; and knowledge economy.



Intermediary cities tend to evolve in **coastal**, **inland** and **landlocked contexts**. Geographic location has a significant impact on functional specialization. Around 40% of the urban population in i-cities live in 'coastal strips' of 100-150km, which creates strong 'path dependencies' for their urban development process. The remaining 60% live in either/both inland and/or landlocked i-cities. Local development in these cities is inevitably intertwined with the improvement of local connectivity and relations with surrounding areas – a pre-condition for any form of access to regional and global markets.

**I-cities play an increasingly influential role in the economic integration and territorial cohesion of their countries, because of their potential to generate development opportunities, not only for their urban residents but also for the rural population living within their sphere of influence.** This has been very apparent in Europe, where polycentric urban systems are common, with many i-cities interconnected to a small number of metropolises, each one fulfilling specific complementary functions and contributing, in its own way, to mutual cooperation and integration.[23] It is essential, accordingly, that national policies recognize the specificities and typologies of i-cities, acknowledging their contribution to regional development, while fostering a more balanced urban system.

## 2.1.2 Urban and demographic transitions

A significant proportion of the world's i-cities face the complex challenge of making socio-economic progress and sustainable development compatible, against a backdrop of often unpredictable urban and demographic transition.

Urban expansion does not necessarily coincide with population growth. In many advanced economies, for instance, the urban footprint of many i-cities has expanded, irrespective of natural growth rates that were often either static or even declining. While in developing countries, many i-cities have recorded a surge in population growth – thanks mostly to the overall reduction of mortality rates, steadily growing fertility and birth levels, and intensified rural-to-urban migration flows – they have also expanded their urban agglomeration through unprecedented peri-urbanization processes.

Table 2.1 **Rates of annual growth of population in cities, according to their size, for the periods 2000-2015 and 2015-2030 (%)**

Source: UN–DESA, World Urban Prospects, 2014, F17d, Population in cities classified by size class of urban settlements, major area, region and country 1950-2030

| GLOBAL REGIONS | METROPOLITAN AREAS | | | | | | INTERMEDIARY AND SMALL CITIES | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | >10 million | | 5 to 10 million | | 1 to 5 million | | 500,000 to 1 million | | 300,000 to 500,000 | | < 300,000 | |
| | 2000-2015 | 2015-2030 | 2000-2015 | 2015-2030 | 2000-2015 | 2015-2030 | 2000-2015 | 2015-2030 | 2000-2015 | 2015-2030 | 2000-2015 | 2015-2030 |
| WORLD | 4.18 | 2.96 | 2.57 | 2.34 | 2.32 | 1.93 | 2.36 | 2.14 | 2.15 | 1.33 | 1.60 | 0.88 |
| Less developed regions | 5.23 | 3.73 | 2.73 | 2.45 | 3.09 | 2.25 | 2.92 | 2.52 | 2.76 | 1.58 | 2.07 | 1.16 |
| Africa | | 7.87 | 0.34 | 7.57 | 4.56 | 3.13 | 3.14 | 5.19 | 5.38 | 1.75 | 3.50 | 2.47 |
| Sub-Saharan Africa | 8.04 | 5.81 | 1.88 | 7.49 | 3.69 | 2.79 | 3.30 | 5.05 | 4.61 | 1.38 | 3.02 | 2.20 |
| Asia | 4.92 | 3.00 | 2.53 | 1.85 | 3.10 | 2.20 | 3.41 | 2.26 | 1.91 | 1.62 | 2.18 | 0.96 |
| Europe | 8.35 | 0.42 | -4.64 | 0.52 | 0.06 | 0.92 | 0.98 | 0.19 | -0.14 | 0.47 | 0.24 | -0.01 |
| Latin America and the Caribbean | 1.14 | 2.57 | 3.40 | -1.64 | 2.47 | 1.80 | 0.65 | 0.54 | 4.35 | 1.63 | 0.91 | 0.52 |
| Northern America | 0.28 | 0.47 | 7.98 | 1.64 | 0.25 | 1.19 | 0.46 | 1.70 | 3.13 | 0.64 | 0.08 | 0.25 |
| Oceania | | | | 0.00 | 1.22 | -4.16 | 0.00 | 7.94 | 1.73 | 1.46 | 1.73 | 0.63 |

Table 2.1 shows an approximation to the population growth rate of cities according to their size, with a comparison between the periods 2000-2015 and 2015-2030. The population of i-cities between 500,000 and one million inhabitants is expected to keep growing at an average rate of 2.14%. Annual growth rates of population in cities with fewer than 500,000 inhabitants, however, are likely to drop from 1.33% to 0.88%. Population growth rates in megacities, the fastest growing typology until 2015, are projected to slow down to a rate of 2.96% over the next 15 years. Even though a general drop in growth rates is foreseen across all types of i-city, this decline will vary by region. The population growth rate in Sub-Saharan African cities, for instance, will increase significantly in large metropolises of more than 5 million inhabitants (a 7.57% increase between 2015 and 2030). Meanwhile, the population of i-cities of 500,000 inhabitants or more which will experience a 5.19% surge over the next 15 years, and smaller i-cities of 300,000 inhabitants or fewer will see a 2.47% increase. However, this table should be viewed with caution as for many countries, data have a high level of uncertainty. It also does not account for the population of intermediate cities that jump from one category to another (e.g. those i-cities that have exceeded the threshold of 1 million people and will no longer be considered i-cities in 2030).

**In the urban and demographic transition of many developing countries, rural-to-urban migration has had a decisive impact**. The exact effect of migration in many countries of Sub-Saharan Africa and South-eastern Asia, however, has proven hard to assess, mostly because of obsolete census information that has historically failed to take account of the floating population (people that move from rural to urban areas, and vice versa, on a seasonal or semi-permanent basis). In Sub-Saharan Africa, for instance, the world region with by far the highest urban population growth rate (4% a year), rural migration accounts for a third of this growth, but i-cities do not necessarily retain this new population. Data show that many i-cities, especially smaller ones, have been absorbing significant flows of rural migration – even though these inflows have been consistently compensated by outflows either back to rural areas or towards larger cities. The contribution of migration was considerably higher in Asia during the same period and is expected to continue growing, albeit at a slower pace.[25] A common issue for many i-cities – e.g. in the Philippines, China, India, Mexico, and most of Europe - is the out-migration of younger populations to larger cities in search of jobs, education and other opportunities, leading to imbalances in the remaining population.[26]

Since the 1980s, urban transition globally has been led by China. There, urban policies have targeted the competitiveness of provincial urban systems and at the same time attempted to reform the household registration system of *hukou* which had been designed to curb migratory pressures on its main metropolises.[27] China actually concentrates 41% of its total urban population in i-cities (2015), which have contributed substantially to the development of what is today the world's second largest economy. Similarly, Africa has the same population concentrated in 1,086 i-cities as in 56 metropolises, and, in certain contexts – such as Mozambique, Algeria, Morocco, Sudan, Tunisia or Nigeria – i-cities have been predominant in the urban landscape and essential to the economic specialization of the territory.

On the contrary, developed economies of the Eurozone, Northern America and Japan are facing exactly the opposite urban and demographic challenges of those in the Global South. Europe is currently the world region with the largest concentration of population in i-cities (41.8%), double that of its metropolitan areas. I-cities have played a major role in catalysing territorial cohesion and diversifying the national economy, during cycles of both economic growth and downturn.

Between 1990 and 2014, the population of many i-cities from 'transition economies' in Baltic countries, Central and Eastern Europe, and Central Asia, has shrunk in the face of structural changes in their political and economic organization. In the United States, Detroit is a well-known example of a 'shrinking city', as the collapse of its automotive industry saw the city lose more than half its peak population and file for bankruptcy in 2013.[28]

As mentioned in the introduction, it is anticipated that i-cities will host more than 400 million new urban dwellers in the coming 15 years, more than 90% of them in Asia and Sub-Saharan Africa, at a pace of 70,000 people per day. I-cities often play a gateway role in the migratory process towards metropolitan areas. In most cases, however, the migrating population tends to remain systematically excluded from a full right to enjoy citizenship, creating pockets of concentrated poverty and

**It is anticipated that i-cities will host more than 400 million new urban dwellers in the coming 15 years, more than 90% of them in Asia and Sub-Saharan Africa, at a pace of 70,000 people per day**

triggering precarious sub-urbanization and informality in all aspects of daily economic and social activities.

Intermediary cities, in this regard, have a responsibility to act as buffers in the implementation of migration policies. To do so, integrated multilevel governments have to cooperate to guarantee housing rights, access to basic services, education and decent job opportunities. As urbanization continues,[29] many i-cities will have to prepare to institutionalize planning in their development agendas, by adapting their spatial, social and economic development to an ever-changing demographic environment – guided, though, by a firm determination to anchor development to their own territory for the security and wellbeing of future generations.

### 2.1.3 Economies of scale and proximity

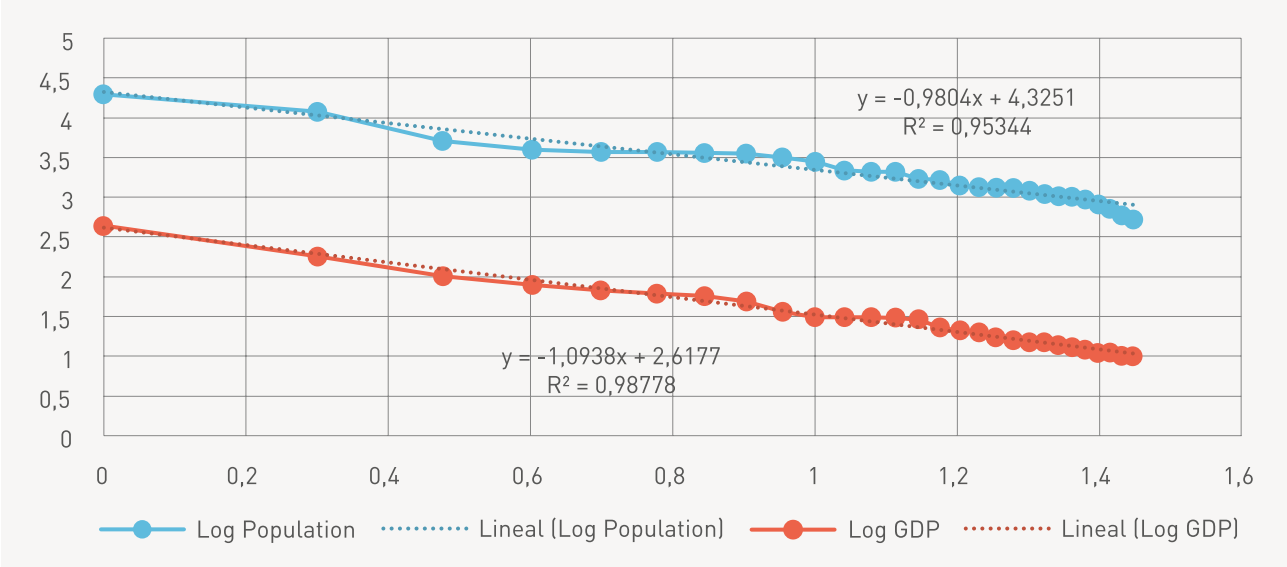
There are significant differences in GDP wealth and income between cities, and the size of a city certainly affects these indicators. Reliable data, moreover, are not easily obtainable in many countries, even less so with regard to i-cities. In many cases, the GDP and economic performance of such cities tend to be near to, or slightly below, the national medians and averages of their countries – while the opposite is normally true for metropolitan areas. In many cases, where one or two large cities dominate the national urban system, i-cities show a much-reduced range of economic activities. Normally, they depend on one dominant sector – such as agriculture, mining, raw materials manufacturing or tourism – as the economic foundations of the city. This is most prevalent in regions such as Sub-Saharan Africa and Southern Asia, where urbanization levels are still relatively low.

Comparisons between i-cities and larger cities should, however, be made with care. In more polycentric national systems of cities, the relationship between population, economic and other indicators is generally more balanced. The more polycentric the network of national systems of cities, the greater the capacity of i-cities to share their resources within these national systems. The analysis of data from Germany, the United Kingdom, and Australia shows patterns similar to the United States.

In OECD countries with polycentric systems of cities, on the other hand, there can be significant variation in the relationship between population and GDP indicators, explained by the fact that some i-cities have high levels of specialization and value-adding industries. In Europe, polycentric systems of i-cities have played a key role in the economic integration of the territory. In spite of the global financial crisis of 2008, several i-cities in Germany, Italy, Spain, Switzerland, Poland, the Netherlands and Norway have

Graph 2.1 **Log of the relationship of GDP and population by city ranking, Brazilian cities (2015)**

Source: MGI, 2014; UN-DESA, 2015



experienced higher GDP growth than that of their respective capitals. The main i-cities of Spain, the Netherlands, Sweden and Poland, for instance, account for between 50% and 80% of their respective capitals' GDPs. However, in Ireland, Denmark and Portugal, the main i-city of the national urban system only produces between 25% and 50% of the capital's GDP. These figures are even lower (10-15%) in France and the United Kingdom, mostly because of the larger economic influence of Paris and London, both truly global cities.[30]

Much of Latin America also relies on narrowly specialized i-city economies. Graph 2.1 shows the relationship between the ranking of population size and GDP for 30 Brazilian cities. As the scale of the population in i-cities declines, there is a proportional but steeper decline in GDP and GDP per capita. These differences can also be seen in other countries, where the spatial population settlement system is heavily concentrated in one or two large cities, e.g. Lima in Peru and Santiago in Chile.[31] Countries such as Ecuador and Colombia are exceptions whose i-cities show greater diversity of economic activity.

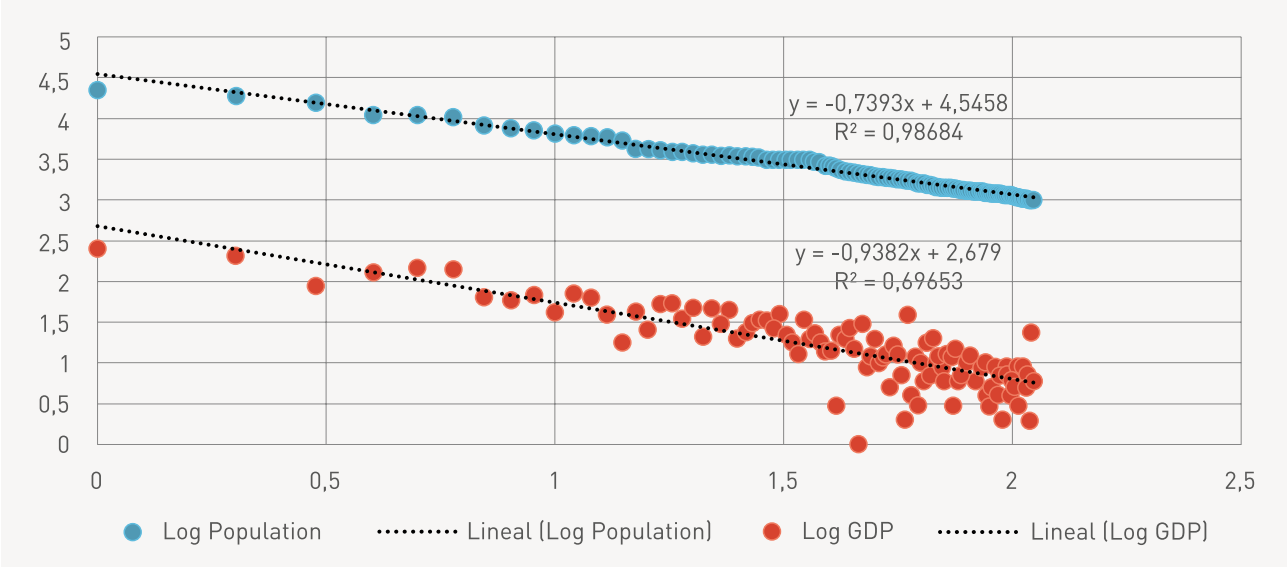
Graph 2.2 shows the relationship between the ranking of population size and GDP for 205 Chinese cities. This measurement is consistent with that of most other large economies in the world. The relationship between log ranking of population and GDP demonstrates, however, that cities with fewer than one million inhabitants experience significant variations in GDP. Except resource-rich cities in Western China, GDP variations in inland cities are much greater than in coastal cities, or in cities located on large navigable rivers. The log ranking of the relationship between population and GDP for China is similar to that of other large countries in Asia, including India, Indonesia, and Pakistan. Accessibility, quality of infrastructure, distance from the national capital and skills development are all factors that explain why many inland i-cities in Asia are not performing as well as coastal i-cities.

I-cities' demographic relevance has an impact on their ability to generate economies of scale in production and/or competitiveness of local firms and industries.[32] As i-cities grow, they also generate their own internal economies of scale and local markets, and their economies tend to diversify. This transition normally occurs when the urban population exceeds 60,000-100,000 – depending on the country – and especially when a city has technological and innovative industries, a fully functioning regional university campus or strong political and business leaderships. I-cities with a population of 250,000 or more tend to perform better than small cities, especially in the categories of job creation, economic growth, innovation and wealth.[33]

**Comparisons between i-cities and larger cities should, however, be made with care**

Graph 2.2 **Log of the relationship of GDP and population by city ranking, Chinese cities (2015)**

Source: MGI, 2014; UN-DESA, 2015



Data collected for 421 United States cities show that major cities significantly out-perform intermediary and small cities in employment creation in the information and manufacturing sectors.[34] Studies of European,[35] Australian, Latin American[36] and South African cities show similar trends.[37] What is also apparent from the literature is that smaller cities of fewer than 100,000 inhabitants tend to struggle compared with larger cities, and are far more vulnerable to economic turbulence.

Inequality (and its perception) is an important related issue for i-cities. It is commonly assumed that an increase in inequality is an inevitable consequence of economic growth and urban development. There exists, nonetheless, little analytical evidence that relates economic inequality to a city's size and population. Although a study of Latin American cities, conducted by UN-Habitat and one of the development banks of Latin America, *Corporación Andina de Fomento* (CAF), indicates a correlation between city population and income disparity,[38] i-cities show a larger variation in income differentials, and widely varying success at reducing inequality. The availability of global evidence across a wider range of indicators – such as innovation, quality of life, literacy, human resources and infrastructure – is still limited. At least in Europe and Northern America, however, the pool of i-cities shows a growing gap between those able to innovate and those (usually smaller cities) that still lag behind. Central governments must take into account the negative consequences of these widening disparities between cities on regional economies and societies. Efficient multilevel governance must step up to this challenge by acknowledging i-cities' key contribution to territorial integration and cohesion, and by fostering impactful policies that hinge on the creation of balanced and integrated polycentric urban systems. **With the reduction of inequality demanded by Goal 10 of the SDGs, the 'good governance' of i-cities is still one of the most important catalysts of progress, participation and innovation, and an ally in the challenge to 'leave no one behind'.**

**As i-cities grow, they also generate their own internal economies of scale and local markets, and their economies tend to diversify**

# 2.2 EVOLUTION OF URBAN GOVERNANCE AND FINANCING OF I-CITIES

I-cities are embedded into specific institutional and legal frameworks inherited from long-standing social and political arrangements within each state. Across different regions, processes of decentralization and devolution of administrative functions are underway that share a number of common elements. Legal frameworks conceived to foster local autonomy have made possible the transfer, to different degrees, of resources and responsibilities to i-city governments.

## 2.2.1 The implementation of local governance: purpose and design

Decentralization – defined as the devolution of responsibilities and functions from central to both intermediate (e.g. regions, provinces or departments) and local governments – almost always comprises three fundamental dimensions: political, fiscal, and administrative. Its success has been connected, first and foremost, to the outcome in the balance of power between different levels of government and the functionality of administrative powers and fiscal resources to enforce such a process.

In many developed countries with a long history of decentralized governance, the legal and institutional frameworks that determine the functional responsibilities and fiscal powers of local governments are, in general, better established and elaborated. This is even in spite of the difficulties and drawbacks inevitably experienced by many of them. Generally speaking, i-cities have been assigned explicit mandatory and elective expenditure responsibilities, as well as fiscal powers in terms of revenues, transfers and borrowing authority. They have also been empowered with a set of effective rules and regulations that facilitate local governments to operate in a more efficient, transparent and accountable manner.

In many developing countries, the legal and institutional framework conditions for good local governance are not yet in place. Legislation that may further detail the distribution of fiscal powers and responsibilities often remains ambiguous, fragmentary and incomplete. The same goes for subsidiary rules and regulations. As a result, local governments – including i-cities

– lack the institutional incentive and capacity to efficiently exploit their developmental potential and manage their financial resources.

In Europe, reforms at both the national and the supranational level were instrumental in the promotion of new forms of governance that have also involved i-cities. For several decades now, the continent has seen a continuing, though sometimes uneven, trend towards greater democratic decentralization to the local and regional levels, as evidenced by the European Charter for Local Self-Government.[39] The role of local government has grown considerably. The 2008 financial and economic crisis has, however, affected sub-national reforms. This is in the form of territorial reorganization (e.g. amalgamation of municipalities or other tiers of sub-national governments in some countries); generalized budget restrictions that reduced public investments (sub-national public investments, for instance, fell by more than 20% between 2009 and 2013) and, in some cases, recentralization of competences.[40] At the EU level, however, several programmes aimed at enhancing municipal administrative capacities have targeted i-cities in particular.[41]

Meanwhile, Latin America is now reaping the benefits of a 30-year-long wave of decentralization that has built on the democratization of participative processes at the local level and strengthened the governance of i-cities. Multi-party local elections are now a reality throughout all countries of the region (with the exception of Cuba). Positive spill-overs of this empowerment of citizen participation have slowly and steadily elicited a transfer of both policy competences and financial capabilities from the central to the local level of government – although a few contexts (Costa Rica, Panama, and Uruguay) have shown stronger resistance until recently to such trends.

In the Asia Pacific region, decentralization reforms in South-eastern Asia, have brought about major institutional innovations for local policy-making and management, including in the traditionally highly centralized contexts of Indonesia and the Philippines, and, to a lesser extent in India. The OECD countries in the region – Australia, Japan, the Republic of Korea and New Zealand – have also emphasized the empowerment of sub-national governments during processes of administrative reform. Countries such as China and Vietnam have adopted decentralization strategies at administrative and financial levels within an overall context of strategic economic modernization. Other countries, such as Pakistan, have experienced successive cycles of centralization and decentralization. At the same time, higher tiers of government in Asia have often managed to retain control over local governments, mostly through the power of appointment, only symbolically ratified by local councils, or through administrative controls and very limited transfer of resources. This phenomenon is also visible in the MEWA region where, with the exception of Turkey, central governments have retained tight control of policy and seldom devolved any competences to lower levels.[42]

In Africa, a formal wave of decentralization policies swept the continent during the 1990s and the constitutional reforms of the 2000s.[43] Nonetheless, with some exceptions (e.g. South Africa, Morocco), the average actual implementation and devolution of these programmes and plans has been incomplete, inconsistent and sporadic at best. Despite African nations signing a charter on decentralization in 2014, political traditions and conflicts continue to hamper such efforts across the African continent.

**Where it has taken place, the empowerment of sub-regional units with decision-making powers has structurally transformed i-cities' governance**. While acknowledging the responsibilities of local government, the institutional framework has not, however, led to a clearer distribution of skills and competences. In many cases, especially in countries with a strong central state, the definition of the appropriate distribution of power is still a fluid process.

Photo: Elias Afassi - N'Dali (Benin).

It has not been uncommon for central governments to oppose local ones on the grounds of preserving the general interest over and above a city's particular local needs, thereby questioning the capability of local governments as drivers of change. Higher-tier resistance to substantive decentralization is even more apparent in the case of i-cities, mostly because of the disparity of resources between these two levels of government and the overwhelming influence that interest groups have at the regional and national levels. There have been few examples of i-cities who have managed to surmount resistance from either central government or powerful economic actors.[44]

I-cities need an enabling and adapted legal and institutional environment. National policies should address i-cities' specific issues through customized decentralization, to create a flexible, multi-layered system that adapts devolved responsibilities to different i-cities contexts. They should clarify the shared responsibilities between the various levels of government based on the principle of subsidiarity and reduce the overarching rules and regulations that overburden the limited capacities of i-cities. These reforms could strongly contribute to the achievement of Goal 16.6 of the SDGs ('Develop effective, accountable and transparent institutions at all levels'). National governments should involve i-cities in decision-making processes related to decentralization and national urban policy (NUP). This requires mechanisms for regular dialogue and cooperation between i-cities, national and regional governments, to facilitate complementarities and be conducive to more integrated territorial governance.

**I-cities need an enabling and adapted legal and institutional environment**

## 2.2.2 From open politics to participatory governance

The accountability of local representation plays a significant role when it comes to assessing governance performance and the delivery of policy outputs to the local populations of i-cities. Open politics at the local level, with concrete policies to leverage the role of civil society to an active and autonomous participation in the process, has become essential to the fairness, responsiveness and effectiveness of local governance.

Many initiatives to achieve and improve political accountability to i-cities' electorates have taken place by creating channels for citizens' cooperation and direct participation in public affairs. Public consultations and deliberation; extensive collaboration with organized social groups; institutionalized contact with government officials; and systematic pressure to increase budget and decisional transparency, as well as to accept popular initiatives, have been just some of the most visible indicators of the transition towards participatory governance at the local level. Mayoral consultation, referenda and participatory municipal budgeting have all been implemented in more than 3,000 cities in different countries, and need further development to achieve an open, transparent and legitimate mandate for local governments worldwide.[45]

Local democracy and citizens' participation in local decision-making are crucial to support strong local government and development processes, and to achieve 'inclusive, participatory and representative decision-making at all levels' (Goal 16.7 of the SDGs). **I-cities' local governments must create an enabling environment for direct civil society participation and the involvement of other civil society actors in creating the vision, content, monitoring and evaluation of public policies. Gender and anti-discriminatory approaches to citizen engagement are crucial to enhancing local democracy and inclusiveness in all policy and decision-making processes.** Goal 5 of the SDGs, for instance, addresses gender equality, in particular Goal 5.5, which calls for 'women's full participation and equal opportunities for leadership at all levels'. I-cities' local authorities can significantly benefit from establishing systems for monitoring public opinion about local public policies and programme performance.

## 2.2.3 Fiscal decentralization

There are certainly large differences in the volume of financial resources that i-cities across the world have at their disposal, and in the ability of different i-cities to access these resources. Table 2.3 shows the total revenue per capita per year of 19 i-cities. These range in order of magnitude (largest to smallest) from USD 5,612 in Aberdeen, United Kingdom, through to USD 644 in Monteria, Colombia, and USD 0.31 in Kenema, Sierra Leone. I-cities in OECD countries receive by far the most revenue per capita; i-cities in Africa and Asia receive the least, and those in Latin America fall in the middle of the spectrum.[46]

Importantly, there are also significant variations in where i-cities draw their revenue

Table 2.2 **Municipal budget: revenue, total and per capita for selected i-cities**

Source: Gundula Löffler, Analysis of the state of local finance in intermediary cities. (to access this document with original data: http://www.gold.uclg.org/reports

| INTERMEDIARY CITY | Country | Population | Total revenue (in USD) | Total revenue per capita (in USD) | Own revenue (in USD) | Own revenue as share of total revenue (%) | Intergov'l' transfers (in USD) | Intergov'l' transfers as share of total revenue (%) |
|---|---|---|---|---|---|---|---|---|
| **Saskatoon** | Canada | 248,700 | 276,933,309 | 1,114 | 232,022,453 | 83.8 | 44,910,855 | 16.2 |
| **Peterborough** | Canada | 78,700 | 211,044,965 | 2,682 | 151,377,519 | 71.7 | 59,667,447 | 28.3 |
| **Freiburg** | Germany | 230,542 | 838,805,311 | 3,638 | 577,518,508 | 68.9 | 261,397,776 | 31.2 |
| **Leipzig** | Germany | 526,909 | 1,388,328,786 | 2,635 | 856,358,845 | 61.7 | 531,969,941 | 38.3 |
| **Bristol** | United Kingdom | 442,500 | 2,171,129,880 | 4,907 | 1,025,332,711 | 47.2 | 1,145,797,168 | 52.8 |
| **Aberdeen** | United Kingdom | 196,670 | 1,103,790,822 | 5,612 | 502,835,018 | 45.6 | 600,955,804 | 54.4 |
| **Polokwane** | South Africa | 642,183 | 141,731,803 | 221 | 95,945,832 | 67.7 | 45,785,971 | 32.3 |
| **Matlosana** | South Africa | 433,973 | 121,637,691 | 280 | 86,873,134 | 71.4 | 34,764,558 | 28.6 |
| **Bo** | Sierra Leone | 149,957 | 53,542 | 0.36 | 20,514 | 38.3 | 33,028 | 61.7 |
| **Kenema** | Sierra Leone | 128,402 | 40,370 | 0.31 | 15,408 | 38.2 | 24,961 | 61.8 |
| **Iwo** | Nigeria | 224,550 | 3,237,533 | 14 | 71,703 | 2.2 | 3,165,830 | 97.8 |
| **Pekalongan** | Indonesia | 275,241 | 27,667,913 | 101 | 1,634,133 | 5.9 | 26,033,780 | 94.1 |
| **Langsa** | Indonesia | 140,267 | 23,715,334 | 169 | 1,630,770 | 6.9 | 22,084,564 | 93.1 |
| **General Santos City** | Philippines | 538,086 | 31,174,093 | 58 | 12,529,209 | 40.2 | 18,644,884 | 59.8 |
| **Lucena City** | Philippines | 246,392 | 13,326,453 | 54 | 5,299,701 | 39.8 | 8,026,752 | 60.2 |
| **Cucuta** | Colombia | 566,244 | 242,481,541 | 428 | 57,970,204 | 23.9 | 184,511,337 | 76.1 |
| **Monteria** | Colombia | 288,192 | 185,703,370 | 644 | 53,450,200 | 28.8 | 132,253,170 | 71.2 |
| **Feira de Santana** | Brazil | 556,642 | 221,875,911 | 399 | 61,715,088 | 27.8 | 160,160,823 | 72.2 |
| **Guarapuava** | Brazil | 167,328 | 88,482,758 | 529 | 23,700,989 | 26.8 | 64,781,769 | 73.2 |

from. While a considerable number obtain most of their income from local revenue sources, many of them are heavily reliant on intergovernmental transfers to meet both recurrent and capital expenditure costs. Intergovernmental transfers tend to have a less important role in more developed cities, as they are usually in a better position to meet their expenditure needs through other revenue sources. There are also significant exceptions to this trend (e.g. Matlosana and Polokwane in South Africa). **Dependence on intergovernmental transfers can create problems for cities' budget planning and execution: when transfer amounts are difficult to predict, disbursement is unreliable, or when transfers are subject to significant conditionality**.

As regards the composition of local revenues, local taxes play the biggest role in most i-cities. One common source of revenue are taxes on business activity (e.g. business licensing taxes, market fees, trading taxes).[47] While some business taxes are widespread in developing countries due to their ease of collection (e.g. in China, Kenya, Rwanda, Ivory Coast, Brazil, Venezuela and the Philippines, among others), their importance tends to be limited in OECD countries (e.g. in France, Belgium, Germany, the United Kingdom, Switzerland, and in some states of the United States). Taxes on land and immobile property are also largely devolved to local governments in both developed and developing countries, although there are significant discrepancies regarding the

effectiveness of their exploitation. In most developed countries, property taxes tend to be administered effectively in all types of urban settlements, while in developing countries effective property and property transfer tax collection is often limited to metropolitan areas. Despite their substantive revenue potential, many i-cities in Africa, Asia and Latin America often fail to systematically collect these taxes. This is due to their fairly complex administration but also because of political economy issues (with important exceptions such as Colombia, Mexico, Argentina, Chile, Guinea, Tunisia, and several federate states in India). [48]

Other local revenue sources are local fees and user charges. Their contribution to local budgets, however, varies considerably – e.g. Freiburg, Leipzig (Germany), Lucena City (the Philippines) or Cúcuta (Colombia) only collect between 0.2% and 4.9% of their budget from fees and user charges, while in Peterborough (Canada) and Matlosana and Polokwane (South Africa) this share is as high as 31.3%, 68.5% and 64.2% respectively. These significant differences can be at least partly explained by the wide range of services for which the cities charge directly.[49]

**In developing countries, the access to and quality of local infrastructure and basic services is often more problematic in i-cities, although there are important regional differences**

Land development payments that serve to capture value increases from public infrastructure development are another relevant land-related revenue source. Here, i-cities need to catch up. In most large and i-cities in Europe and Northern America, local governments make these assets work for them effectively. In developing countries, the record of i-cities with regard to their use of public assets is somewhat mixed, mainly due to poor management, including recording, valuation and depreciation of public assets.

Another way for local governments to access additional capital is through borrowing. In most developed countries, both large and i-cities routinely borrow financial resources. Countries such as the United States, Canada, Belgium, Finland, Sweden, France and Spain have established bond banks that facilitate local governments' access to bond markets.[50] In contrast to this, municipal borrowing in the developing world is often limited to metropolitan areas. In Brazil, for example, the three metropolitan cities of São Paulo, Rio de Janeiro and Salvador de Bahía account for about 75% of total local borrowing.[51] In South Africa, only 26 out of 283 municipalities took out loans in 2008, among which were all the country's larger cities and metropolitan areas.[52] With some exceptions (Indonesia, Colombia, the Philippines, and South Africa), i-cities frequently suffer from poor creditworthiness aggravated by administrative and regulatory restrictions, and the immaturity of national financial markets.[53] Without improved public sector financial management and credit status, many smaller i-cities are completely excluded access to public and private sector capital bond and lending markets.

**In summary, many i-cities have tremendous untapped financial resources. National and regional governments should ensure adequate financing of i-cities to unlock their potential as catalysts for territorial development**. Local governments need financial powers and autonomy to generate local revenues and access to different funding sources, and to experiment with innovative financing models. These will be instrumental to contribute to Goal 17.1 of the SDGs, to 'strengthen domestic resource mobilization, (...) improve domestic capacity for tax and other revenue collection'. On their side, i-cities must enhance accountability mechanisms (performance monitoring, transparent budgets and public procurements systems, adequate public asset management) to ensure sound municipal governance – and thereby respond to SDGs' Goal 16.6 ('effective, accountable and transparent institutions at all levels'). Steps must be taken to improve local governments' borrowing capacity. Central or regional governments need to establish or reinforce mechanisms like municipal development funds and municipal banks for more efficiency in leveraging access to credit or capital markets for long-term infrastructure investments adapted to cities' needs. International institutions and donors must give greater priority to the targeting and weighting of official development assistance (ODA) funding to i-cities' governments for development in low and lower middle-income countries. All these steps, moreover, are consistent with the overarching commitments adopted by national governments and international institutions in the Addis Ababa Action Agenda for financing sustainable development and developing sustainable finance (paragraph 34).

### 2.2.4 Improving basic service management

The process of political and administrative decentralization towards local governments has allowed them to take up important responsibilities in various public policy areas.

I-cities are typically responsible for the provision of a wide range of infrastructures. These can vary considerably from one country to another but include roads, public transportation, water and sanitation systems, schools, health centres, and other public amenities. All these services are critical for the quality of life of local communities and the achievement of several key SDGs e.g. Goals 1, 3, 4, 6, 7 and 11.

In developed countries, most i-cities are able to provide universal access to high-quality public services and have a record of good infrastructure management (see, for instance, the case of Fredericton, Canada, in Box 2.1), even if there are significant regional differences. However, an increasing number of i-cities face growing budget constraints and, particularly in Northern America, ageing infrastructures, deferred maintenance issues, adaptation to new structural challenges (e.g. climate change effects), as well as access inequalities.[54]

In developing countries, the access to and quality of local infrastructure and basic services is often more problematic in i-cities, although there are important regional differences. Based on a sample of cities in different regions, UN-Habitat calculates that in Latin America and Eurasia, between 75% and 88% of urban households are connected to piped water and between 65% and 71% to sewerage systems. Meanwhile, in Africa and Asia, the percentages are around 50% for piped water and 43% in Asia and 28% in Africa for sewerage. In all regions, except Eurasia, i-city household connections are in general between ten and 20 points below those in metropolitan areas. Connections to electricity vary from 69% on average in Africa to 99% in Eurasia and 96% in Latin America. But household connections in i-cities are in turn five to 15 points below those in metropolitan areas.[56]

As mentioned above, many i-cities are heavily reliant on central government grants and do not have the revenues to provide universal service access and support the expansion of services to newly urbanized areas. Studies of public capital expenditure on infrastructure show that there are significant differences in the levels of urban investment, which is heavily biased towards major and capital cities.[57] In some cases, the deterioration of basic services is related to the structure of intergovernmental transfers, which tend to disregard local government expenditure needs in maintenance and repairs of services and concentrate allocations on new investments.[58]

## BOX 2.1 GOOD PRACTICE PLANNING, INFRASTRUCTURE MANAGEMENT IN FREDERICTON, CANADA

Fredericton is the capital of the Canadian province of New Brunswick and is located in the west-central portion of the province, along the Saint John River. One of the main urban centres in New Brunswick with a population of 56,224 (2011), this small i-city is the third largest city in the province. Fredericton is a quintessential Northern American or European i-city. Once a lumber town, it has undergone significant structural changes, with education now being its largest employment sector. As a small city, it paid very careful attention to the planning, management, and maintenance of infrastructure, which is affected by extreme weather conditions during the winter. Fredericton's infrastructure is currently valued at more than 1.3 billion Canadian dollars. This translates into an investment of over 43,000 Canadian dollars per property in general fund infrastructure, and 30,000 Canadian dollars for each connected property of fund utility infrastructure.[55]

As a consequence, infrastructure in i-cities tends to be much older, poorer, and less well-maintained than in larger metropolitan regions, hampering i-cities' potential for sustainable development as well as severely disincentivizing future investment.[59] The major deficits relate to water and sanitation, electricity and urban and inter-urban mobility. Long-distance high-speed rail investments have in many cases delayed the modernization of local railway services, not only in Europe but also in Africa. This is strongly emphasized in the Abuja Declaration for Habitat III ('Africa's Priority for the New Urban Agenda', published on 24 – 26 February 2016), which calls for 'well-connected cities and human settlements at national and regional levels as nodes of growth... enhanced connectivity between rural and urban areas to harness the full potential of the rural-urban linkages' and to 'take advantage of urban corridors at the regional level for related infrastructural and other initiatives'.[60]

As an alternative to increasing public debt, Public-Private Partnerships (PPPs) have been widely promoted as a means of improving efficiency in service provision and overcoming capital constraints. However, many countries – mainly but not exclusively developing ones

## BOX 2.2 INTER-MUNICIPAL COOPERATION MODELS

Forms of cooperation between local authorities may range from simple 'areas of cooperation' (e.g. Spain's *comarcas*) to associations (e.g. Spain's *mancomunidades de municipios*, *associações* in Portugal, France's *intercommunalités*, or Italy's *unioni di comuni*) or syndicates, as in the Netherlands. Some of these models imply the creation of an integrated inter-municipal entity, with pre-determined functions. Others are more flexible schemes that build on looser legislative and institutional frameworks. Local authorities engage, accordingly, mostly in ad hoc joint delivery of services, whose technical or administrative complexity may vary extensively and are generally under the jurisdiction of ordinary law and contractual procedures. Bulgaria, the Czech Republic, as well as the United Kingdom are usually associated with this kind of cooperation arrangement. A third model consists of special districts for specific services and this is widespread in the United States e.g. school or water service districts.

Local governments in France have developed a unique model of inter-municipal cooperation. The legislative framework of French *intercommunalités* was created by its Public Institution of Inter-Municipal Cooperation (*Établissement Public de Coopération Intercommunale* - EPCI), and their powers are limited to areas and matters that are pre-established by the law or delegated to them by member municipalities. The defining element of France's *intercommunalités* is that they enjoy the right to collect taxes. The EPCI scheme has grown steadily in the last few decades. In 2016, the EPCI framework included close to 12,000 structures and more than 3,000 syndicates, including 12 metropolitan poles.[64]

In Spain, as of 2016, there are 922 active inter-municipal cooperation institutions (*mancomunidades de municipios*), that do not have any tax collection powers. Evidence seems to indicate that these schemes involve a majority of small municipalities that would otherwise on their own be unable to take care of basic service provision. The Philippines also provides an interesting insight into the second general model of inter-municipal cooperation. The PALMA (Pigcwayan, Alamada, Libungan, Midsayap, Aleosan) Alliance brings together small municipalities of North Cotabato that are remote from big urban centres and usually highly dependent on fiscal transfers from central government. These municipalities developed an inter-municipal agreement whereby six local governments started sharing their heavy machinery. As a result, each member municipality was able to open and maintain all-weather roads without using contractors. Other strong examples of inter-municipal cooperation can be found in Latin America.[65]

– still lack adequate legal frameworks. I-cities, moreover, are often not attractive enough to private service providers and may lack the bargaining power to effectively negotiate convenient arrangements with the private sector. PPPs are often difficult to assemble in the context of limited resources, and i-cities have long needed to approach this instrument with great caution.[61]

A different type of PPP, namely partnership arrangements with citizen groups controlling large amounts of remittance monies through migrant hometown associations (HTAs), has started to play a role in some countries of Asia, Africa and Latin America and, in particular, in their i-cities.[62] As mentioned in Chapter 1 on metropolitan areas, small private enterprises in both formal and informal sectors (e.g. individual operators and cooperatives), as well as partnerships with local communities (public-people partnerships) could play an important role where the quality and extent of such provisions by official service providers are lacking.[63]

**Inter-municipal cooperation is another important mechanism for smaller i-cities to overcome their limited capacities in service provision**. The concept of inter-municipal cooperation spans the whole range of institutional relations between two or more municipalities that agree to share common operative functions and features. The degree of institutionalization of such cooperation may vary significantly and has an impact on the scope and effectiveness of these schemes (see Box 2.2).

The strengthening of public service management is critical to improving access to basic services. These services are often carried out in i-cities by local government departments or public providers. **Their effectiveness must be improved by investing in human and technical resources, implementing modern management systems and strengthening inter-municipal cooperation.** Stronger partnerships between local governments (that have the responsibility to deliver public services) and key stakeholders (such as central governments, service operators, trade unions and civil society) should be better exploited. Local authorities, therefore, need clear legal frameworks and support to negotiate PPPs, especially in intermediary and smaller cities that do not have the power or capacity of large metropolises.

# 2.3 INCLUSIVE PLANNING FOR A SUSTAINABLE URBAN DEVELOPMENT

Urban and territorial planning has always played a significant role in the local politics of many cities throughout the 20th century. Planning allows cities to make their own growth expectations compatible with the preservation and valorization of their economic, social and environmental assets. Whenever it has coincided with robust and effective national and regional legal frameworks, responsible leadership and an informed citizenship, urban planning has become the key instrument to protect the city's scale by fostering neighbourhood compactness, social inclusion and functional diversity; revitalizing the public space; rationalizing mobility and urban infrastructure; organizing non-urbanized land; and taking advantage of key resources such as its historical heritage and natural environment.

SDGs devote great attention to 'participatory and integrated planning' to build inclusive and sustainable cities (SDG 11.3). In this regard, policies should consider the growing gap between advanced and developing economies. In European and Northern American cities, urban planning is a traditional component of local public management and has been one of the key competences that allowed many i-cities to become an alternative to metropolitan areas, because of the attractiveness of their land availability for commercial and residential use, territorial interconnectedness, and quality of life. Conversely, planning in i-cities in developing countries has generally been weaker, with important exceptions in Latin America, North and Southern Africa and some countries in Asia. Many of these cities face challenges that stem from the accelerated processes of urban growth: settlement informality and peri-urbanization, inequality and the concentration of poverty pockets and environmental degradation. According to UN-Habitat,[66] most developing economies have left urban planning and land-use control in i-cities of fewer than 500,000 inhabitants fully in the hands of central and regional governments, resulting in inefficient outcomes.

Local governments in i-cities have now both a right and an obligation to plan according to the needs and expectations of their citizens, in collaboration with neighbouring municipalities, sharing with them the decision-making process on development plans. To do so, they will need an effective multilevel governance framework to work within, they will have to strengthen their human-scale proximity, anticipate and amend the externalities of informal peri-urbanization, and benefit from technology adoption to make their urban ecosystems more resilient, sustainable and smarter. These dimensions are analyzed in further detail throughout this section.

## 2.3.1 Strengthening urban governance

Good governance is the foundation upon which urban planning in i-cities can respond to the challenges imposed by urbanization. Weak national and regional legislative frameworks, inadequate technical and financial resources throughout the public administration, and the exclusion of citizens from the decision-making process are all factors that affect planning and its overall effectiveness.

**Good governance is the foundation upon which urban planning in i-cities can respond to the challenges imposed by urbanization**

National urban policies (NUPs) and the legislative frameworks they establish can provide planning decisions with a necessary legal certainty. In many countries, however, such frameworks are obsolete and have been neither updated nor adapted to acknowledge the specific needs of those i-cities facing rapid transformation. Efficient urban planning, at the same time, requires a duly trained[67] group of officials and professionals that are aware of, and committed to, the challenges and capabilities of local governments.

Strategic coordination across the national, regional, territorial and urban scales, would provide certainty and consistency around land-use management for i-cities that, in spite of being formally endowed with municipal planning tools, are still negatively affected by fragmented approaches to infrastructure planning, rural land use, and environmental protection. Master plans,[68] for instance, are still the main instrument of spatial and land-use management applied in many European cities. They tend to be rigid legal tools designed to cover an extended timeframe and are extremely costly, both economically and technically, for multilevel administrations throughout the design and implementation phases. Even in contexts characterized by low demographic pressures,

as is the case in many European i-cities, over the last few decades the pressures of the real-estate market combined with weak local governments have led to an over-valuation of the growth estimates upon which master plans had been devised. In many cases, these tensions have threatened the economic and environmental sustainability of urban planning.

Rigid legislation and insufficient resources to revise the planning toolkit can explain the low impact of 'spatial planning' in many i-cities in developing countries.[69] Other approaches, such as strategic planning and more flexible alternatives, have emerged over the last few decades, promoting a more integrated approach that includes a vision, an overarching framework, and short and medium-term policy decisions. Many African, Asian and Latin American i-cities (see Box 2.3) have used strategic planning as a 'roadmap' to prioritize public investment, such as fostering the local economy; strategic renovation projects for old towns and historical centres to promote tourism; investment attraction for new economic areas; public space recovery, or the reduction of environmental vulnerability. Accordingly, instruments such as the City Development Strategy (CDS)[70] integrate social, economic and environmental dimensions, thereby requiring coordination between both the citizenship and institutions through participatory channels.

An i-city such as Bilbao (Spain), for example, has modelled its strategic plan on increasing the international profile of the city through the transformation of former industrial areas into iconic cultural spaces, thanks to the inclusion of key actors including the Guggenheim Foundation. Other examples can be found in other European i-cities such as Valencia (Spain), Cottbus (Germany), Delft (the Netherlands) and Gdansk (Poland). Strategic planning has been popular in Latin American cities since the 1990s through city networks such as the *Centro Iberoamericano de Desarrollo Estratégico Urbano* (CIDEU),[71] and cities such as Trujillo (Peru) have pioneered the adoption of strategic planning to address integration issues across their urban fabric. More recently, Nampula (Mozambique) has structured its CDS around the commitment to strengthen institutional capacity and citizenship participation, especially in marginal neighbourhoods and slums. I-cities such as Montepuez and Calbayog in the Philippines have modelled their CDSs to foster agro-industrial sustainability of their main economic activities, mobilizing significant resources for infrastructure and housing.[72]

Many European countries have included in their urban legislation an obligation to involve their citizenship in the different stages of the urban and territorial planning process. However, these dynamics have often been criticized as one-off consultations that do not create a truly inclusive process of public management. Nevertheless, cities such as Bristol (United Kingdom), with its 'Campaign Creator', have actually strengthened their participative democracy by offering to their citizens frequent and ongoing opportunities for consultation.

Citizen participation goes far beyond the drafting of urban planning designs. Monitoring programmes and regular evaluation schemes established by many urban communities have been key mechanisms to institutionalize grassroots participation. Many Brazilian cities, such as Maringá or Canoas, have engaged

## BOX 2.3 I-CITIES IN THE INTER-AMERICAN DEVELOPMENT BANK'S AGENDA

The Emerging and Sustainable Cities Initiative (ESCI) is a technical assistance programme that is providing direct support to local and central governments of Latin America and the Caribbean in the development and execution of their urban sustainability plans, with particular attention to i-cities. The ESCI adopts a comprehensive and interdisciplinary approach that identifies, organizes and prioritizes urban interventions in order to tackle the main hurdles that hamper a city's sustainable growth. This cross-sector approach builds on three main pillars: (i) environmental and climate sustainability; (ii) urban sustainability; and (iii) fiscal and governance sustainability.

Established in 2011 with five participant cities – two of which were the i-cities Trujillo (Peru) and Santa Ana (El Salvador) – in 2015 the ESCI encompassed 57 cities with a total population of about 52 million people. It has already supported the editing of action plans for i-cities such as Cumaná (Venezuela), Valledupar, Pasto, Monteria, Bucaramanga, Pereira and Manizales (Colombia), Santiago de los Caballeros (Dominican Republic), Salta and Paraná (Argentina), Montego Bay (Jamaica), Florianópolis (Brazil), Valdivia (Chile), Cuenca (Ecuador) and Cochabamba (Bolivia).[73]

citizens in their Participative Directive Plans[74] and improvements in the tax collection system and participative budgets of their municipalities. African i-cities such as Kisumu (Kenya), Manhiça and Xai-Xai (Mozambique), Gweru (Zimbabwe) or Entebbe (Uganda) are also good examples of participative experiences. In Benin, 24 intermediary and small cities developed plans for environmental intervention in 1,300 selected projects, of which 217 were fully implemented by their citizens between 1997 and 2011.[75]

**To achieve Goal 11 of the SDGs, and more specifically targets 11.3 and 11.b** ('number of cities and human settlements adopting and implementing integrated policies and plans'), **i-cities need to be mobilized systematically.** In developing countries i-cities need human resources, access to new technologies and other instruments to develop and enforce integrated urban planning and land use, applying flexible and simplified approaches, strengthening the involvement of communities and collaborating with other levels of government within cities. National governments should revamp the legislative frameworks and reshape available policy instruments to reflect the current needs of their cities. More experienced i-cities can serve as a reference in territorial management for other i-cities to strengthen their capacities and train their officials through decentralized cooperation. This is especially critical in rapidly growing urban areas in, for example, Sub-Saharan Africa and Asia.

**In the context of i-cities, the concept of 'Right to the City'** (see also Chapter 1) **should be rephrased as a 'right to the plan' and foster inclusion and participation in the design of urban plans** (see also SDG Goal 11.3). Participative plans and budgets need the population to have access to participatory spaces, information and the ability to follow and evaluate these processes. Unlike metropolises, the proximity scale of i-cities can actually become a competitive advantage by reducing the complexity of planning processes as well as enhancing coordination among social actors, including the most vulnerable groups and communities, in the definition of just urban policies.

## 2.3.2 Towards human-scale cities: planning compactness and public spaces

The impact of urban and demographic transitions, together with local governments' difficulties in developing and implementing their plans, have contributed to the emergence of unsustainable levels of urban sprawl and land use in many i-cities – in particular those around metropolitan areas. The impact of this has also cascaded into peri-urban areas, affecting in particular the livelihood and natural resources of rural populations closer to the city.

Compactness is essential for cities to preserve a 'human scale' and, therefore, lower the costs associated with urban layout, infrastructural maintenance, services and mobility.[77] It is advisable to promote urban policies that avoid low-density dispersion by designing new urban extensions that are as dense as more centric areas, while preserving

### BOX 2.4 DYNAMIC, STRATEGIC, PARTICIPATORY AND LOW-COST PLANNING: THE BASE-PLANS FOR I-CITIES

Since 2003, the UNESCO Chair in Intermediary Cities and World Urbanization (University of Lleida, Spain) and the UIA-CIMES network of the International Union of Architects have applied the base-plan method in more than 150 local, regional, provincial and national governments in Europe, Africa, Asia and Latin America. The programmes were implemented by cooperating directly with national governments (with the Ministries of Urban Development and Housing of Ecuador in 2013, for instance, or of Costa Rica's in 2015) or regional governments (as was the case in the Santa Fe province, Argentina), in partnership with UCLG as well as with the participation of UN-Habitat.

Compared to conventional approaches, the base-plan is a flexible, functional, simple and economical urban and strategic planning methodology. It serves as the government's and citizens' first contact with urban policies: it lays the groundwork for dialogue and cooperation on urbanism and the urban policies that follow. The key objective of the base-plan is to prioritize urban policy actions that overcome any negative inertia and increase leadership and its capacity to take up the challenge of creating (in the local administration and community) an effective, efficient and responsible urban policy. Examples of what was achieved can be seen in the base-plans developed in the twelve African cities of Oran and Constantine (Algeria), Tangier (Morocco), Lubango (Angola), Sikasso (Mali), Lichinga, Manhiça and Caia (Mozambique), Wukro (Ethiopia) and Oussouyé (Senegal).[76]

indispensable urban public areas for roads and green spaces. Compactness is also essential for a city to support inclusive and cohesive strategies of functional integration: new land use should imply proximity of housing and economic activities, education and leisure, with public space designed through the lens of sustainable mobility.

Compactness has been a planning and urban management tool accessible to many European cities. Policies on compactness have focused on an increase in density in specific urban areas and, at the same time, the concentration of large parts of new public spaces within a 'green belt'. Conversely, in the United States, planning has been a vehicle for further urban dispersion and increasing socio-spatial segregation, with expansive suburbs characterized by high dispersion and specialized low-density peripheries that have often been divided along ethnic lines, all structurally dependent on private motorized transportation. In developing economies, peri-urban dispersion phenomena have, by and large, involved low-income or otherwise vulnerable groups. An inland i-city such as Cuenca (Ecuador), for instance, increased its population and urban footprint at similar rates in 2005, thereby maintaining its compactness, while between 2005 and 2010, the footprint of its new peri-urban extensions grew at twice the rate of population growth.[78] At the same time, especially in larger i-cities, a different trend of gated communities and neighbourhoods – typically associated with an emerging middle class and their concerns about safety and security – has also proliferated, as in the case of Valdivia (Chile) or San Pedro Sula (Honduras).

**Intermediary cities, more than other urban agglomerations, face the challenge of making compactness and human scale compatible**

Public space is vital for every city. This is particularly true for those i-cities that invest in their compactness. In these cases, it is the public space that allows citizenship to control the human scale of a city by looking strategically at walkable distances or a progressive reduction in polluting motorized mobility. In many Latin American i-cities such as Cuzco (Peru) or Antigua (Guatemala), the *Plazas de Armas* - the old city's central squares - are the heart and core of the city, a meeting point for both tourists and residents, and most of the city's leisure, accommodation and restoration opportunities tend to concentrate in this area. Similarly in Northern African and Middle Eastern cities, such as Tetouan and Essaouira (Morocco) or Esna (Egypt), the *souq* is generally the city's commercial centre. Food markets have historically been the primary setting of goods and service exchange between urban and rural areas. Informal markets and street sellers[79] also contribute to the liveliness of certain neighbourhood hubs and public spaces in Sub-Saharan African cities such as Matola, Inhambane or Nampula in Mozambique,[80] and South-eastern Asian cities. In smaller Indian i-cities, public spaces tend to reproduce the traits of the settlement's rural identity, with narrow pedestrian-sized streets that lead directly to the large rural farmlands in the surrounding areas.[81]

Intermediary cities, more than other urban agglomerations, face the challenge of making compactness and human scale compatible. **They can do so by promoting density, fostering a transition to multi-household dwelling models and finding an optimum balance between mobility networks and public spaces.** Such a transition, however, has to go hand in hand with a public policy blueprint that helps the most vulnerable parts of the population gain access to decent housing. Municipalities, on the other hand, have to strengthen land control and management, defining building-free areas available to the citizenship that may, over time, transform into a powerful network of public spaces. I-cities need to develop urban policies and projects to protect their tangible and intangible heritage values, preserve the quality of life and increase their attractiveness. In this regard, the improvement of the quality of public spaces plays a major role. Both dimensions are at the centre of Goal 11 of the SDGs, and more specifically of Goals 11.4 ('protect and safeguard the world's cultural and natural heritage') and 11.7 ('provide universal access to safe, inclusive and accessible, green and public spaces').

### 2.3.3 Access to land, housing and informal settlements

As with most metropolises, many i-cities in low and middle-income countries are coping with increasing environmental, economic and social deficits with regards to access to land or decent housing. Even i-cities, regardless of their size, have experienced processes of informal settlements, although without the same media fanfare that surrounds the paradigmatic slums of larger metropolitan agglomerations with high density and extreme living conditions. As mentioned above, the

local administration of many of these i-cities is still severely affected by the systematic lack of tools and resources – often in spite of the demographic growth and urban footprint expansion they have experienced.

In developed economies, the proportion of informal unserviced slums is small. Nevertheless, the problem of affordability a critical issue, especially regarding accessibility to adequate housing. As discussed in the previous chapter, the global financial crisis of 2008, aggravated by the reduction in social housing stock in the past few decades (in particular in Southern European countries) and a sizeable shortfall in net housing supply, has had a severe impact. This has further hindered the ability of low and middle-income citizens, as well as vulnerable groups (e.g. younger people or the unemployed) to have access to decent housing options and exacerbated social inequality and income segregation in urban spaces.[82] Globally, while house property and renting prices are generally lower in i-cities than in metropolitan areas, the relative difference in household income reduces overall housing affordability.

China, in particular, has tried to manage its accelerated urbanization process with strong, top-down state housing policies.[83] These policies were aimed at a population of several hundred million people and were sometimes brought forward regardless of their high social and environmental costs. The inefficiencies of some of these policies have given rise to 'ghost towns'.[84]

In many other low and middle-income economies, access to land is the first step for the poor to gain access to a liveable place, and this is strongly dependent on different typologies of land access and land tenure. Paôy Pêt (Cambodia), for example, has taken advantage of its proximity to the Thai border to grow by some 50,000 inhabitants over little more than six years, following typically rural land-use patterns, mostly through larger parcels of farmland. Kupang City (Indonesia) offers an example of a different growth model, promoting compact and dense lots resembling those of larger cities. In India, informal settlements can be seen throughout its urban geography, with a stronger impact on megacities and metropolises than on i-cities which still show, in many cases, traits typical of growth in a rural environment.

These models differ sharply from the urban context of Sub-Saharan Africa, where informal settlements, primarily concentrated in peri-urban areas, have severely reduced the (already small) room for manoeuvre of local administrations. Larger i-cities such as Blantyre (Malawi) have experienced extensive peri-urban growth, with extremely low density and a centre-periphery distance of over 10km, and this has fundamentally disrupted any efforts by local administrators to provide quality urban services. Conversely, i-cities such as Sodo, Arba Minch and Hosaina (Ethiopia), whose populations have doubled in a decade, have managed nonetheless to drive informal land use at city limits through the orthogonal zoning patterns of the city – an essential element of the provision of easier prospective urban services. Conversely, Latin American and Caribbean i-cities also show significant rates of residents in informal settlements, though not comparable to those of their large metropolitan areas. The lack of public mechanisms to tackle access to decent housing has traditionally been addressed through strong community self-management, from land organization to the self-construction of houses. In many Latin American i-cities, informal areas has turned into perhaps the most organic form of urban expansion and – as multilevel institutions have increased investments at the neighbourhood scale – have gradually taken up the provision of urban services. In Antofagasta (Chile), most of the 40 *campamentos* mapped by TECHO, consisting of more than 2,000 households, have settled at the eastern limit of the city and lack urban services or paved roads, but their typology is similar to that of more consolidated urban areas.

Urban and demographic transitions are accelerating the expansion of informal settlements and the consolidation of precarious habitats in many regions. Because of their scale, intermediary cities can guarantee and provide basic housing needs to their citizenship more efficiently and cheaply than metropolitan areas – through their urban renovation policies, neighbourhood upgrade programmes, land-tenure provisions, and locally co-managed self-construction schemes. However, **i-cities must demand that their national and regional governments be granted adequate resources to progressively integrate informal settlements into the existing urban fabric, so as to improve compactness and avoid social segregation**. Proactive interventions by i-cities will contribute significantly to the achievement of related SDGs, and more specifically to targets 1.4 and 11.1.

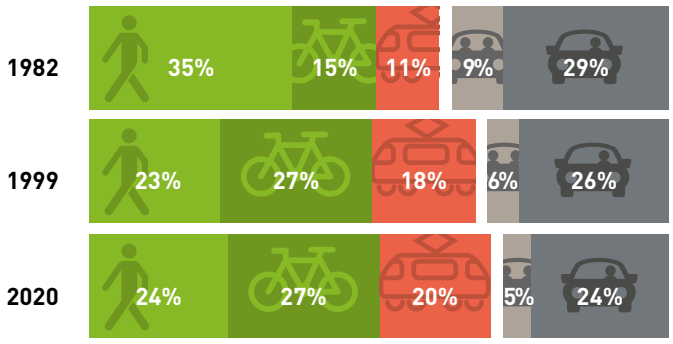
**Because of their scale, intermediary cities can guarantee and provide basic housing needs to their citizenship more efficiently and cheaply than metropolitan areas**

## BOX 2.5 FREIBURG: MOBILITY AND ENERGY TRANSITION

Source: http://www.freiburg.de/pb/,Len/646587.html

Freiburg has put into practice some inspiring initiatives to reduce GHG emissions and confront the impact of climate change. The goal is to achieve a 40% emissions cut by 2030 by transitioning to renewable energy sources, imposing tighter regulations on building energy consumption and promoting an efficient public transit system along with an improved cycling network (the objectives are shown in the graph below). Between 1982 and 1999, the proportion of all trips made by bicycle rose from 15% to 27%, pedestrians' fell from 35% to 23%, the use of motor vehicles dropped from 38% to 32% and use of public transport rose from 11% to 18%. Freiburg now has more than 400km of cycling paths, including bike-friendly streets, street-side bike paths, and separate bike paths. About 9,000 bicycle parking spaces were provided, together with 'bike-and-ride' lots at transit stations to promote inter-modal transit. In 2011, the city council introduced a bylaw requesting any new buildings to offer bicycle parking facilities. With 423 cars per 1,000 people, Freiburg has the lowest automobile density of any city in Germany.

The city has also achieved high levels of waste recycling. Every household or apartment building, for example, has separate bins for paper, food and garden waste (the 'bio-bin'), and non-recyclables ('rest-waste'). Freiburg reduced its annual waste disposal from 140,000 tonnes in 1988 to 50,000 tonnes in 2000. The city has attracted many 'green' businesses, for example, there are more than 100 businesses working in the solar power industry. Freiburg has also attracted some research organizations. Overall, the Freiburg area environmental economy employs nearly 10,000 people in 1,500 businesses and generates 500 million euros per year.[86]




## 2.3.4 Environmental sustainability and urban resilience

Environmental sustainability and urban resilience need to be integrated into planning processes in i-cities. As the number of inhabitants of i-cities gains parity with the number of people living in metropolitan areas, their impact on the environment should not be ignored if the ambitions and objectives enshrined in the SDGs and the Paris climate change agenda are to be met in time. Urban planning, supported by sustainable policies, can reduce i-cities' environmental footprint. Policy actions should include improved waste management and recycling (Goals 11.6 and 12.5 of the SDGs); reduced GHG emissions; efficient energy consumption through enhanced compactness and short mobility distances; and the protection of green spaces and better use of natural resources.

Many i-cities have rapidly become global reference points for urban sustainability. Bristol (United Kingdom) has been recognized for its robust policies on promotion of public transport, creation of green spaces, biodiversity conservation and improved energy efficiency. Empowerment of civil society in the decision-making process and the expansion of the city's 'green economy' have both played a substantial role in these achievements. Meanwhile Freiburg (Germany), since the 1970s a pioneer of urban sustainability, is today a 'Green City' that has encouraged urban and economic development through the lenses of environmental policy, solar energy promotion and sustainability and climate change actions (see Box 2.5).

Bucaramanga (Colombia) is known as the 'city of parks' and since 2012 it has led the renovation of about 80% of public spaces through urban reforestation, monument renovation, and free Wi-Fi areas, creating over 120 new jobs for members of vulnerable communities. Since 2008 Chiang-Rai, a smaller i-city in Thailand, has introduced several initiatives to restore the losses in local biodiversity caused by the rapid urban expansion, promoting the harmonious integration of local industries and the environment and rapidly becoming a reference point for other cities in the region experiencing similar issues.

I-cities can more easily transition towards planning, building and developing more resilient cities, following the commitments adopted in the Sendai Framework for Disaster Risk Reduction and contributing to Goals 1.5, 11.3 and 11.b of the SDGs. A city's urban resilience measures the capability of

its population and habitat to absorb certain environmental, economic, or social impacts and overcome them in as short a time and with as small a (human and financial) cost as possible, and transform them into growth opportunities.

With regard to resilience strategies, a high-income i-city such as Christchurch (New Zealand) managed to emerge stronger from the 2011 earthquake crisis by improving its warning, coordination and seismic-protection systems, quickly becoming a global point of reference for the management of such risks.[87] On the other hand, many cities in developing countries of the Indian Ocean, Central Asia and the Caribbean, such as Léogâne (Haiti), are frequently on the cusp of humanitarian emergency. Cities such as Quy Nhon (Vietnam) have developed response mechanisms to enhance their energy resilience in the face of critical events, by integrating into their urban planning design detailed studies about potential water hazards.[88] Other studies suggest that i-cities in Sub-Saharan Africa may be more susceptible and less prepared to address severe climate change storm and earthquake damage and that resilience is generally slower because of weaker governance and financial capacity.[89]

The concept of the 'smart city', on the other hand, has evolved in tandem with the democratization – in both the public and the private spheres – of technology and social media networks. The implications of the smart city concept are still contested and debated in academic and practitioner communities, due to the inherent risk in allowing transnational technological products and providers to directly affect the management of local urban services. This notwithstanding, the positive impact of technology can still be invaluable when it comes to looking for new, effective responses to persistent urban problems. Led mostly by metropolises in advanced economies, the 'smartification' of cities has been a rapidly growing process that has involved, to different degrees, the whole world's urban geography. At the scale of intermediary and small cities, however, the concept of smart city has frequently referred to the use of technology to establish reliable virtual channels for citizen participation. Other cities, moreover, have applied these advances in mobility-oriented applications with the direct involvement of the citizen-user (e.g. real-time sharing of information about public transit and parking), although the provision of free wireless internet connection through city-wide hotspots has perhaps been the most successful policy in this regard.

**Ultimately, i-cities have an advantage over metropolitan areas when it comes to fostering climate change plans and promoting adaptation and mitigation through sustainable policies. They should advocate a low-carbon, energy-efficient, risk-informed and resilient development pathway. Technology, moreover, can play a crucial part in preparing for an ecological transition – from an economy based on fossil fuel to a green economy based on sustainable energy**. Compact urban form and neighbourhood functional diversity, together with the creative impulse of future generations, have to be the primary drivers of climate-friendly development. The Global Covenant of Mayors for Climate and Energy – an institution established through the merger of the Compact of Mayors (an initiative launched by a number of global networks of local authorities, such as the C-40 Cities Climate Leadership Group, ICLEI-Local Governments for Sustainability and UCLG, with the support of UN-Habitat and the UN Special Envoy Michael Bloomberg) and the Covenant of Mayors (institutionally supported by the European Commission) – has been actively committed to the fight against climate change and the reduction of GHG emissions (see Box 4.1 in Chapter 1 for more details), and offers a significant opportunity of enhanced institutional activity and visibility for many i-cities all around the world.

Photo: Pierre Martinot Lagarde - Negombo (Sri Lanka).

# 2.4 LOCAL ECONOMIC DEVELOPMENT

**Intermediary cities face the crucial challenge of making their own local economies attractive to investment that can contribute to the overall wellbeing of their citizens**. These cities, especially smaller ones, suffer from competitive disadvantages of scope and scale relative to larger urban agglomerations. In many countries, the strong concentration of resources in capitals and metropolitan areas has resulted in unbalanced access to services and investment, and growing inequality, both among systems of cities and between the urban and rural environments.

**Local economic development (LED) has been a strategy of territorial empowerment for many i-cities**

To overcome these difficulties, local economic development (LED) has been a strategy of territorial empowerment for many i-cities. This allows them to establish a number of local activities within a larger regional or national (even global) framework. Different forms of i-city business clusters have developed in different geographical contexts and with different modalities (high-tech, manufacturing clusters of automotive production, electronic industry, textiles, fashion, furniture, education, telecommunications, transportation, etc.). In Europe, support for regional clusters has been part of the EU's economic development strategy. Local authority support has been crucial for the economic development of SME clusters in European i-cities, especially those clusters that were experiencing financial difficulty before the economic crisis, for example in Italy.[90]

During the last decade, the development of city clusters in Asia has been the subject of several analyses.[91] Generally, Asian i-city clusters are newly-grown industrial centres, while Africa's are dominated by informal settlements and businesses, mostly including low-income groups. Northern American and Australian i-cities close to metropolitan areas, on the other hand, spread out over distances of 100km or more, and are predominantly residential and service or trade industry-based. Latin American i-city clusters are more functionally mixed. More examples on i-city clusters are developed below, in Section 3.

## 2.4.1 Economic development and the circular economy

As regards local economic development, many i-cities fail to understand and support the development of the circular economy.[92] A circular economy requires governments to take a more responsible approach to waste management and opportunities to capture and recycle waste, heat and energy to ensure local economic development is more sustainable. It requires that every effort is made to use renewable resources or to use resources for as long as possible, to extract the maximum value from them while in use, then recover and regenerate products and materials at the end of each serviceable life.

The major challenge for i-cities in creating the circular economy is the cost associated with recovery of waste and discharged heat energy. In many cases, critical mass is needed to create sufficient recyclable materials to generate scale industry opportunities to substitute reprocessed materials for virgin produce, which in most cases is cheaper.[93] The application of industrial ecology - the recovery of waste and heat energy - to support co-generation of electricity, use of recycled materials and water is becoming more widespread. Some i-cities have been very successful in applying industrial ecology to support the development of local circular economies. Kalundborg, a small city in Denmark, is an example of a city that has taken advantage of scale and position and moved to embracing a circular economy and applying industrial ecology very successfully.[94]

Local governments should take the lead in developing participatory LED strategies and bringing key partners together (the private sector, non-governmental organizations - NGOs, universities and local institutions) to share diagnoses and drive strategic projects to adapt to structural economic changes. **I-cities need to create a business-friendly environment that attracts firms, high-quality jobs and investment. This requires a mix of good infrastructure, creativity, innovation, civic entrepreneurship, public utilities and investment**. It also requires an effective public administration that reduces bureaucratic hurdles, helps local business and investors to cooperate, and contributes to the creation of business clusters and innovation. Local economic development policies can contribute to achieving 'decent work and economic growth' (Goal 8 of the SDGs), 'industry, innovation and infrastructure' (Goal 9) and 'reduced inequalities between territories' (Goal 10).

## 2.4.2 Rural-urban linkages

Improving rural-urban linkages is a matter of growing concern for i-cities because of the pivotal role they play in the development of regional sub-national economies. Investing in i-cities is vital to strengthen rural-urban alliances (see Box 2.6). Rural-urban linkages include a range of factors: the physical infrastructure services needed to move goods and services; the economic linkages incorporating the supply chains and value chains between centres of rural and regional production and urban markets; the knowledge systems in the ways information, data and knowledge is transferred between i-cities, small towns and rural areas; education, business and health services, and governance arrangements. For many rural regions and small towns, the quality and capacity of the infrastructure and services is weak, with very low levels of public and private sector investment. The effect of this is that transaction costs between i-cities and their supporting hinterland of smaller cities and rural settlements are rising. **As rural and regional sub-national areas lose population, this results in further depletion of human and social capital, loss of jobs and an increasing reliance on i-cities to supplement non-farm income**.

Better means of strengthening the capacity of rural-urban linkages are needed, given depleting resources and human capital to support smaller cities and rural areas. Innovative policies to foster 'shorter economic circuits' or 'localized food systems' are contributing to local production and strengthening local food security, job creation, transaction cost reduction, and the improvement of i-cities' carbon footprint. Many i-cities in Quebec (Canada), for instance, or the small i-city of Albi (France) are aiming to achieve food self-sufficiency.[95] The improvement of transport networks, communications and essential services enjoyed by the urban population (health, education, etc.) is also vital to ensure the viability and efficiency in smaller towns and surrounding rural areas. ICT services, for instance, are essential to strengthen urban-rural linkages, for example, by facilitating access to the internet in areas with poor access and through the use of technology for remote services (e.g. health, training, etc.).

An isolated i-city such as Pasto (Colombia) provides services to an extensive region (Nariño) in which 50% of the local rural population still relies on mini funds. Over the last decade, deficient infrastructure (roads, transit) has hindered access to market opportunities and agro-industrial systems needed for this agricultural economy,[96] emphasizing the revenue gap between rural and urban communities. Pasto's response has centred on the management of the city's peri-urban areas, making the city's physical urban growth compatible with the expected infrastructural and logistical expansion of productive rural areas.[97]

In several European rural areas, i-cities have fostered local development agencies for decades, together with business models more consistent with the needs and expectations of the local population and territory. Agricultural cooperatives, for instance, have grown to become a primary source of direct

### BOX 2.6 RURAL-URBAN PARTNERSHIPS: AN INTEGRATED APPROACH TO ECONOMIC DEVELOPMENT

A 2013 OECD report considers different ways to foster rural-urban linkages using partnerships, with a case study of 11 cities and regions in Europe, Australia and the United States.[101] The European case studies include Nuremberg (Germany), Rennes (France), Brabantstad (the Netherlands), Castelo Branco (Portugal), Prague (Czech Republic), Extremadura (a Spanish region), Forlì-Cesena (an Italian province), West Pomerania (a region in Poland) and the Central Finland region. The OECD report focuses on the improvement of rural-urban partnerships through cooperation mechanisms that manage such linkages to achieve common goals and a better regional development, all the while taking into account the emergence of any rural-urban externalities.

I-cities emerge from the report as a key player in the strengthening of the rural-urban alliance. Rennes promoted its peri-urban agricultural system. Forlì and Nuremberg have improved economic cooperation between agricultural producers and urban consumers and successfully included the promotion of the local economy within their touristic development. The OECD report also praises those cities that have achieved a medium-scale service-based economy through the provision of cheaper, more efficient services to their urban and rural communities, such as in Jyväskylä and Saarijärvi-Viitasaari (Finland), mainly down to new technologies, or West Pomerania, through more efficient waste management. The report stresses the effectiveness of various measures to limit urban sprawl either through special integrated plans or a comprehensive development plan that engages the rural and urban environments equally.[102]

and indirect rural employment.[98] A small i-city such as Lleida (Spain) hosts one of Southern Europe's largest agro-alimentary cooperatives, an agglomeration of over 150 minor cooperatives that manage the whole production chain, from cultivation and transformation to distribution and commercialization, all the while protecting the worker through in-house insurance services. This system has increased productivity and optimized production chain flows.[99]

In China, national policies aimed at the modernization of agriculture certainly strengthened the bond between the urban and rural environments, investing in food security for their cities and bridging the wealth gap between rural and urban population in certain provinces.[100] At the same time, however, they have also boosted the rate at which the floating population has been pushed towards cities due to precarious livelihoods. In Peru, joint investments by the state and the International Fund for Agricultural Development (IFAD) in the development project for the Puno-Cuzco corridor have bolstered the relationship between farmers and the micro-business community of the corridor's i-cities. This project enhanced cohesion and empowered women in the management of savings groups that were essential to achieving long-term sustainability. Even so, the relationship between vulnerability reduction for the rural population and their products' availability on national and international markets was possibly the most valuable achievement, as i-cities configured themselves as key business hubs.

**I-cities should expand their role as regional nodes of development, increasing their attractiveness and delivering, for example, quality infrastructures and basic services accessible to all inhabitants**

**I-cities' economic development can build on their competitive advantage by mobilizing their local assets and involving their hinterlands. They should engage in inter-municipal cooperation and rural-urban partnerships to promote more integrated development strategies and economies of scale**. They should also expand their role as regional nodes of development, increasing their attractiveness and delivering, for example, quality infrastructures and basic services accessible to all inhabitants. Central governments, especially in emerging and developing countries, should develop an adequate legal framework and adopt incentives for strong alliances and cooperation between i-cities, small towns and rural communities – as required by Goal 11.a of the SDGs ('support positive economic, social and environmental links between urban, peri-urban and rural areas').

### 2.4.3 Identity and tourism

The very essence of i-cities is the uniqueness of their historic, cultural and natural capital. This can become a touristic and recreational asset, often different and more readily accessible than those offered by larger cities and their surroundings. Many i-cities have a bold cultural identity that their population has defended through time, making it possible for tangible (monuments, buildings, etc.) and intangible (traditions, holiday feasts, cultural events, etc.) heritages to survive. As the tourism industry grows in economic relevance, many i-cities have introduced incentives to promote the attractiveness of their own assets as well as those of their hinterland.[103] More visibility and better access through improved inter-regional air travel, can translate into investment opportunities. The advantage of i-cities is that they offer opportunities for sustainable investment in eco, cultural, agriculture and water sport tourism. Importantly this new hybrid of tourism, which focuses on individual and small group travel using locally-owned and operated accommodation, products and services, provides new models for tourism compatible with SDGs.

Mobility infrastructure and its refurbishment have been essential to tourism promotion in many i-cities. It is true, however, that rapid urbanization and too narrow an economic focus on mass tourism have negatively affected i-cities' economies in the past. Cities such as Denpasar (Bali Island, Indonesia), Cuzco (Peru), Luxor (Egypt), Stone Town (Tanzania) and Cartagena (Colombia) are facing enormous challenges in retaining their own cultural identity, product and asset management and planning capabilities, whilst coping with mass tourism.[104] Admittedly, building sustainable development into tourism has not been easy where funds to support cultural heritage and infrastructure are limited.

Dependency on one activity, such as tourism, has in fact been a challenge for several i-cities. For example, i-cities that are heavily dependent on international tourism can be strongly affected by changes in exchange rates or political relations. Bizerte, Hammamet, Cartago and other touristic Tunisian destinations have been severely impacted by the country's spiralling political situation. On the other hand, Malaga, a Spanish i-city on the Mediterranean coast, is

an interesting example of a systemic reaction to such risks of marginalization. Since the 1960s, Malaga has been a first-rate European touristic centre. It has nonetheless managed to reduce its dependency on seasonal tourism by investing heavily in its cultural and social agenda through initiatives such as *Ágora del Mediterráneo* or *SOHO Malaga*, and by positioning itself strategically in the landscape of global innovation clusters via the SmartCity Malaga project.

**I-cities should build on their strong identity**, as well as on their **cultural heritage and potential**, respect **their history and architectural wealth**, and invest in strong cultural policies. They should integrate **the cultural dimension of their cities as a key facet of sustainable development**, a vital element of social integration and political participation, but also as an opportunity for **enhanced attractiveness and long-term touristic potential coordinated with their hinterland and territory** (directly related to SDGs 8.9 and 11.4).

### 2.4.4 High-tech hubs and knowledge-based economy

Over the last few decades, many i-cities, especially in advanced economies, have oriented local economic development towards higher value knowledge sectors, while also leveraging technology to update and renew their primary and industrial sectors. Universities, dynamic business ecosystems, complex supply chains and good mobility and communications infrastructure are just some of the factors that have brought about a decentralization of knowledge from metropolitan areas to i-cities. According to the International Association of Science Parks and Areas of Innovation (IASP), 54.1% of all innovation parks are located in cities with fewer than one million inhabitants. In particular, 37.6% of all such institutions are located in cities with fewer than half a million inhabitants, a figure that is comparable with that of metropolitan areas.[105] Most of these institutions are publicly-funded, although there is a growing presence of PPPs.

A dynamic business environment revolving around innovation has allowed many i-cities to take immediate advantage of a number of advances in the environmental development and urban service provision. These cities' smaller size and the enhanced proximity between their local development agencies, universities, the private sector and citizens have made it easier, for instance, to rely on effective pilot trials that were then seamlessly integrated into actual management plans. Many of these features – such as e-government and electronic administration, or the circular economy in service provision – have changed for the better the daily habits and routines of the population.

For a number of i-cities in developing economies, where the quota of rural population remains significant, improvements in connectivity have helped public administrations to enhance the quality of their service provision; cut red tape and administrative costs; increase public management's transparency, monitoring and control; and gain more visibility within their regions. Examples are Yogyakarta (Indonesia), Tra Vinh (Vietnam) or Songkhla (Thailand). An i-city like Tunja (Colombia) is now replicating the successful model of Barcelona's (Spain) 22@ technological district, aiming to increase the competitiveness of its service-based economy through further investment in the knowledge economy and innovation. Technological

### BOX 2.7 KNOWLEDGE-BASED CITIES

For several years now, the UCLG's Commission of Digital and Knowledge-Based Cities has been working together with local governments for the development and growth of truly smart, innovative and competitive cities. The outcomes of these innovation-driven processes are particularly important for i-cities, which can reap the benefits of technological development, integration and connectedness to improve their position in national urban systems, foster territorial cohesion, and act as technological hubs for a number of other local actors.

Together with the municipality of Bilbao – a front-runner in political and financial investment in urban innovation – the UCLG Committee of Digital and Knowledge-Based Cities has developed a holistic perspective that builds on six main axes for smarter cities: economy, governance, citizenship, quality of life, environment, and mobility.[106] This scheme aims to innovate and promote key factors, including investment in high-tech and innovation-driven industries and enterprises; ICT penetration in traditional economic activities; systematic improvement and enhancement of e-democracy and electronic administration; stronger presence of knowledge-driven education and research programmes; larger penetration of broad-band connectivity throughout the territory; technology-driven preservation of cultural heritage and opportunities; and e-health, e-inclusion and enhanced accessibility for all citizens, to improve the wellbeing and quality of life of an integrated, involved and interconnected citizenship.[107]

innovation and citizen participation have been key tools for bridging urban infrastructural gaps in an i-city in an emerging economy such as Solapur (India).[108] Many other such i-cities in emerging countries, e.g. Toluca (Mexico) or Ajmer (India), are living examples of the huge potential that i-cities enjoy as part of the information society. Astana (Kazakhstan) has been leading a growing movement of 'smart cities' in the region.

I-cities enjoy a significant advantage when it comes to positioning themselves at the regional, national and global level as innovation laboratories embedded in a knowledge economy (related to SDG Goal 8.2). This is the effect of advances in telecommunications: connectivity makes up for any distance from the relevant technological hub by granting access to global networks, allowing cities to replicate best practice initiatives.

### 2.4.5 Gender empowerment and inclusive economic growth

I-cities can also play a fundamental role in compensating socio-economic imbalances, not only between rural and urban areas but also between different layers of the population. In many cities, women and youth area substantial part of the vulnerable population. They tend to lead unemployment and informal economy rates, and are generally affected by a lack of public space and household security – a relevant driver of emigration. Persistent gender inequality and the absence of opportunities for younger generations are holding back the local economy and threatening the overall social cohesion of a city. As a result, in the last few decades the informal economy has soared in many cluster i-cities close to metropolitan areas in developing countries.

**I-cities enjoy a significant advantage when it comes to positioning themselves at the regional, national and global level as innovation laboratories embedded in a knowledge economy**

A good example of this is the mid-sized i-city of Nakuru (Kenya), with almost 335,000 inhabitants and where informal street vending is a key component of the local economy. Public management of this issue needs to rely on further representation of women in local decision-making bodies and participative budgets, on the rationalization of the licensing system, and on easier access to responsible financial sources.[109] Naga (the Philippines) has been the first i-city to issue, through the Women Development Code, a city ordinance that guarantees women's 'right to the city', awarding representation posts in public policy-making bodies and reserving 10% of the annual budget for programmes that are related to the ordinance's goals.[110] In many developing countries, a collaboration between local governments and cooperatives or community-based groups rooted in cities' informal economies has played a huge role in basic service provision – particularly when the quality and extent of provision by official service providers is lacking.[111] In particular cases, communities of up to 50,000 people have been efficiently served by small-scale initiatives that stem from the involvement of informal sectors of the economy in public management policies.[112]

Though less visible, over the last few decades, many Latin American i-cities have strengthened the role of women in local economic development, mostly through private and public initiatives that included technical and professional training programmes and improved their first-time access to decent jobs. Production, distribution and commercialization cooperatives have proven to be effective ways to escape the informal economy, in particular for women, even in unfavourable contexts – as the example of fast-growing Palestinian supermarket cooperatives Bezaria, Beita and Al-Noemeh show.[113]

While promoting gender equality in local economic development, i-cities should also consider socially inclusive urban policies that may positively affect the safety and security of the most vulnerable sections of the population. Together with public space, school is a key life stage where investment in infrastructure will benefit generations to come. Accordingly, in many Indian i-cities, women have been at the forefront of participative processes to renovate and improve the public space. In Antalya (Turkey), women have led improvement of urban services for peri-urban areas, and were able to control 70% of the decision-making process.[114] The improvement of safety and security of the public space significantly reduces women's exposure to male violence, as one beneficial externality of more efficient access to residential or productive land use.

**Even though many enjoy only limited resources, i-cities can still use the advantages of proximity and human scale to address social issues tailored to the needs of people at risk of exclusion. At the same time, they can address gender and other inequalities (such as youth exclusion, the informal sector, immigrants and minorities)**. Urban plans and public services are not keeping up with growing urban demands and the gap between cities is widening. Local authorities need to be proactive and avoid the risk of increasing social polarization and exclusion. Their actions could contribute substantially to the achievement of a number of SDGs, for example Goal 5 on gender equality, Goal 8 on productive employment and decent work for all, and targets 8.5 and 8.6 on youth.

# 2.5
# PROXIMITY AND HUMAN SCALE: LIMITATIONS AND OPPORTUNITIES

There has been a huge demographic, physical, economic and social transformation of i-cities throughout all the regions of the world, helping to shape a 'new economic geography'.[115] Although on average they will grow at a slower pace, i-cities face huge challenges in the coming 20 years to host the millions of new urban dwellers that are expected. This requires urgent action, especially in Southern and South-eastern Asia and Sub-Saharan Africa, to help i-cities to plan and manage this process in order to reduce the pressure on metropolitan areas and organize more balanced urban systems.

Differences among i-cities, and between i-cities and metropolitan areas – measured by GDP per capita and competitive advantages– are widening, particularly in developing countries. A majority of i-cities in the Global South are unable to ensure adequate urban planning, and larger i-cities now face similar challenges to metropolitan areas: sprawl, peri-urbanization, land and housing pressure, weak access to basic services, spatial segregation, spreading informality, environmental fragility, and resilience imperatives. The evolution and roles of i-cities should attract more attention from both national governments and international institutions. Most SDGs, and the New Urban Agenda, rely on the successful adaptation of i-cities to the challenges ahead.

Beyond their traditional role as administrative and service provision centres, many i-cities reinforced their role as local/regional hubs for revamped agricultural economies and specialized industries that were often associated with the exploitation of natural resources. Others developed new activities such as technological or knowledge centres or culture and tourism. I-city clusters or corridors have emerged in almost all regions, developing vital linkages

Photo: Izu navi - Atami Market, Shizuoka (Japan).

with global supply chains for goods and services. However, other i-cities have not benefited from these transformations and have in fact experienced stagnation or decline ('shrinking cities'). The next section explains the geography of these changes.

Legal and institutional reforms have also been decisive in this process. Over the last few decades, decentralization reforms have given local governments in i-cities more responsibility for service provision and infrastructure which form the basis of local attractiveness and quality of life. Nevertheless, in developing countries, an enabling environment for good local government performance is often not yet in place. Many i-cities are suffering increasing budgetary pressures, particularly in regions that are lagging.

Human scale provides an identity, a sense of belonging, close networks, tacit knowledge and the willingness of communities to work together to build a more prosperous environment. Size, however, also affects the availability of access to opportunities, services, jobs and knowledge. Distance from other centres of economic activity adds to the cost of doing business and reduces access to services and opportunities.

**I-cities' economies must become more 'glocalized', i.e. they must gear local industry, production systems and trade to the demands of national and global markets**

The challenge that local governments and citizens of i-cities now face is to turn the advantages into economic development policies, into inclusive societies, into a valuable and welcoming environment, into creative and liveable cities. I-cities also have to overcome the problems that come with the creation of a 'critical mass', to make local economic and social development affordable and accessible. Though there are no simple or immediate solutions to these problems, nor recipes to make i-cities more inclusive, dynamic and sustainable overnight, there exist several strategies – as shown throughout this chapter – that i-cities can use and turn into leadership opportunities.

As mentioned above, i-cities need to look for more collaborative models of development, strengthening their collaboration with other cities, local stakeholders and their hinterlands, building alliances with the private sector and communities to encourage endogenous growth, building on their own assets, strengthening local identities and social capacities. Participatory governance, strategic urban planning, integrated spatial, economic and social policies, shared strategic projects, economic development and inclusive social policies and gender equality could all be actions conducive to the foundation of these collaborative models of development. Fast growing, i-cities in developing regions need to prioritize flexible and integrated urban planning approaches, land-use management, reform of urban governance systems, financial management, and better access to land tenure, to basic services and decent living standards for everybody, following human rights' principles.

I-cities that go through structural reforms in the face of economic downturns should certainly prioritize re-education and re-skilling, strong political and business leadership, the participation of local communities and the different elements of a collaborative economy, as well as embrace innovation and new technologies. Specific policies are necessary to attract and retain young people in particular.

I-cities need to create a culture of cooperation rather than competition with their hinterlands and surrounding small towns and rural areas, promoting economic integration, shared assets, services, and infrastructures, adapted to the demands of the entire region. The challenge for many i-cities is how to operate both at their scale and in a more globalized and competitive economic environment. I-cities' economies must become more 'glocalized', i.e. they must gear local industry, production systems and trade to the demands of national and global markets, looking for more complementarities and synergies with metropolitan areas. National policies should foster and guide these strategies.

**I-cities can and have become more prosperous, dynamic and creative places. They must learn how to use their assets in a sustainable way**. Scale offers opportunities to transform their patterns of production and consumption, their social, cultural and natural environment. Scale also opens up spaces for i-cities to become more innovative and dynamic locations in which to live, work and create. To overcome some of the challenges they are facing, i-cities must learn to collaborate, integrate and work together within networks, building more synergies between urban areas and territories. They need to create a more balanced and complementary system of cities. I-cities' challenges and opportunities, however, will vary significantly across the world depending on their geographic, political and economic situation. These dimensions are reviewed in the next section.

# 3.

# NATIONAL AND REGIONAL URBAN SYSTEMS AND INTERMEDIARY CITIES

Globalization, governmental reforms – including decentralization, urban growth and the impact of new technologies are changing the dynamics of development of urban areas. This is leading to a significant transformation of national urban systems and the expansion of international systems of cities in the global arena.

The spatial pattern of the network of systems of cities varies across different countries and regions, and is in flux.[116] Many countries have a hierarchal system of classified cities, some of which are defined by laws or even constitutions. Functional hierarchical systems remain the main basis of public administration and local finance in most countries. The pace of urbanization, however, is ushering in a more dynamic model, where cities are more networked and less hierarchically defined by population, size or government frameworks. This evolving pattern in systems of cities, based on functional linkages and interdependence, is bringing national, regional and global systems closer together. **This has profound yet unpredictable implications for the evolution and performance of existing urban hierarchies in terms of trade, economic development, investments, migration, culture, knowledge and information**.

Photo: Xiaojun Deng - Thimphu (Bhutan).

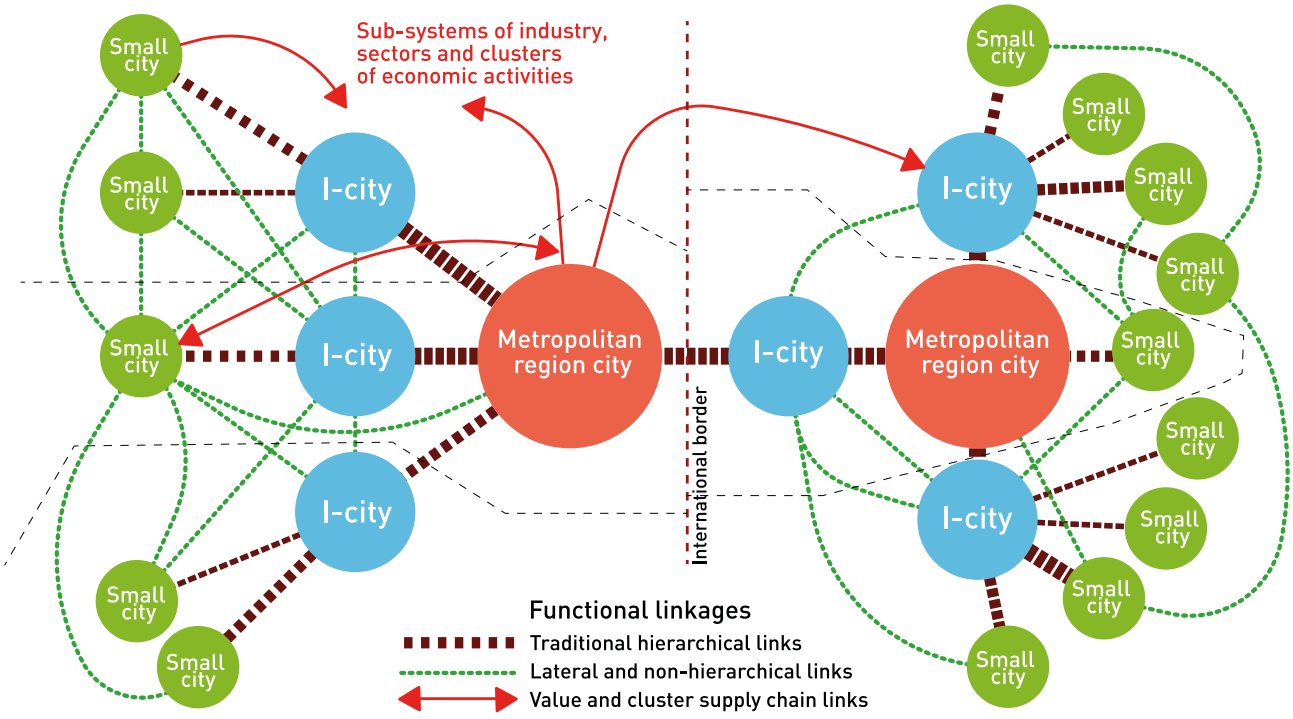
Figure 3.1 shows that, while many elements of functional urban hierarchy remain, there are more and more lateral connections within and between countries. Both national and global systems of cities now comprise a complex mesh of ever-changing hierarchical and non-hierarchical structures and relations, based on a series of hubs, spokes and loops. The internet and rise in the service economy are presenting new opportunities for different kinds of trade networks between cities, transcending national and international borders.

In light of these emerging new patterns, when we consider what shapes the spatial patterns and scale of development in national systems of i-cities, we need to reformulate the very way we think about the relationship between scale, size and function, and the impact these have on urban systems. As discussed in Sections 1 and 2, there are three broad categories of i-city: sub-national i-city nodes, clustered i-cities, and i-city corridors.

Each of these plays a different and critical role in shaping the demographics, economics and nature of national systems of cities and national development. There are overlaps between the three categories, and some extend beyond national boundaries as part of the international systems of i-cities.

This section presents a brief overview of systems of i-cities (monocentric, bicentric, polycentric, coastal, inland, landlocked, clusters and corridors).[117] Where possible, it will refer to national and regional urban policies and practices used in different world regions to respond, positively or not, to the challenges of urbanization and the needs of i-cities. **The goal here is to explore how i-cities can play a much stronger role in the development and functioning of national and regional systems of cities**. The concluding remarks summarize the most important messages about the national and regional systems of i-cities, as well as their crucial importance in shaping the New Urban Agenda for the next decades.

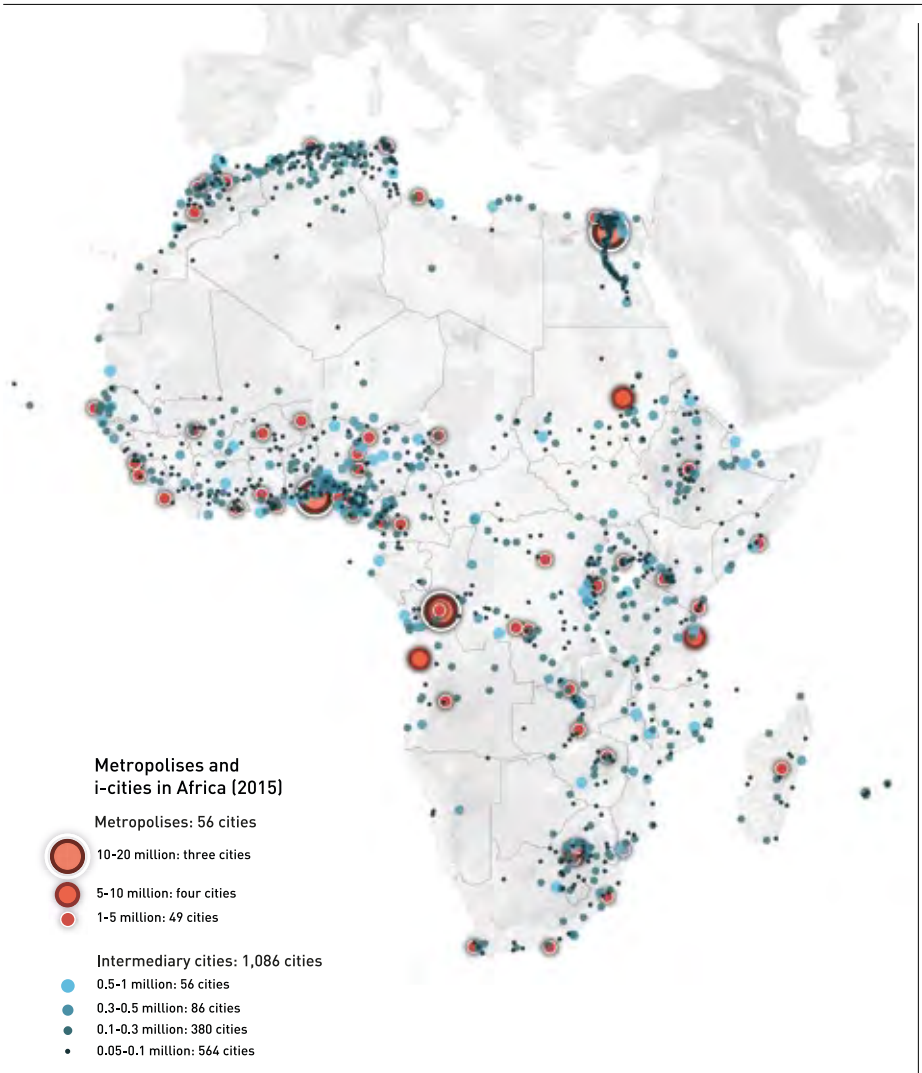
Figure 3.1 **Hierarchical and non-hierarchical systems of cities**

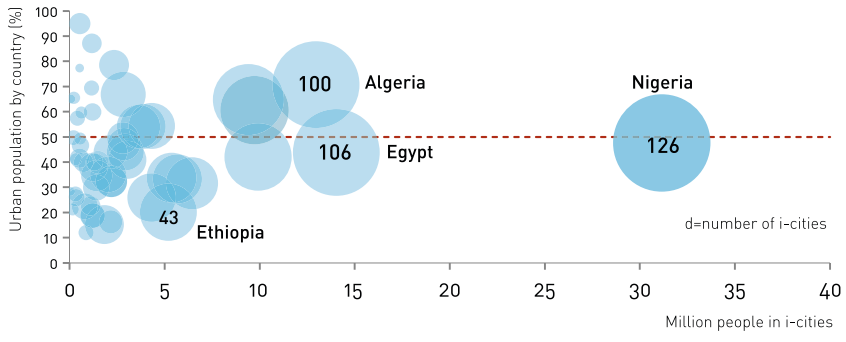


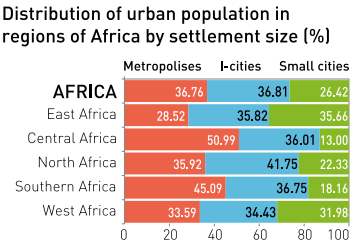
# 3.1
# URBAN SYSTEMS AND INTERMEDIARY CITIES IN AFRICA

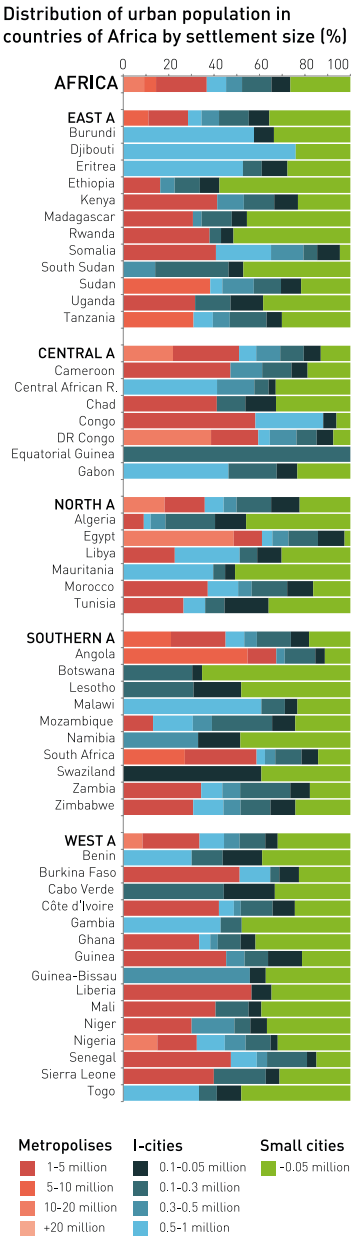
Figure 3.2 **AFRICA urban agglomerations and distribution of population by settlement size**

Source: UCLG and CIMES-UNESCO



### 3.1.1 Spatial integration and functional balance of African i-cities

Africa's 1,086 intermediary cities are home to 174.8 million people, approximately 36.8% of the continent's total urban population. This figure is close to the number of people that live in Africa's 56 metropolises (174.5 million inhabitants, 36.7% of the total urban population), but more than the population of inhabitants of small cities (125.4 million, 26.4%). In Northern Africa (where 56% of the people live in urban centres, making it the most urbanized region of Africa), i-cities host a significant quota of the urban population (42%). This compares with 36% living in metropolitan areas and 22% in smaller cities (fewer than 50,000 inhabitants).

In contrast, in Southern and Central Africa, where 44% of the population live in urban areas, the majority of the urban population (45% and 51% respectively) live in metropolitan areas. Meanwhile, i-cities host around 36%, and small cities, between 13% and 18% respectively. In East Africa, a generally more rural area, only 26% of the population live in cities. Here, the structure of urban distribution is inversed: most people live in intermediary and small cities (35% and 36% respectively), while 28% of the urban population live in metropolitan areas. Finally, in Western Africa (with 45% of urban dwellers), the population is well-distributed between metropolitan areas, intermediary and small cities (33.6%, 34.4% and 32% respectively). Important differences within each region still exist, however, with a significant polarization of urban systems.

**In most countries across the continent, one or two metropolitan areas clearly dominate, hosting 33% or more of the urban population (monocentric or bicentric systems)**

#### *Monocentric/polycentric regional spatial structure in Africa*

In most countries across the continent, one or two metropolitan areas clearly dominate, hosting 33% or more of the urban population (monocentric or bicentric systems). This is particularly true in the case of Central Africa (Cameroon, Chad, Congo and the DR Congo), many countries in Eastern Africa (Kenya, Madagascar, Rwanda, Somalia, Tanzania, and Uganda), Western Africa (Burkina Faso, Côte d'Ivoire, Ghana, Guinea, Liberia, Mali, Senegal and Sierra Leone), and Southern Africa (Zambia and Zimbabwe). In Northern Africa, Egypt presents similar characteristics.

In South Africa, however, 59% of the population live in metropolitan areas, distributed in six main large agglomerations. In Northern Africa, urban systems are generally more balanced, thanks to a strong presence of i-cities: 46.4% of Morocco's urban population are concentrated in the country's 62 i-cities; over 90% of Algeria's urban population reside in either intermediary or small cities. Significantly, in Nigeria, Africa's most populous country, 35.6% of urban population live in 126 i-cities. The preeminent role of large i-cities (between 500,000 and one million inhabitants) is key to its polycentric configuration of the urban system: '[A] more developed network of i-cities can contribute to balance the urban systems and support the urbanization that is currently taking place'.[118]

#### *Coastal, inland and landlocked intermediary cities*

The system of coastal intermediary cities plays a crucial role in the regional cohesion of North Africa and the most dynamic economies of the Gulf of Guinea. Almost all of North Africa's cities are concentrated in a strip measuring 200km that extends along the coastline following the Atlas mountain range and bordering the Sahara Desert. Approximately 80% of all cities in Algeria – a country with an important system of i-cities – are concentrated within this strip. In Nigeria, 60% of all i-cities are located around the metropolitan areas of Lagos and Ibadan, Benin City, Onitsha and Port Harcourt, which results in an especially dense and cohesive urban system.

On the other hand, a system of inland i-cities dominates the east, centre and south of the continent, structured around an extended network of navigable fluvial waterways. The Great Lakes area lies midway along an internal North-South axis that links Khartoum (Sudan) with Durban (South Africa) and, across five countries, hosts nearly one third of Africa's cities. On a smaller scale, the Nile Valley concentrates the urban system of Egypt, with 44 i-cities between Aswan and Cairo.

**Africa has a significant level of more isolated regional i-cities that control an extended administrative area and have developed 'enclave economies'**. Most of them sit in semi-arid areas at the northern and southern fringes of the Sahara Desert, as well as in the Congo Basin. Cities with a rich historical legacy and heritage, such as Gao or Timbuktu (Mali), Tahoua and Agadez (Niger), and Abeche (Chad) have prospered throughout the centuries. This is due to their role as cultural centres and their location within trade, mining and exchange areas

at the regional scale. Others examples of this are Sabha (Libya, located in an entirely desertic area), Tamale (Ghana), Bobo-Diulasso (Burkina Faso), Sokoto (Nigeria), and Saurimo or Luema (Angola). All have suffered from low levels of territorial interconnectedness.

### *Functional balance of African i-cities: clusters and corridors*

Over the past few decades, **many African i-cities have experienced rapid demographic growth with the establishment of new economic activities and specialized services at a regional and global level**. This process has often elicited the emergence of regional and global clusters. Such clusters are generally characterized by a large number of small and micro enterprises active in both formal and informal sector economies. This is even though multinational companies still seem to be relevant for those i-cities that are strategically located in terms of transport and movement of goods. Tangier, for instance, a former i-city in Morocco, with strong automotive industries and logistical infrastructure, has turned into a metropolitan 'gateway' to Europe, as part of a national strategy of regional development based on regionalization and decentralization. Monastir and El Feidja (Tunisia) have created a regional textile cluster – the *Pôle de compétitivité Monastir-El Fejja* (Mfcpole) – and the establishment of new laboratories and R&D centres.[119]

Nnewi (Nigeria), meanwhile, surrounded by a cluster of satellite i-cities, is commonly known as Africa's 'Taiwan' or 'Japan', thanks to its strong automotive industry, universities and technical institutes.[120] Arusha (Tanzania) has grown into a regional cluster in the furniture industry. Similarly, Lake Victoria is one of main clusters of agriculture and fishing in the region within the larger influence of Kampala (Uganda) or the mid-sized i-city of Kisumu (Kenya). Mek'ele (Ethiopia), an i-city north of Addis Ababa, is a good example of a cluster in a landlocked economy, with a concentration of over 250 companies involved in the manufacturing of furniture, construction materials and agricultural machinery. The Gauteng region (South Africa) is a another good example of an emerging i-city cluster, close to the metropolitan areas of Johannesburg and Pretoria (e.g. Sasolburg, Potchefstroom and Klerksdorp are mid-sized i-cities historically anchored in mining).

A better understanding of i-cities and cluster arrangements outside the metropolitan core is necessary to appreciate the emerging opportunities for increasing social, financial and human capital on the African continent.

Africa's physical geography, together with the low levels of territorial interconnectivity of its inner transport network, has favoured the emergence of city corridors in specific geographical areas. These are mainly along the coast, as is the case with Northern and Western Africa, or inner city corridors in landlocked countries, traditionally linked to fluvial waterways, on a North-South axis from the Great Lakes area down to South Africa.

National frontiers, however, have been a barrier to cross-border trade and have hindered the formation of i-city corridors as a truly integrated regional urban system (e.g. a potential corridor of i-cities from Morocco directly to the Libyan i-cities of Misrata and Sirte through a corridor of Algerian and Tunisian coastal cities). In the Gulf of Guinea, a region-wide international corridor is connecting Abidjan (Côte d'Ivoire) with Port Harcourt (Nigeria) (see Box 3.1). Another relevant corridor is that which connects Nairobi (Kenya) with Juba (South Sudan). This includes 12 small and mid-sized i-cities, such as Eldoret and Kisumu (Kenya), and Lira and Gulu (Uganda) along its 600km extension. In Central Africa, the DR Congo's system of cities builds on the backbone of a 1,600km long internal corridor that connects the cross-border megacity of Kinshasa-Brazzaville with Lusaka, a metropolis in Zambia. Free trade agreements and investments in infrastructure are needed for these i-city corridors to further nurture and protect their development.

Cameroon, Egypt, Ethiopia and Nigeria all have examples of internal i-city corridors. One corridor joins 12 Cameroonian i-cities together, from Kumbo to Douala, and hosts over 60% of the country's total urban population. Egypt has developed three large corridors of i-cities as the backbone of the country's urban economic structure (e.g. the Cairo-Alexandria axis in the Nile Delta, the Suez-Ismaïla-Port Said axis along the Suez Canal and, though not well-structured yet, the Cairo-Aswan corridor in Lower Egypt).

Ethiopia, a largely rural landlocked country yet one of the continent's emerging economies, has developed three main structural urban axes to bolster its system of cities. These are: the Addis Ababa-Asmara corridor (Eritrea) as a natural gateway to sea access; the Addis Ababa-Berbera corridor (Somalia) to gain access to the sea, but compromised by regional military and

**Mek'ele (Ethiopia), an i-city north of Addis Ababa, is a good example of a cluster in a landlocked economy, with a concentration of over 250 companies**

## BOX 3.1 WEST AFRICA TRADE COAST CORRIDOR

The United Nations Economic Commission for Africa (UNECA) and the African Development Bank (AfDB) have both acknowledged the growing importance of economic trade and development corridors in boosting trade relations and investments between cities and countries in Africa. The AfDB and the World Bank have made a significant contribution to funding trans-African highways to improve connectivity and economic trade along the Dakar-Lagos route, known as Highway 7 (4,010km). This provides access to 11 West African nations: Senegal, the Gambia, Guinea-Bissau, Guinea, Sierra Leone, Liberia, Côte d'Ivoire, Ghana, Togo, Benin and Nigeria. The trans-African Highway 7 plays a significant role in trade and economic opportunities across West African countries, serving as the area's most direct cross-country thoroughfare. I-cities are benefiting from the highway in terms of connectivity and, thanks to its infrastructure, some have evolved into important multi-modal nodes and transfer hubs for access to other landlocked cities and countries.

The management of the corridor is undertaken multinationally by regional economic communities: the *Union Economique et Monétaire Ouest-Africaine* (UEMOA) and the Economic Community of West African States (ECOWAS). While the continued improvements and extension of Highway 7 are stimulating the development of metropolitan regions and i-cities, there are still significant impediments to trade and investment along the corridor, not least certain poorly constructed or maintained sections.[121] Border crossing can take many hours, customs regulations and standards are not uniform, intermodal goods-transfer infrastructure and systems are not integrated, and the control of development along the highway is not regulated, significantly increasing congestion in smaller towns and i-cities along the route.[122]

security tensions; and the Addis Ababa-Arba Minch (Somalia), an internal rural axis. Nigeria is an interesting case, with the Abuja-Onitsha-Port Harcourt metropolitan corridor extending over 400km with i-cities of more than half a million inhabitants, such as Makurdi, Enugu and Aba. This corridor counterbalances Lagos' megacity and system of satellite i-cities economically, with both areas bordering the River Niger.

African i-cities will play a fundamental role in the coming decades, absorbing a significant part of the continent's urban and demographic transition and strengthening its economic integration and territorial cohesion. Even beyond the specific function of large metropolitan areas on the global level, the huge potential of the urban system of corridors and clusters of coastal and inland i-cities can be capitalized on, if the infrastructural deficits in their regional and international interconnections can be addressed. The political likelihood of transforming i-city clusters and corridors into free trade areas or special zones depends also on investment. This is especially true in those inland areas where inadequate governance frameworks and structural vulnerabilities have year after year been turning these regions into the planet's most fragile urban areas.

### 3.1.2 Trends and national urban policy responses in African i-cities

Following colonial developmental patterns, several African states either failed to alter or continued to favour the development of capital cities and large agglomerations linked to export activities. This prevented the creation of more even urban development with integrated networks of i-cities. A majority of African countries continue to depend on agricultural sector or raw materials exports, making their economies vulnerable to global volatility and competition. Regional conflicts and humanitarian crises elicited mass movements of rural communities to urban agglomerations in search of security and job opportunities. Over the past few decades, these trends have widened the gap between rural and urban areas.

In past decades, the many structural adjustment programmes imposed by the IMF on African countries have failed to take into consideration the spatial impacts of their measures. The low level of industrialization in larger cities in Africa – unlike for instance in South-eastern Asia – has prevented these cities from properly absorbing the growing demand for employment resulting from urban growth, particularly among the younger population. This population flow has been channelled towards informal economic activities and settlements. All this notwithstanding, **urban environments have nurtured an emerging middle class that, in turn, stimulates the rise of different kinds of service provision, economic access and governance organization.**

Institutionally, as a result of significant democratic reforms and decentralization

processes, elected local governments have emerged in a majority of African countries. Decentralization, however, has generally been partial and lacked a consistent pattern of empowerment both financially and in terms of governance for regional and local administrations.

These structural hindrances have prevented national governments from reaping the full benefits of a decade of impressive economic growth. Dependence on raw materials industries and exports should be being counterbalanced by adequate economic modernization – a process that would benefit from a context of well-connected, well-equipped, and economically efficient and diversified systems of cities. However, African urban societies face long-standing consequences of massive, disorderly urban growth. Slums and informal settlements – dominated by insecurity of tenure, lack of essential services and infrastructure, and deficient application of planning and regulatory provisions – characterize most African cities.[123] African countries face the challenge of sustainably transforming the rural-urban balance of their economies and transitioning towards a fully-fledged urban society, where urban needs and demands are met.

**Africa's urban and demographic transition, moreover, has not been equally distributed across the continent**. Certain urban economies in industrialized areas of North Africa, e.g. Morocco and Algeria, have long been competitive with industrialized areas in Southern Europe. However, they have also had to adapt to the events and uncertainties triggered by the aftermath of the Arab Spring. On the other hand, many countries in Sub-Saharan Africa have shown structural difficulties in upgrading their own NUPs to changing demographic and economic scenarios.[124]

Many African i-cities have been exposed as incapable of creating sustainable prosperity for their populations. Lacking the administrative capacity or the financial resources to tackle informality and precariousness directly, smaller settlements have historically been unable to manage the effects of these trends.

In light of such effects, it has increasingly been emphasized that African nations need to have adequate institutional frameworks and NUPs to promote more even urban and territorial development at national and regional levels. Sixteen African countries have been developing NUPs in the last decade. While a few trailblazing countries are setting the pace on the role of i-cities (e.g. Algeria, Ethiopia, Madagascar, Morocco, Rwanda, South Africa), others have reserved a spot for intermediary cities and their development in their national roadmaps. Benin, Ghana, Mali, Niger and Uganda have created new opportunities for i-cities to improve urban management and rationalize investment in infrastructure (see Box 3.2).[125]

Decentralization, sustainable growth, urban networking and coordination are all integral to the recommendations to tackle Africa's future urban challenges. The Summit of the Heads of State and Government of the African Union approved, in June 2014, the African Charter on the Values and Principles of Decentralization, Local Government and Local Development.[126] The Abuja Declaration, reaffirmed as recently as February 2016 by African UN Member States in the preparatory proceedings of Habitat III, presents 'Africa's Priorities for the New Urban Agenda'. It acknowledges the need for an integrated vision of Africa's human settlements that spans the rural environment, intermediary cities, as well as metropolises. The Declaration is one of the latest steps in the direction set out by the 'African Agenda 2063'. This strategic document, promoted by the African Union, serves as a roadmap for the continent's long-term socio-economic development, in which urbanization is recognized as a crucial driver of innovation, and cities are imagined as the vibrant backdrop of integrated economies and 'a major driving force for the continent's transformation'.[127] However, while Agenda 2063 imagines 'cities and other settlements' as 'hubs of cultural and economic activities, with modernized infrastructure' and whose people 'have access to affordable and decent housing including housing finance together with all the basic necessities of life such as, water, sanitation, energy, public transport and ICT',[128] more attention should be paid to the role of emerging i-cities.

Ultimately, the role of African i-cities is essential, even in spite of their absence from the continent's national agendas and priorities. Beyond acknowledging that i-cities are the 'missing link' or the 'invisible' factor in African countries development strategies, NUPs need to prepare for the 250 million new urban dwellers that will be absorbed by its growing number of intermediary cities over the next two decades. This process may definitively transform the existing rural-urban links, promoting the development of surrounding rural areas, improving access

**Institutionally, as a result of significant democratic reforms and decentralization processes, elected local governments have emerged in a majority of African countries**

## BOX 3.2 NATIONAL URBAN POLICIES IN AFRICA

The 16 African countries that have been developing national urban policies (NUPs) in the past decade are: Algeria, Benin, Burkina Faso, Cote d'Ivoire, Ethiopia, Gabon, Ghana, Malawi, Mali, Morocco, Niger, Rwanda, Senegal, South Africa, Swaziland and Uganda.

South Africa, for example, until recently lacked a consistent NUP since rural development was considered a top priority. A first attempt to introduce an NUP was made in 2009 and backed up in 2013 when the government began work on a new integrated urban development framework (IUDF). The IUDF requires that every city formulate a 30-year long-term growth and development strategy (GDS). Seven components will provide the policy mechanisms to promote change: basic infrastructure networks, inclusive economic development, integrated transport and mobility, integrated human settlements, land management, social transformation and urban governance. The priorities, concerns and capacities of the smaller municipalities, including their inadequate financial resources, have prompted debate. The South African Network of Cities (SACN) asks for more flexible and multi-layered categorizations to better take into account the reality and vulnerabilities of i-cities, acknowledging their role in both national development and rural development policies to foster cross-sector integration.[129]

In the latest of a series of strategic documents,[130] Nigeria created a national urban development policy (NUDP) in 2012. The aim of the NUDP is to promote a dynamic system of urban settlements that fosters sustainable economic growth, promotes efficient urban and regional planning, and ensures improved standards of living and wellbeing for the Nigerian people. The NUDP presented 18 key strategies and actions to be implemented at all levels of government in the short, medium and long term. A priority strategy was to establish an institutional framework to ensure the orderly development and management of urban settlements. A hindrance in this process, however, has been a structural issue with decentralization and the allocation of funds and resources to local authorities.

Rwanda has made impressive development progress since the 1994 genocide and civil war, including high economic growth, rapid poverty reduction and reduced inequality. In this regard, the NUP approved by the Rwandan government cabinet in December 2015 defines the strategies for national human settlement development under conditions of economic growth. Rwanda is functionally 'using' i-cities to prepare its transition to a fully urban society. Rwanda's NUP takes into consideration the principles of efficient administration, seamless participation of communities, strong human resources and sustainable planning. As such, it is divided into four pillars which illustrate the cross-cutting nature of urban development: **coordination** to ensure multilevel institutional cooperation; good governance and effective urban planning and management; **densification** to use land efficiently and integrate green developmental principles for efficiently serviced urban neighbourhoods, at the same time preserving valuable natural and agricultural resources; **conviviality** to ensure social inclusion and cultural preservation; and **economic growth** guided by green economic criteria, whereby urban areas are centres of innovation and entrepreneurship and sources for socio-economic services and opportunities.

Ethiopia is actively managing an urbanization process to become a predominantly urban country over the next 20 years. A national urban agenda has been part of the growth and transformation plan (GTP) that aims to make Ethiopia a middle-income country by 2023. This urban agenda includes spatial and economic strategies, infrastructure development and the empowerment of local governments. The plan has linked Ethiopia's economic and spatial strategies together for the first time, identified strategic growth corridors and set up an organized 'hierarchy' of urban centres. To ensure that Ethiopia's urbanization is socially and economically inclusive, climate-resilient and environmentally efficient, a main emphasis has been on service delivery and economic performance. Its Urban Local Government Development Programme is a key part of the national urban strategy. Funded by the national government in partnership with the World Bank, the programme wants to bolster local governments in urban areas while further acknowledging their role. This commitment is accompanied by fiscal decentralization measures and the ambition for Ethiopia's future metropolitan areas to be 'green', well-governed drivers of economic and social development. The programme has targeted 16 urban centres of fewer than 500,000 inhabitants to develop tourism and the manufactural sector.

By 2013, Madagascar had created 13,000 new jobs through an investment wave that touched on water supply, mobility and transport, vocational training and education in i-cities, in order to set up a functioning regional network of urban communities. Morocco supported the expansion of tourism and other industrial sectors in Tangier and Meknès, while a new regional plan will support peripheral cities in the Casablanca area.

to public services, and linking smaller towns and the rural economy to national and international markets. I-cities can also alleviate the congestion of metropolitan areas, by retaining rural migration and developing a more active role as regional or provincial socio-economic hubs. Lower tiers of governance need awareness to harness the potential and respect the needs of functioning economic corridors and specialized i-city clusters – a pre-condition for the growth of infrastructural investment and easier cross-border trade. The transition from a rural society to a developed urban economy depends on adequate integration of cities' hinterlands and rural surroundings.[131]

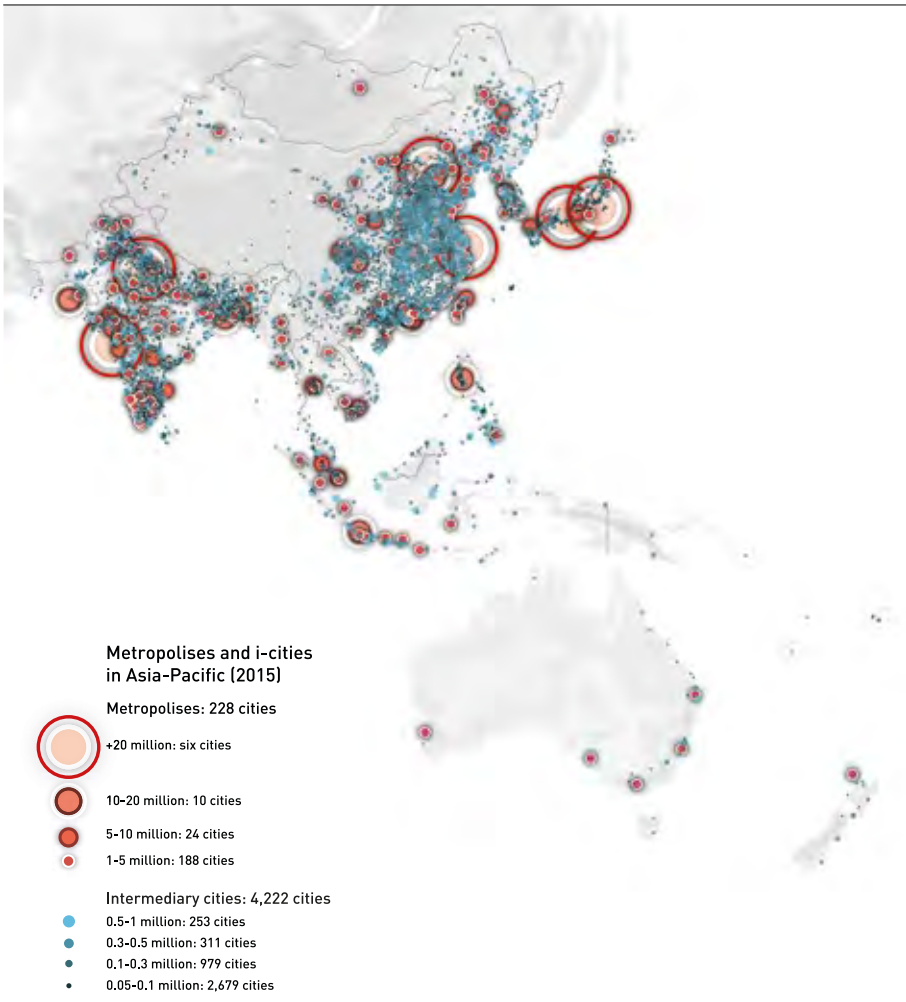
Similarly, NUPs must recognize the relevance and function of i-cities as regards the territory's social cohesion and economic integration. In the most dynamic regions of Northern, Eastern and Western Africa, the share of population in i-cities is already similar to or greater than in metropolises. Many of these countries will have to wager on their economic modernization without industrialization, by improving agricultural productivity and investing in services and innovation. In this regard, technology plays a fundamental role in the economic decentralization of territories that are more often than not weakened by a deficient transport infrastructure. I-cities have to step up in providing strategic connectivity in energy and telecommunications, strengthening their local development, while reducing the social and environmental vulnerabilities that are inherent in the rapid **urban expansion processes** in the years to come.

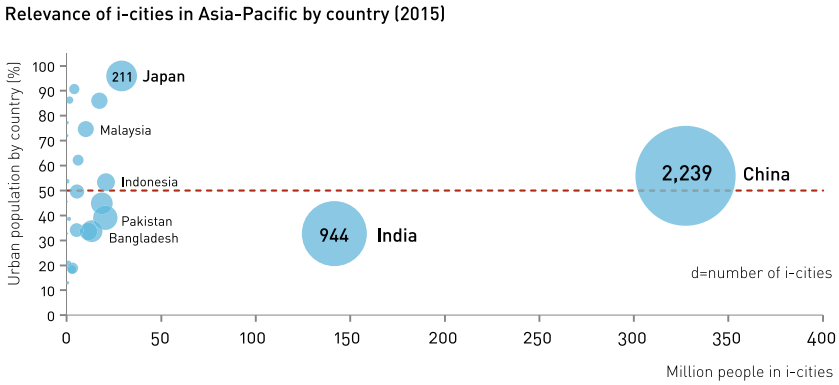
Photo: Bikejuju - Nampula (Mozambique).

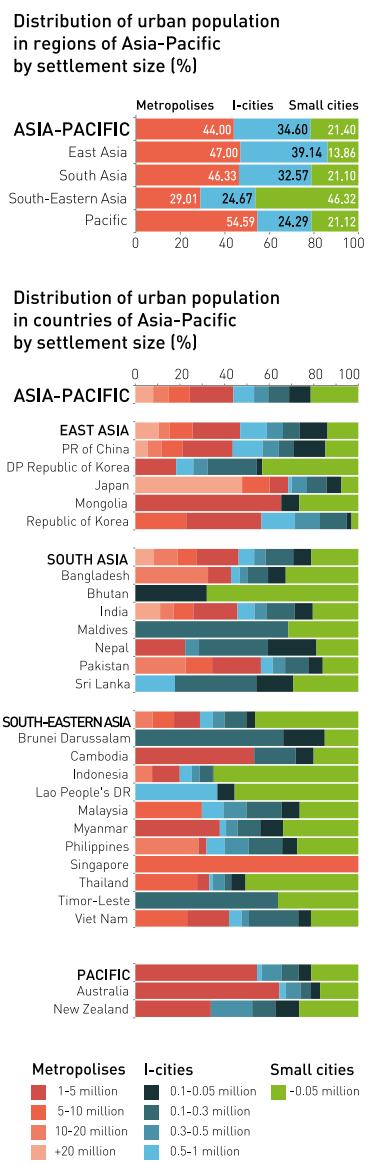
# 3.2
# URBAN SYSTEMS AND INTERMEDIARY CITIES IN THE ASIA-PACIFIC

Figure 3.3 **ASIA-PACIFIC distribution of population by settlement size and urban population weight in i-cities**

Source: UCLG and CIMES-UNESCO. For China and India, see more details in figure 3.3. bis



## 3.2.1 Spatial integration and functional balance of Asian-Pacific i-cities

Asia-Pacific comprises four large sub-regions: Eastern, Southern and South-eastern Asia, and the Pacific. It is the biggest and most densely populated region of the world (54% of the global population and 46.2% of world urban dwellers), with an enormous variety of geographic, cultural, economic, climatic and political landscapes. China, India, Indonesia and the Philippines are amongst the most populous countries on Earth, while the Pacific Island states of Nauru, Tuvalu and Palau are some of the least. The region puts a 100% urbanized compact city state like Singapore together with de-urbanizing (-1% urbanization rate in 2011) low-density island states like Samoa, landlocked ones like Mongolia, and a dispersed mountain state like Nepal. The Pacific region, often referred to as Oceania, is the largest but least populated region.

Asia's systems of i-cities are much larger, concentrated, diverse and complex than in other continents. The region includes 222 metropolises that are home to 49% of the world's population living in metropolitan areas, as well as 16 of the 29 megacities with over 10 million inhabitants. It also has the most i-cities of all the regions (4,177 cities with 635 million inhabitants, making up 44.5% of the world's population that are settled in i-cities). In the Pacific, on the other hand, i-cities outside of Australia and New Zealand tend to have small populations and low density, often separated by thousands of kilometres and with populations of less than 100,000.

In the global recount of intermediary cities, China and India's demographic dominance is absolute. China and India have 2,238 and 944 i-cities respectively, i.e. 35% of all of the world's i-cities. Japan, the third largest economy and one of the most urbanized societies in the world, is a late follower (211 i-cities). Emerging economies with low urbanization levels follow suit, e.g. Pakistan (134 i-cities), Bangladesh (105), the Philippines (104), Indonesia (72) and Vietnam (71). There is however, a higher concentration of i-cities in China's eight most populous provinces – with 1,467 i-cities and around 200 million inhabitants – than in the whole of Northern America and Europe. These data do not even take account of the fact that, by Chinese standards, cities of two to three million inhabitants are generally considered to be 'mid-sized'. Similarly, it is estimated that India's urban population will increase by 160 million inhabitants by 2030 (about 30,000 people per day), and 44% of this projected inflow will settle in i-cities. The percentage of population living in urban areas in India, however, is expected to reach 39.5% by 2030 (currently, 67.3% still live in rural areas) and only pass the 50% threshold in 2050.[132]

The level and rates of development of i-cities across the region, therefore, vary enormously. Some medium-sized i-cities of fewer than 500,000 inhabitants are growing relatively fast. Cenxi (China) is increasing at a 5.5% yearly rate, Ambon (Indonesia) at 4.95%, and Begusarai (India) at 8.8% per year. On the whole, urban population growth in i-cities from 2000 to 2015 has been higher than in metropolitan areas but not than in megacities (see Table 2.1 in Section 2) e.g. 1.9% to 3.4% per year compared with 2.2% to 3.1% per year. Over the next 15 years, however, metropolises of between one and five million inhabitants are expected to grow faster than i-cities, especially smaller ones.

### *Monocentric/polycentric regional spatial structure in the Asia-Pacific*

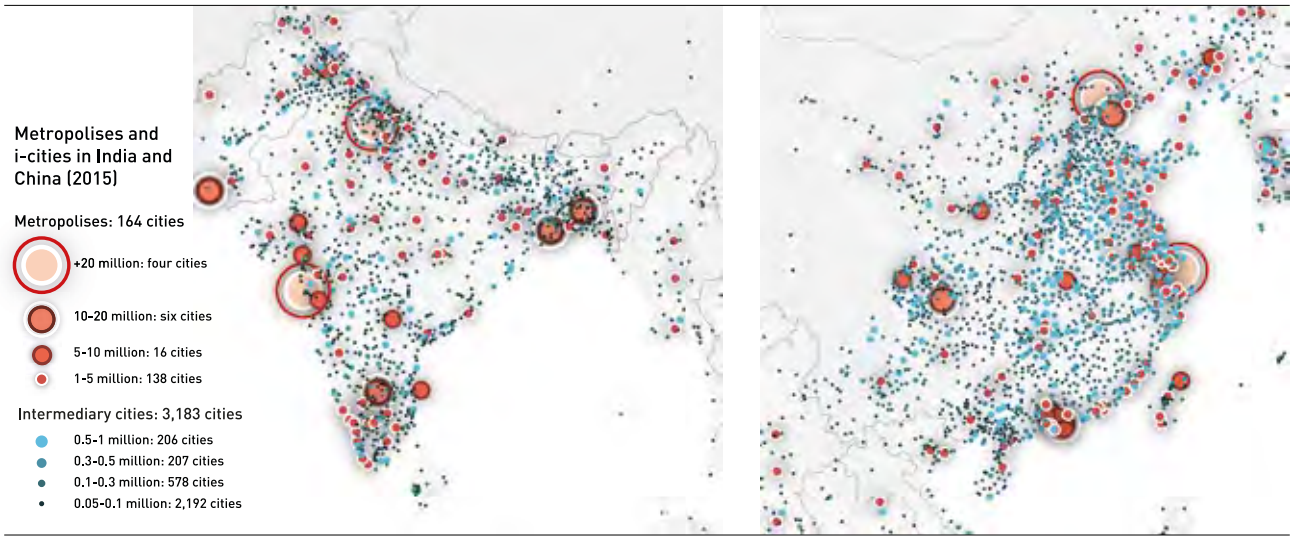
There are important differences in the structure of systems of cities in the region. In general, East Asia has a much more uniform structure compared with that of Southern and South-eastern Asia. Perhaps the greatest deviation from the hierarchical structure of systems of cities in South-eastern Asia is due to the archipelagic structure of its two most populous countries, Indonesia and the Philippines. In Southern Asia, the system of cities follows a more uniform hierarchal structure than in South-eastern Asia, partly explained by the federal form of government of important countries in the area, such as India and Pakistan.

In the case of China and India, however, it may be more appropriate to analyze their systems of cities from a regional perspective because of their demographic relevance and structure (see Figure 3.3 bis). China's most populous province, Guangdong, has a polycentric urban configuration. It hosts 15 metropolises of more than one million inhabitants (74% of the province's urban population), of which two – Guangzhou and Shenzhen – are megacities with more than ten million people. Together with bordering Hong Kong and Macau, the province forms one of the world's most populated urban areas. On the other hand, several interior

**Asia's systems of i-cities are much larger, concentrated, diverse and complex than in other continents**

Figure 3.3 bis **CHINA and INDIA distribution of population by settlement size and urban population weight in i-cities**

Source: UCLG and CIMES-UNESCO




provinces have a monocentric system: Chongqing, for instance, gathers 60% of its total urban population to its capital city. The Tianjin province, close to the Beijing area, is a similar example, as its capital city is 35 times larger than its second largest city.

India's federate states have generally strongly polycentric urban systems, next to a compact network of i-cities that have benefitted from their proximity to both larger metropolitan agglomerations and the rural environment. In 2012, India had 54 metropolitan cities that accounted for 13% of the population. Together with their hinterland and the i-cities located in it, these metropolitan areas concentrated 40% of the national GDP. Both their number (forecasts show 69 metropolitan areas by 2025) and economic relevance are expected to grow (it is calculated that by 2025 they will concentrate half of India's GDP).[133] The development of i-cities, especially those located around metropolitan areas, will thus significantly affect India's economic development. Other South-eastern Asian developing economies with low urbanization levels, like Myanmar, the Philippines, Thailand and Vietnam, concentrate a significant part of their urban populations in capital cities but at the same time foster an extensive network of intermediary and small cities with a strong link to rural areas. The Philippines has two metropolitan poles: the metro area of Manila in the north, a megacity of over 13 million inhabitants, and Davao in the south, with 1.6 million residents. Between these two cities, a long corridor of 104 i-cities, together with smaller towns, concentrates 68% of the country's urban population.

### *Coastal, inland and landlocked i-cities*

A feature of the geography of i-cities in the Asia-Pacific region is that many of them are located on low-lying coastlines or along large, long navigable rivers. Consequently, many have ports, which play a crucial role in national logistics systems and servicing inland areas. Many i-cities in emerging economies of the region feature low-rise constructions and relatively high rates of urban growth. This is eliciting sprawling and poor planning, as well as poor-quality urban services and housing. In the developed economies of Japan, Korea, Australia, and New Zealand, **i-cities are generally better planned and have relatively good urban infrastructure and services. There are more efficient national connectivity systems and a much greater focus on risk management, densification, improved building construction and energy efficiency**.

Coastal i-cities in the region have developed a broad mix of economic activities. Eastern Asian countries experienced a thriving commercial and industrial development generated by export processing zones (EPZs). Transaction costs for i-cities, however, tend to be higher than in metropolitan regions, due to inefficiencies in supply chains. Moreover,

arterial road systems and access to transport logistics between metropolitan areas and i-cities tend to be heavily congested due to high vehicle ownership rates, even in more developed countries. While the whole Asian region has been increasingly susceptible to environmental threats, exposure to natural disaster (e.g. tsunamis, earthquakes and hurricanes), pollution of waterways, high incidence of water-borne diseases in tropical regions, and flooding during the wet seasons have been particularly menacing for coastal i-cities. Rising sea levels in Pacific islands has vastly affected economic performance, stability and the wellbeing of the citizenship.

Inland i-cities of Asia are growing at a slower pace than coastal i-cities. In China, for example, coastal i-cities are growing at rates around 2.7% per year, compared with a rate of 2.4% rates for inland, non-river port i-cities. Many of these inland i-cities are industrial or resource-rich regional centres, or agricultural regions, for instance, in the case of Australia. Most Indian i-cities are concentrated in inland Uttar Pradesh, Bihar and West Bengal states, located in the vast plains around the River Ganges, which host one third of the country's total population. Uttar Pradesh alone, inhabited by approximately 200 million people, has 124 i-cities with a population of 17 million – comparable by and large to the total population of its nine metropolitan areas.

**Many i-cities in Asia have transitioned from an agricultural tradition or administrative relevance into mixed industrial centres, thanks to rapid urban growth** – which also led many of these centres to pass the 'one million inhabitant' threshold. In many Asian developing economies, inland i-cities are often located along national arterial transport networks. Poor logistics and access issues due to inadequate or ageing infrastructure have had an impact on the competitiveness, productivity and growth of these inland i-cities. Many smaller inland i-cities in the region, especially in Southern and Eastern Asia and Australia, are experiencing a significant slowdown in urbanization and economic growth rates, mostly as they struggle to retain skills and attract investment capital.

Nepal, Bhutan, Laos and Mongolia are four landlocked developing countries in the Asia-Pacific region. Nepal is the most populated (29 million inhabitants) and the least urbanized (only 20% of the population live in urban areas), while in Mongolia, 75% of the population live in urban areas. Both primary and intermediary cities in these countries are generally constrained by weak regional networks of road and air transportation and insufficient access to ports in bordering countries. Many rely on imports, have high informal sector economies and lack basic infrastructure. As a result, landlocked i-cities in Asia tend to struggle with their own development while, at the same time, they have had to find resources and capabilities to accommodate increasing numbers of rural-to-urban migrants in the face of increasing economic urbanizing pressures.

### *Functional balance of Asian-Pacific i-cities: clusters and corridors*

I-city clusters are a significant recent development in the systems of cities in Asia and – to a lesser extent – Australasia. Most large metropolitan areas have a cluster of i-cities within a range of 75-150km from their centre. Many of these i-cities clusters have been planned as growth nodes or poles, such as Clark and Angeles City, 85km north of Manila (Philippines). Clark was a former United States' military base, which has been re-planned as and transformed into an important EPZ. It is one of several EPZ cities of the Philippines, like Subic Bay and Cavite, concentrated around Manila's metropolitan area.

In some countries, governments are promoting clusters of i-cities to serve as regional growth nodes and take advantage of spill-overs from megacities. High levels of public investment and involvement have been necessary to support their initial development. In some cases, governments have combined this strategy with PPPs and land development. The large metropolitan regions of Beijing, Shanghai (China), Bangkok (Thailand), Ho Chí Minh City (Vietnam), Delhi, Mumbai (India) and Dhaka (Bangladesh) are all planning and developing i-city clusters to take the pressure of development off metropolitan regions.[134] Clusters close to metropolitan areas are key for the Indian economy. India's 49 metropolitan clusters extend beyond metropolitan districts, and have grown to include 250 of the country's 450 i-cities with more than 100,000 inhabitants. These clusters could account for about 77% of India's GDP growth from 2012 to 2025.[135]

Corridor i-city development has been a significant feature of urban expansion in Asia and Australia. Many i-city corridors, however, are the by-product of poor regional planning and developmental control. Some i-city corridors are long and continuous in

**In 2012, India had 54 metropolitan cities that accounted for 13% of the population. Together with their hinterland and the i-cities located in it, these metropolitan areas concentrated 40% of the national GDP**

shape e.g. the urban corridor between Hồ Chí Minh City and Vang Tau in Vietnam, which spreads almost 100km. A similar i-city corridor development is taking place in Sri Lanka, between Colombo and Galle; in Thailand between Bangkok and Rayong, and between Manila and Batangas in the Philippines.

In Japan, Korea, and Australia, corridor i-cities are still growing, expected to eventually link up together, as is occurring in South-East Queensland, Australia. The Indian government is planning its largest i-city corridor development so far, between Delhi and Mumbai, to include 170 million people, with over 40 new or expanded i-cities and eight dedicated 'investment regions' for industrial development.[136] In Gansu, a Chinese interior province that borders with Mongolia, the urban system is articulated in 36 i-cities along 1,000km of connectivity infrastructure between Tianshui, its capital city Lanzhou, and Jiuquan, forming an extensive specialized corridor in the mining industry.

Corridor i-cities in Asia, however, are proving very challenging to manage. They tend to form as small towns along the main thoroughfares between metropolises and large regional i-cities and then grow off strip-market development, often with high levels of specialization and clusters of activities appearing in different parts of the corridor. Eventually, the corridor becomes a continuous system of expanded towns and villages that form linear i-cities. This frequently blurs the limits and boundaries of corridor i-cities, and many of these end up suffering from the very elements that made their development possible. Traffic congestion, growing water and air pollution and decreased economic efficiency are all common symptoms of unbalanced or deficient development in this kind of urban settlement.

**China's urban areas have grown at an unprecedented rate, and will continue to do so in the coming decades**

### *I-cities in Pacific Islands*

A quick note is necessary about the urban systems and i-cities of Pacific Island states. In these small countries, systems of cities tend to revolve around the capital city, often with fewer than 100,000 inhabitants. Urban development is generally characterized by low density, with growing levels of informal settlements. Most port/airport i-cities have grown reliant on tourism and governmental policies to drive economic development. Distance, poor logistics and a generally low skills base – together with extreme vulnerability to climate change effects – have hindered the development of i-cities' economies in Pacific Island nations.

## 3.2.2 Trends and national urban policy responses in Asia-Pacific i-cities

The diversity of Asia-Pacific countries makes it hard to analyze NUPs in the region without emphasizing the importance of economic and social contexts, as well as the variation and differences in their design and implementation. Most countries are confronted with the effects of urbanization, i.e. spatially unbalanced urban development; rural-to-urban migration; increased concentration in the main metropolitan agglomerations; development of urban slums; and inadequate infrastructures and urban services, particularly in peri-urban areas of metropolises and i-cities. Even those countries that do not show high levels of urbanization will experience increasing rates in the coming decades. **Most of them are being dramatically affected by the impending challenges of climate change, increased disaster exposure, and short-term environmental sustainability** – especially in the Pacific Ocean's archipelagos and island states.

During the last decades, many countries in the region strengthened the role of local governments in urban management, particularly through decentralization (Indonesia and Philippines) or increasing local administrative and fiscal autonomy (China and Vietnam). Developed countries in the region have also emphasized the role of their local governments. Decentralization processes, however, have not been fully completed (or have even regressed) in India, Malaysia, Pakistan, Sri Lanka and Thailand. Here, state, provincial and central governments concentrate most power and resources. In other countries, local governments are still at an embryonic stage.

Countries in the region are, however, moving towards the development of more coherent urban policies. Centralized governance systems and smaller states tend to put national urban development policies in the hands of central government. Some federal states, or at least those whose structures fit a more fragmented model, have favoured a more decentralized urban policy approach. Lastly, large economies with significant socio-political weight like China, India or Indonesia do not even have proper NUPs but rather have relied on national plans and/or sectorial initiatives. Thailand

has not developed any NUP, meanwhile the Bangkok Metropolitan Authority has designed its own policy instrument to deal with urban development issues in the area.

China's urban areas have grown at an unprecedented rate, and will continue to do so in the coming decades. Its urban system follows a concentrated blueprint that raises important questions, such as how to deal with unbalanced territorial development, increasing social inequalities and environmental issues. Among the challenges for urban policies in China in the next few years are the need for more efficient and greener urban planning; local public finance reforms; social inclusion – in particular the 'unrecognized' status of rural migrants accessing the cities – as well as better land management for urban expansion, and improved coordination of urban policies. It is worth noting that, since December 2014, the *hukou* system is being reformed to facilitate regulation in small towns and intermediary cities.[137]

Conversely, India – despite its fast-growing economy – is urbanizing at rates that are below those of other developing countries and, at this pace, is only expected to pass a 50% urban population threshold in 2040. Larger cities are confronted with extreme inequality, extensive slums, inadequate infrastructures and deficient essential services. Launched in 2005, the Jawaharlal Nehru National Urban Renewal Mission (JNNURM) is probably the closest India has had to an NUP. It brought about a significant 'paradigm shift' by introducing cities into national development objectives and establishing a USD 24 billion investment programme through a seven-year period.[138] The JNNURM was replaced in June 2015 by the 'Smart Cities Mission', with the aim of assisting the development of 100 cities through a USD 15 billion investment (see Box 3.3).

Instead of a comprehensive NUP, Indonesia is building on key governmental plans[140] to gather adequate human, financial and administrative resources and political consensus to support metropolitan areas and small cities shifting to a local development approach. The geography of the country, moreover, requires urban policies to tailor development measures to a scattered archipelago extending right across the region and hosting one of the world's largest populations. Similar challenges have confronted the Philippines, whose urban policies[141] suffer from problematic horizontal and vertical collaboration among local authorities and with central government. Informality is still a sensitive issue in the country; access to basic services and infrastructures is insufficient, and a lack of financial and human resources has prevented an effective, consistent response to urban challenges. This is all the more necessary as human settlements across the country are increasingly threatened by recurrent natural disasters.[142]

Developed countries in the region such as Australia and New Zealand have been adopting NUPs. Australia's 2011 'Our Cities,

## BOX 3.3 SMART CITIES MISSION: INTERMEDIARY CITIES IN THE URBAN AGENDA OF INDIA

The 'smart' cities involved in the Indian government's recent plan share a few characteristics that aim at comprehensive urban development. These features revolve around investment in basic infrastructure, robust IT connectivity, e-governance and citizen participation. This will promote **mixed land use** in area-based developments; policies for **housing and inclusiveness** that expand housing opportunities for all; **walkable localities** to reduce congestion, air pollution and resource depletion, while also **boosting the local economy**, promoting social interactions, and ensuring more security. The programme also aims at **preserving and developing open spaces** like parks, playgrounds and recreational spaces to enhance the quality of life of citizens, reduce the urban heat effects and promote a better overall eco-balance. The Mission aims to **promote a variety of transport options** – transit-oriented development (TOD), public transport and last-mile para-transport connectivity. The Mission's expectations rest on the goal of a **more citizen-friendly and cost-effective governance** that increasingly relies on online services to strengthen accountability and transparency. Smart cities within the Mission seek **an identity for the city and the application of smart solutions for infrastructure and services**. Out of the 98 cities selected to implement the integrated strategy of human development, nearly a half (46) are intermediary cities. Only five of them, however, were included in the programme's first implementation phase – Solapur, Davengere, Belgaum, Kakinada and Udaipur. This was swiftly revised in successive iterations of the programme and i-cities involved now include Warangal, Bhagalpur, Imphal, Panaji and Agartala – the latter four also being capitals of the country's least populous federate states.[139]

Our Future' focuses on cities with more than 100,000 inhabitants; New Zealand's National Policy Statement on Urban Development was launched at the end of 2015, with a public consultation. Both countries have progressed their integrated approach to urban policy, and their national strategies are among the few that consider the integration of secondary and intermediary cities. Korea is developing a national urban strategy to cope with urban challenges such as regional disparities (49% of the population is concentrated in the Seoul's metro area); the growing pressure of urban areas on the environment, and its ageing.[143]

Other countries have been promoting urban policies through different sectorial policies to foster economic development (Vietnam[144] or Malaysia,[145] for instance). A country like Pakistan, with the centrality of the city long-standing in its social organization, has experienced progress and performant service provision in its metropolises, but it is still looking at NUPs as a way to achieve better integration of its systems of cities.

Several other countries have adopted different strategies to promote smooth rural-to-urban transitions (Bangladesh, Cambodia) or to cope with the effects of conflict-induced migration and natural disasters (Nepal, Sri Lanka). Bangladesh has been struggling since 2006 to develop an NUP whose goals included the improvement of urban planning and land management capabilities and the protection of the urban environment and its water resources.[146] Cambodia is in the process of developing a national urban development strategy for 2014-2018. Nepal created its first NUP in 2007 and established the Ministry of Urban Development in 2012. Following the 2015 earthquake and for the coming years, however, most resources will be concentrated on reconstruction. Sri Lanka introduced its first NUP in 2010, aiming to become the 'Pearl of the Asian Silk Route'. The document was replaced and updated in 2015.[147]

In the Pacific, outside the large mainland nations (Australia and New Zealand), small island states or archipelagos are facing structural (if not geographical) difficulties in the establishment of a reliable infrastructure, the reduction of informality, and the strengthening of their capacities for key urban policy action. Climate change effects and a threatening vulnerability to natural disasters (hurricanes, flooding, wildfires) have also risen to the top of the urban agenda. A common element of NUPs in the Asia-Pacific region is that intermediary cities, though mentioned in several strategic documents, do not feature strongly. The United Nations Economic and Social Commission for Asia and the Pacific (UN-ESCAP) has given strong support to countries in the region to build urban policies that promote integration and the development of systems of secondary cities.[148] The importance of functional linkages between systems of cities has also been stressed by the Asia-Pacific Economic Community (APEC).[149]

Within the framework of the preparatory debates ahead of the UN Habitat III 2016 Summit, the representatives of the Asia-Pacific region have agreed on the Jakarta Declaration on 'Sustainable Urbanization to Accelerate Development'. **This document acknowledges the need for enhanced dialogue on urbanization and its effects horizontally across borders and vertically across governance levels**. But it also sets out key strategic directives for future region-wide coordination on urban development and its impact. The Declaration does not expressly refer to i-cities. Yet its recognition of the need for 'systemic solutions' and 'planned, productive and integrated city growth', and the call for cooperation among stakeholders 'to manage the increasing diversity and demographic complexity' of Asian-Pacific cities, are pivotal points of a rational and integrated roadmap for i-cities to follow in the coming years.

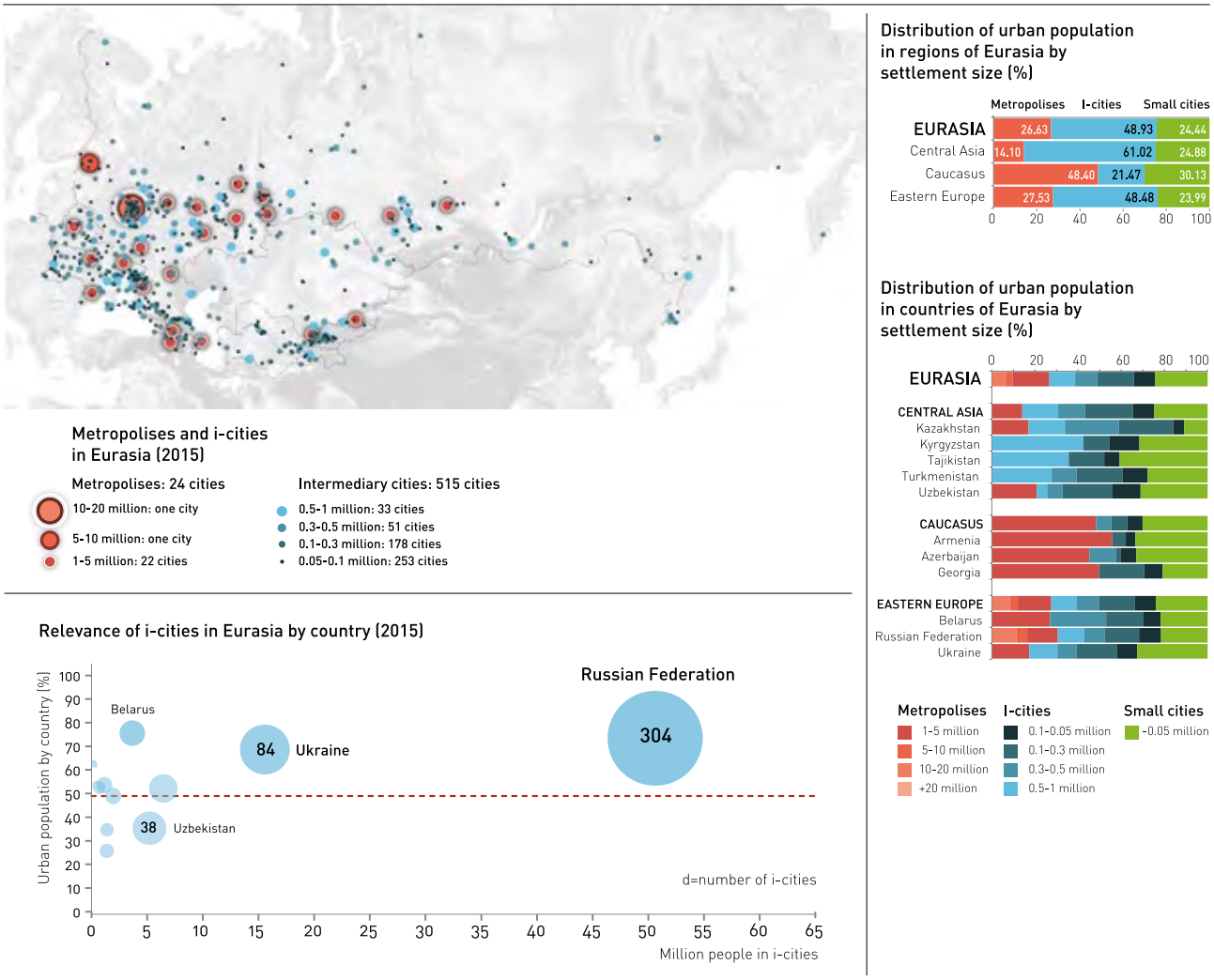
**I-cities in the Asia-Pacific region have been proven to contribute to overall development especially in polycentric systems of cities, but differences between i-cities and metropolises or megacities are expanding**

I-cities in the Asia-Pacific region have been proven to contribute to overall development especially in polycentric systems of cities, but differences between i-cities and metropolises or megacities are expanding. This affects the ability of regional i-cities to contribute to a more equitable distribution of wealth and production. The challenges confronting i-cities in Asia still relate mainly to the improvement of system interconnectivity (roads, railways, communications); weak local governance and financing; and ineffective strategic urban policy, particularly in terms of effective implementation.

# 3.3
# URBAN SYSTEMS AND INTERMEDIARY CITIES IN EURASIA

Figure 3.4 **EURASIA distribution of population by settlement size and urban population weight in i-cities**

Source: UCLG and CIMES-UNESCO.




## 3.3.1 Spatial integration and functional balance of Eurasian i-cities

Eurasia covers the territory's three sub-regions: Eastern Europe, the Caucasus countries and Central Asia.[150] The region is formed of 11 countries, nine of which are landlocked, and covers one sixth of the Earth's total land surface. Eurasian states had formed part of the Soviet Union before it broke up in 1991.[151] The total population of the region stands at about 279 million inhabitants, with an urban population of over 180 million people (2015), 59% in the Russian Federation. More than 73% of inhabitants in Russia and Eastern Europe live in urban areas. This rate lowers to 56% in Caucasus countries while in Central Asia it falls to 40%. There are a total of 24 metropolitan areas and 515 i-cities in the region. Almost 49% of the population live in i-cities, although there is significant variation among countries in the region. The median size of i-cities is approximately 171,000 inhabitants.

Compared with Europe, the distances between Eurasian cities are significant. In European Russia, regional centres (most of which are i-cities), are located about 200km from each other, a figure that is even higher in the Asian part of the country. **There are significant differences in the patterns, structures and factors that have shaped the development of i-cities across the region**. Historically, the strong influence of the Soviet legacy on the entire region's institutional, planning and socio-cultural systems is undeniable. The level and rates of development and urbanization, however, vary enormously. Population growth rates in Eastern European and Caucasus countries are falling, affected by rapidly ageing demographic trends, while annual urbanization and population growth rates in Central Asian states are barely higher.

Each country in the Eurasian region has adopted its own approach to define the status and classification of urban settlements, based on population, socio-economic and political significance, and other criteria.[152]

**The economic transition that followed the events of 1991 created a tendency towards concentration, agglomeration and urban sprawl, especially in larger cities and national capitals**

### *Monocentric/polycentric regional spatial structure in Eurasia*

The structure of urban population varies across the region. In Armenia, Azerbaijan, Georgia, Kyrgyzstan and Tajikistan 35% -50% of the total urban population is concentrated in the capital cities. While in the Russian Federation, Belarus, Kazakhstan, Turkmenistan, Ukraine and Uzbekistan, the urban population is more distributed among large agglomerations, i-cities and small towns.

The economic transition that followed the events of 1991 created a tendency towards concentration, agglomeration and urban sprawl, especially in larger cities and national capitals. While national population growth rates are falling, most capital cities have increased their relative demographic importance.[153] In the Russian Federation, the number of cities with more than one million inhabitants grew from 13 in 1990 to 15 in late 2012. Similarly, the population of most cities with over 500,000 inhabitants in Russia and 250,000 inhabitants in Belarus has grown, especially since the second half of the 2000s. Conversely, many medium and small-sized i-cities in the region are shrinking, experiencing a significant economic decline. In the more arid parts of Uzbekistan, Tajikistan and Turkmenistan, i-cities are greatly dispersed and have been functioning mainly as regional administrative, education and agricultural centres.

### *Coastal, inland and landlocked Eurasian cities*

Spatial systems of cities vary across the region. Most Eastern European i-cities are located on predominantly flat or undulate land along an extensive network of river waterways. Central Asian i-cities are nestled predominantly in fertile valley systems. Remoter i-cities, isolated from the main agglomerations, tend to fare worse socio-economically and have faced the additional challenge of losing most of their employable young population to more successful clusters of cities. The dynamics of ageing populations and rural-to-urban migration have also fuelled this disparity.

### *Functional balance of Eurasian i-cities: clusters and corridors*

Under Soviet rule, expanded towns and new municipalities were instrumentally created in Eastern Europe and Central Asia, primarily to meet the needs of the Soviet Union's national economy. These i-cities were often developed as 'monocities', single industry towns that responded to the needs and goals of major industrial programmes at the national level and integrated into production chains throughout the Soviet Union, rather than being embedded in or designed to stimulate local economies.[154]

A substantial part of the region's population is concentrated in clusters of cities that extend east of Saint Petersburg and Minsk, through Moscow. This system aligns northwards to Ekaterinburg, Astana, Omsk and Novosibirsk, and southwards to Rostov, Tbilisi, Baku, Tashkent and Almaty.

Armenia and Azerbaijan are two of the region's countries to benefit most from their geostrategic position along the gas and oil pipeline infrastructure that unites the Caspian and Black Seas, and to successfully put their own cities on the global map. The Tbilisi (Georgia)-Baku (Azerbaijan) corridor links almost all intermediary cities of both countries – including some historically relevant specialized clusters, such as GĐncĐ (Azerbaijan), a renowned centre of silk manufacturing. Ambitious projects, such as the Kars-Akhalkalaki-Tbilisi-Baku railway (which aimed to connect Azerbaijan and Turkey through Georgia bypassing Armenia with its persistent conflict and tensions)

have for years been trying to use i-cities as hubs and checkpoints in key infrastructural development. In the Russian Caucasus, a parallel corridor joins Machačkala (Dagestan), Grozny (Chechnya) and Nal'čik (Kabardino-Balkaria) with Krasnodar. The corridor is all the more relevant, given the underlying conflictual tensions that have characterized these regions for generations.

### 3.3.2 Trends and national urban policy responses in Eurasian i-cities[155]

The breakup of the Soviet Union in 1991 led to the end of its centrally planned economy, the rupture of established inter-republic economic relations and, consequently, to serious difficulties in securing industrial raw materials and energy resources. After the inevitable economic decline of the early 1990s, most of these countries accelerated the modernization of their economies. Some countries' GDPs are, however, still below their 1990 levels – as is the case with Georgia, Kyrgyzstan, Tajikistan and Ukraine.[156]

This restructuring process entailed an even greater polarization between larger and lower-tier cities, as well as between central and peripheral regions. Job loss, increasing inequalities, migration towards capitals and major cities, stagnation of small and medium urban settlements, including in particular the many mono-industrial towns of the Soviet era and those that remained outside of the central core corridors of development, all became structural issues affecting urban development of the entire region.[157]

However, some i-cities in many parts of Russia, Kazakhstan, Azerbaijan and Turkmenistan are benefiting from emerging economic trends, especially production and export of oil, gas, minerals, metals and chemical products. Improvements have also been seen in i-cities connected to ports, transportation gateways and cross-border trade opportunities for import-substitution activities, as well as in smaller cities attractive for the tourism sector. In addition, clusters of i-cities around larger cities with specific economic advantages are growing. However, many have experienced the adverse effects of proximity to megacities – loss of local jobs and the gradual transformation into a megacity's residential periphery. Importantly, the wealth produced by i-cities embedded in extractive and mining economies has in general been accumulated in national and regional capitals, or overseas via foreign financial actors active on the global market and not in the i-cities themselves. This is feeding an increase in inequality and a lack of economic opportunities.[158]

For most urban settlements, however, the transition towards a market economy has entailed a decline in access to basic services and a downward trend in the quality of their provision. The former Soviet regime left behind a set of urban infrastructures for public utilities (water, sanitation, transport, heat supply, among others), although generally characterized by high production costs and inefficient use of resources. **In the past decade, basic service provision and infrastructure management have stabilized, showing signs of improvement**. A majority of i-cities, nonetheless, still face growing costs to maintain and renew this infrastructural system. This has led to significant service disruption in many cities of the Caucasus and Central Asia.

Forty percent of former public housing privatized in the 1990s has deteriorated significantly, affecting the quality of life of citizens, increasing the cost of energy and the environmental impact of cities altogether. Faced with relatively poor energy efficiency, countries such as Russia and Belarus have launched specific national programmes, aimed specifically at the larger agglomerations of residential buildings, for the diffusion of energy-efficient practices. Others are implementing pilot programmes and initial evaluations (Armenia, Kazakhstan and Uzbekistan). In general, the scale of new energy-efficient house construction is modest throughout the region. The incremental transformation of land tenure and housing provision towards a market system has led to considerable and increasing urban sprawl, putting additional strain on soil use in cities' hinterlands, especially in Central Asia and the Caucasus. In Eastern European i-cities, where the population has scarcely grown or even declined, 'centric' areas have deteriorated most as a result of urban sprawl, heightening maintenance and infrastructural problems. The ageing population in Eastern European i-cities, moreover, is constraining housing and healthcare service provision. Similarly, the levels of urbanization in Central Asian economies are putting pressure on governments to generate employment opportunities for younger migrants that opt to move to larger cities. Regional tensions and conflicts are also having an impact on the stability of governments and populations, as well as on the capacity to keep those i-cities

**This restructuring process entailed an even greater polarization between larger and lower-tier cities, as well as between central and peripheral regions**

close to conflict zones safe and secure. Deficient or uneven administrative reforms and partial decentralization processes have left many i-cities with unclear powers and reduced resources and capacity to face current challenges. I-cities have seen their control over processes of urban development, long-term territorial planning and natural resources decrease. Blurred distribution and duplication of functions, powers and competences between the central and regional levels of the executive power have affected management performance in many i-cities, as has the lack of funding to implement the necessary development programmes.

Urban planning – once central to urban policies in the region – has become progressively less effective, following the breakup of the Soviet Union. **The relationship between spatial planning and economic and human resource development remains weak**. Even though the official discourse privileged balanced territorial development, the actual political priorities of the region have focused, over the last few decades, on creating core economic growth by strengthening the role of metropolitan areas (Moscow and Saint Petersburg in the first place) with a focus on transport infrastructures and the amalgamation of surrounding settlements. Several countries in the region, such as Armenia and Georgia, are at various stages of formulating NUPs, but these are still either incomplete or not integrated into more comprehensive national economic, transport and human resources policy frameworks.

The destiny of i-cities in post-Soviet countries has been particularly affected by national governments' policies and has generally been neglected in overall territorial and urban policy agendas. In Russia, intermediary and small cities tend to revolve around specialized economies and a low business diversification. Many i-cities find it difficult to adjust to the decline of heavy manufacturing industries, to diversify their output and revamp their local economies. This quickly escalates into problematic capital and investment attraction. As mentioned above, this is with the exception of those that have managed to transition to, and take advantage of, new export-oriented economic trends. Several i-cities have also experienced significant population declines due to lower fertility rates and outward migration of youth and entrepreneurs, an issue that seems bound to persist in the future for many Eurasian i-cities. National, regional and local policy-making systems are vertically hierarchized. The decision-making process cascades down to i-cities with a direct impact on small settlements and rural areas, whose existence is thereby dependent on dynamic interaction among such cities. The deterioration of their systems, a lack of investment in their economic and social interconnectedness, and insufficient capacities to recognize and address their specific issues, are compromising i-cities' potential territorial integration and development prospects.

As noted in the UN-ESCAP report, 'the changing of the status of the region, which

was previously isolated from the global economy, will require a new understanding of the role of cities and the creation of a new urban framework. The new paradigm calls for a major reconfiguration of the cities' role at both national and regional level, including the emergence of new leading cities with industrial, innovation, transport and logistics potential'. Much greater attention must be given to increasing i-cities' potential to generate productive employment, attract investment and improve international linkages.[159]

**Decentralization of powers should be legislatively reinforced through the administrative and financial empowerment of local authorities**. As a converging process, this should also contribute to the formulation of well-balanced national policies, with the creation of mechanisms at the central level that are able to stimulate i-cities' development and modernization. More endogenous base-development is required to revitalize the material and social capital and assets of i-cities, resorting to knowledge, information, creative and technology-based industries while reducing their reliance on imports. The long-term prosperity of i-cities is not, however, just an economic matter. New local policy frameworks should foster and privilege cultural heritage and educational opportunities – catalysts of a high quality of life for residents and citizens in the long term, especially in the context of post-industrialization and modernization of economies, lifestyles and participation.[160]

The environmental impact of urban areas, climate change adaptation and mitigation actions, as well as disaster management, should also be addressed through adequate urban planning and the modernization of infrastructures and services. Adequate policies can help to address the shrinking phenomena that have affected many i-cities, promoting denser, more compact cities and looking for solutions to ever more pressing ageing and migration issues. I-cities should be better integrated into spatial trade and economic development corridors. Eurasian countries need to include i-cities in their national strategic programming when designing transportation infrastructure improvements that could become the basis for a region-wide network of development – an element which has sensibly upgraded the effectiveness of urban policies in other regions. Eurasian countries would benefit significantly from adopting a comprehensive urban policy framework that explicitly formulates concepts and strategies of urban and spatial development. To do so, they will need to develop much more open, collaborative and inclusive approaches to urban governance. Eurasian governments have a responsibility to enhance their economic development policies and link these to urban development planning to overcome the challenges that are holding back many countries in this region, and capitalize on the many available opportunities towards more efficient, sustainable and inclusive urban development.[161]

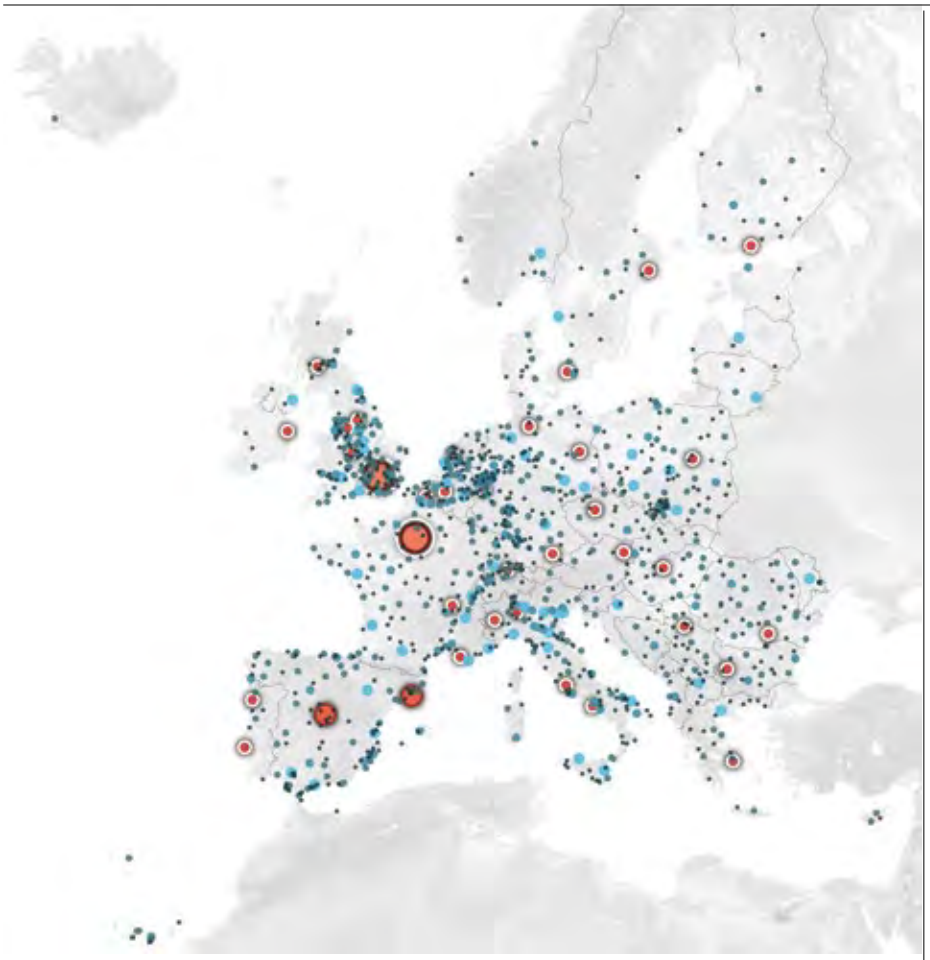
**The new paradigm calls for a major reconfiguration of the cities' role at both national and regional level, including the emergence of new leading cities with industrial, innovation, transport and logistics potential**

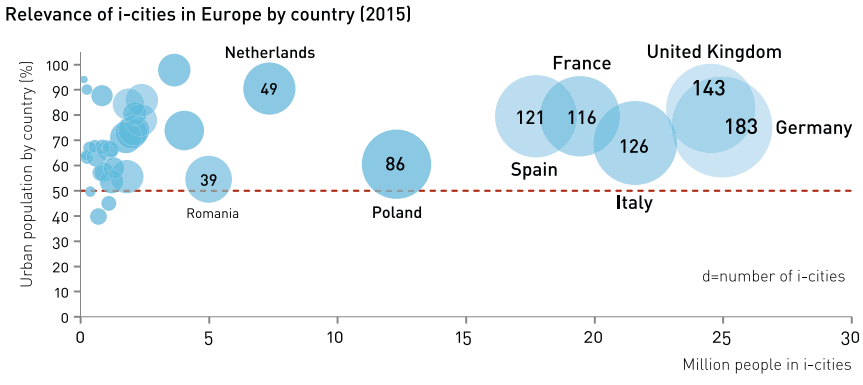
Photo: ppl / Shutterstock.com - Astana (Kazakhstan Republic).

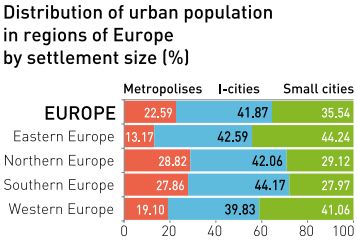
# 3.4
# URBAN SYSTEMS AND INTERMEDIARY CITIES IN EUROPE

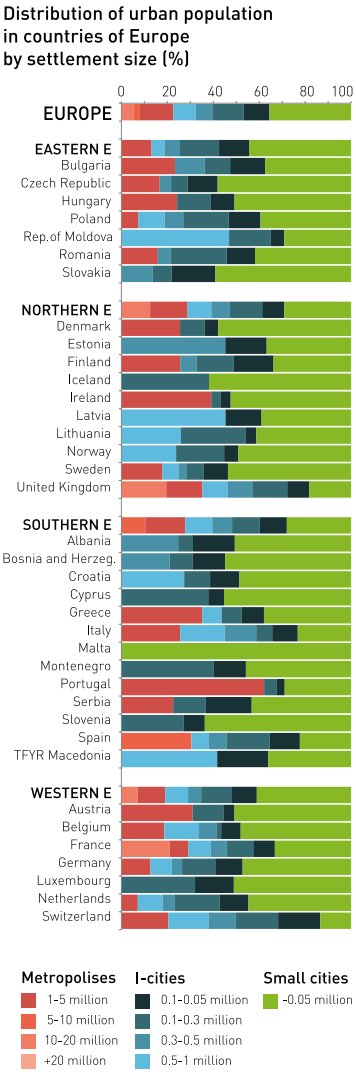
Figure 3.5 **EUROPE distribution of population by settlement size and urban population weight in i-cities**

Source: UCLG and CIMES-UNESCO



## 3.4.1 Spatial integration and functional balance of European i-cities

Europe is the world's region with the highest proportion of urban population living in intermediary cities (41.9%). I-cities with fewer than 300,000 inhabitants in particular, host one quarter of Europe's entire urban population, compared with 22.6% living in metropolises. The third most urbanized region on the planet, Europe hosts 12% of the world's population settled in intermediary cities, after Asia (45%) and Africa (12.3%), and before Latin America (11%).

Even though i-cities are relevant in each of Europe's sub-regions, just six countries concentrate 775 out of a total 1,136 i-cities across the continent. These i-cities have 120.4 million inhabitants, or 71% of Europe's whole i-city population and 30% of the whole urban population of Europe. These six countries are: Germany (183 i-cities and 40% of the urban population); the United Kingdom (143 i-cities and 46%); Italy (126 i-cities and 51%); Spain (121 i-cities and 47%); France (116 i-cities and 37%); and Poland (86 i-cities and 53%). Northern countries, moreover, host over 37% of their urban population in i-cities, even though small cities with fewer than 50,000 inhabitants are still prevalent (48% of the urban population).

### *Monocentric/polycentric regional spatial structure in Europe*

Europe's urban system is a valuable example of a polycentric system with high territorial cohesion. Significantly, 65% of the EU's territory is covered by 45-minute commuting from urban areas, especially in Central and Western Europe.[162] Despite being Europe's least urbanized area, Eastern Europe also has a polycentric urban structure. Eighty-seven percent of its urban population live in intermediary and small cities. In Poland, for instance, larger i-cities such as Kraków, Łódź, Wrocław and Poznań have been losing population and yet manage to be functionally competitive with the metropolitan area of Warsaw – whose population, on the contrary, has steadily increased since the 1990s. On the other hand, in Hungary, Budapest's preeminence is absolute, with the capital having the same population as Hungary's other 18 cities. In smaller countries in Western Europe, such as Switzerland, the Netherlands and Belgium, 66%, 48% and 33% of their urban populations, respectively, are concentrated in i-cities well-connected to their respective capitals. Together with the Zurich area, the Geneva-Lausanne-Bern-Basel corridor hosts 50% of Switzerland's urban population.

Europe's North and South have the smallest concentration of population in i-cities. Portugal's system is 'bicentric' and articulated between the poles of Oporto and Lisbon and hosts 60% of the urban population when just 8.9% of the total population reside in i-cities. A similar pattern can be seen in Spain, where the Madrid-Barcelona binomial makes up 30% of the whole country's urban population, even though its 121 i-cities form a continual extended network that shapes various corridors on the Mediterranean coast and inland, especially through intermediary provincial capitals. In Italy, Milan and Turin are the backbones of a network of well-connected i-cities in Italy's largest plains known as Po Valley and share the country's most developed territorial infrastructures. In the centre, Rome and Naples are the urban gateways to a system that, in the South, relies almost exclusively on intermediary and small cities, deeply linked to the rural environment and economy. In Scandinavia, urban development is greatly affected by the scarce population and massive territorial extensions in Sweden, Norway and Finland. Oslo concentrates 23.8% of the entire Norwegian urban population and connects to Bergen, Stavanger and Trondheim through an urban coastal system internally divided by large distances. In Sweden, small cities of fewer than 50,000 inhabitants host 53.6% of the whole urban population, with Gothenburg and Malmö as the main i-cities in the system – the latter is also pivotal in the Øresund region, together with Denmark's capital, Copenhagen.

**Europe's urban system is a valuable example of a polycentric system with high territorial cohesion**

### *Coastal and inland European intermediary cities*

Europe's urban system of i-cities is one of the world's most complex. **The high density, territorial connectedness and economic and functional integration with both metropolitan and rural areas, make differences among coastal, inland and enclaved cities much less apparent**. The urban population is quite evenly distributed geographically, but the coast plays an important role, hosting 35% of the population.[163] River waterways – like the Danube or the Rhine – are traditional

industrial cores that host a number of inland i-cities.

While i-cities along the coast or the Alpine arch link to form strategic urban corridors, many regional i-cities that are not well-connected have also been central to inland rural development in major European economies. Such is the case in Lleida (Spain), Limoges (France), Erfurt (Germany) and Lincoln (United Kingdom), or the less populated areas of Scandinavia or Eastern Europe's large plains. Countries like France, Germany, Spain or Italy also show significant differences in development and competitiveness between coastal and inland i-cities, even though many of them have been able to buck such trends by leading, for instance, the agro-alimentary and tourism industries.[164]

### *Functional balance of European intermediary cities: clusters and corridors*

**The Trans-European Networks (TEN) policy revolved around ambitious EU-funded projects and goals in transport (TEN-T programme) and energy (TEN-E programme) infrastructure and connectivity**

National capitals are essential to the economies of many European countries.[165] In France and the United Kingdom, for example, i-cities have benefited from their proximity to global cities like Paris and London, the most accessible and connected areas in the region. I-cities such as Oxford, Brighton and Southampton (United Kingdom) have repositioned themselves among larger metropolitan areas as clusters of creative industries.

Thanks to a mix of long-standing spatial systems and policies that have long fostered spatial balance, German i-cities have developed as administrative, manufacturing or administrative centres, with a strong tradition of regional and international market integration. Mainz, Karlsruhe and Münster (Germany), for example, form a significant bio-pharmaceutical cluster, hosting an emerging industry that links the chemical industry with research and university centres. In Northern European countries, Aalborg (Denmark) or the small i-city of Gävle (Sweden, north of Stockholm) have been leading the digital industry in software design and e-commerce.

Technology and mobility clusters have benefited from spill-overs in the automotive industry of the Stuttgart area (Germany), and Wolfsburg, 75km east of Hannover, hosts the headquarters of Volkswagen. Grenoble's micro-electronics cluster has thrived in the Rhône-Alpes region (France), one of the continent's core areas for applied research. Rzeszów, a city of just 185,000 inhabitants in southern Poland, one of the least connected areas of Europe, has nonetheless developed an important aero-spatial cluster, as shown by the emergence of the Aviation Valley association of businesses in the industry.

**The agro-alimentary industry also has significant weight in the produce economies of several Southern and Eastern European regions**. Logroño, capital of La Rioja region in Spain and centre of one of the most important wine clusters in the world, and Almería, the area with the world's highest concentration of greenhouses and the centre of the Mediterranean's most intensive agro-alimentary and horticultural industries, stand out in the Spanish landscape of i-city clusters. Finally, Section 2 has already mentioned the specialized clusters of northern and central Italy, which formed the impetus for an integrated European policy on productive clusters in the first place.

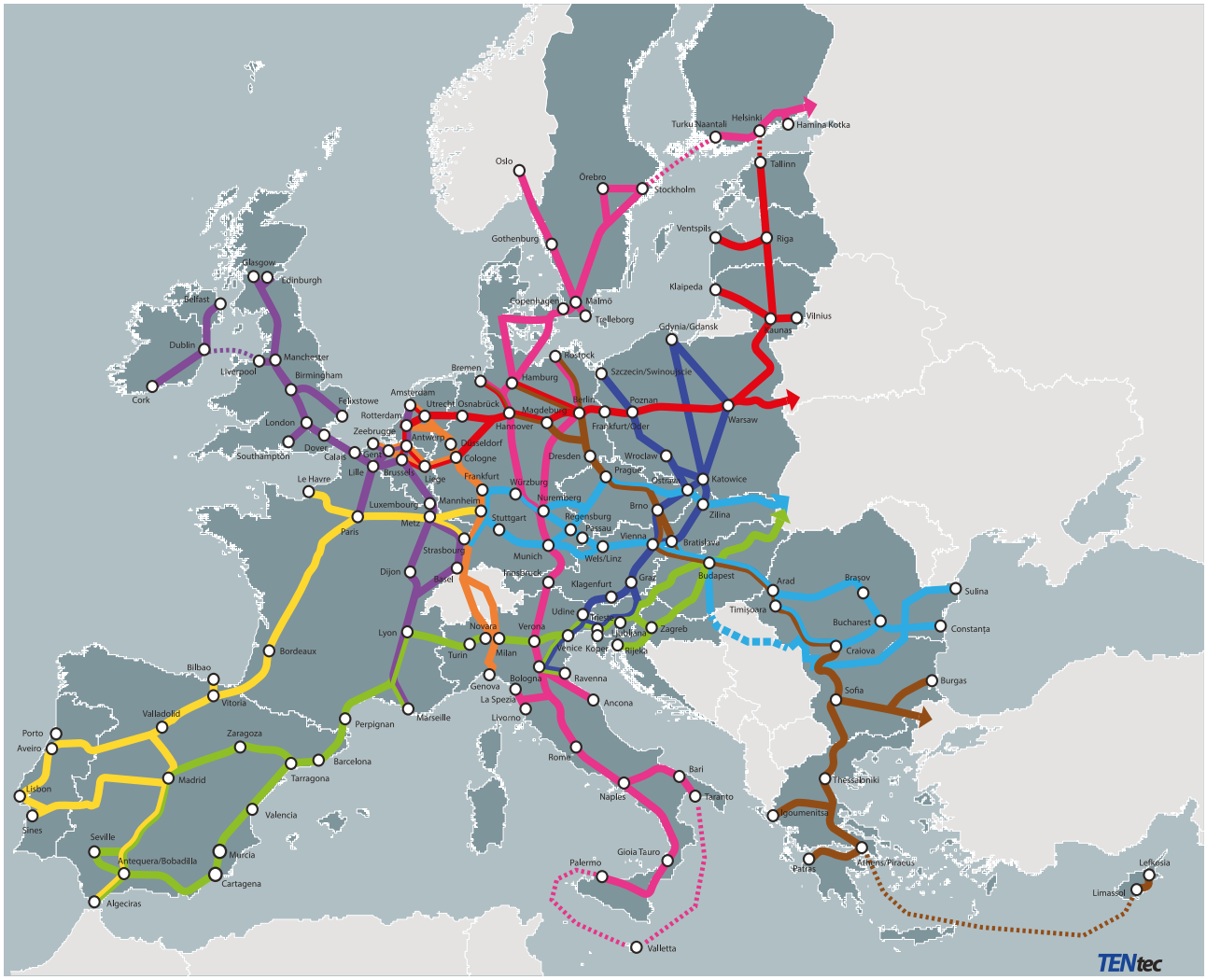
Urban corridors are a feature of Europe's territory. They have also been pivotal in EU policies. A framework for interconnected corridors across Europe was first established in 1996. The Trans-European Networks (TEN) policy revolved around ambitious EU-funded projects and goals in transport (TEN-T programme) and energy (TEN-E programme) infrastructure and connectivity. The policy was significantly revamped in 2014,[166] with a new financial framework[167] and a strong link to the overall sustainability and competitiveness objectives of the EU, under the EU2020 flagship programme. The map of the new TEN infrastructural goals (see Figure 3.6) shows the depth and pervasiveness of the EU's investment in strategic productive corridors across the whole of Europe.

Several examples of effective corridors stand out. The Randstad region in the Netherlands, in fact a polycentric metropolitan area of seven million inhabitants, comprises 21 mid-sized cities in a crescent-shaped corridor from Utrecht in the east to Dordrecht in the south and Alkmaar in the north. The region forms a ring of four large urban agglomerations (with a population of between 1.3 and 0.5 million inhabitants), Amsterdam, Rotterdam, The Hague, and Utrecht, as well as 17 medium and small-sized municipalities, such as Almere, Delft, Leiden and Haarlem.

The Dutch planning system was designed to link cities along the major road and rail corridors and strategically place employment centres in smaller i-cities to distribute occupation around the country and avoid an

Figure 3.6 **TRANS-EUROPEAN Networks (TEN) corridors**

Source: http://ec.europa.eu/transport/infrastructure/tentec/tentec-portal/site/




over-concentration of jobs in larger cities. The development of the European transport and railway systems has resulted in many i-cities being linked along these corridors, both within a country and between different countries (see Box 3.4).

**The development of i-city corridors has been relevant in Southern Europe too**. Together with the long-standing support of corridors across the continent,[168] the EU has encouraged the emergence of cross-border cooperation between cities e.g. Biarritz and San Sebastian between France and Spain, or Basel and Freiburg between Switzerland and Germany. Many of the TEN corridors in Figure 3.6, moreover, are located along pre-existing, historically active social and economic corridors, which, over the last two decades, have benefited ostensibly from the modernization, infrastructures and homogenized standards imposed by EU policies. Within the framework of the Dutch Presidency of the Council of the EU (during the first semester of 2016), a 'EuroLab' on labour mobility was set up among Dutch, Belgian and German cities, together with an urban agenda, to identify the obstacles and shortcomings in European regulation that are hindering consistent and effective urban development in the region.

## BOX 3.4 EUROPE'S SCANDINAVIAN-MEDITERRANEAN CORRIDOR

The Scandinavian-Mediterranean corridor is the longest of the nine core network corridors delineated across Europe by EU policies.[169] It connects economic centres and ports such as Helsinki, Stockholm, Copenhagen, Berlin, Rome and Valletta, and stretches from Scandinavia down to southern Italy and Malta, while connecting high-productivity areas of southern Germany, Austria and northern Italy. Logistically, it crosses the Baltic Sea and reaches ports on the Tyrrhenian, Adriatic and Ionian seas. The corridor has become a crucial North-South axis at the core of Europe's economy. The most important pending projects along this corridor include the Fehmarnbelt fixed immerse link, connecting Sweden to Germany through Denmark, and the Brenner base tunnel between Austria and Italy. Both would address certain interconnectivity issues and bottlenecks that affect freight movement capacities across the region. Their solution would improve transport efficiency and economic performance significantly.

While the corridor passes through some of the biggest cities in Europe, there are also many i-cities located along it. Many of these have small and medium-sized industries, assembling and providing a broad range of products and services that access and leave the area's industry supply chains along the corridor's route. The corridor provides access to those Mediterranean ports that are growing, thanks to their links to the world's largest container-ship routes from other continents. Cities sited on European economic trade corridors are also becoming attractive for investment, as a result of their improved accessibility to markets and the specialized infrastructure that has been developed to support the policy's projects and prospects.[170]

### 3.4.2 Trends and national urban policy responses in European i-cities

There is significant variation in national urban policies (NUPs) across European countries, although the EU aims to present itself as a proactive driver to give the urban policy domain a genuinely European political and strategic direction.[171] An all-encompassing EU urban agenda has a number of challenges. **Cities include a large range of human settlements that, all the while creating opportunities and fostering connectedness, are particularly vulnerable to economic cycles and employment downturns**. Europe, moreover, is characterized by a large diversity of spatial settlements,[172] as some portions of the territory remain prevalently rural (western and central areas of Spain like Castile and Extremadura, central areas of France, Poland, Romania or Moldova, for instance). Meanwhile, others show huge urban concentration (e.g. Germany, Belgium, the Netherlands or England). Demographic trends have also been inconsistent in the European urban landscape: many intermediary medium-sized cities, for example in East Germany, have experienced a decline in population while others benefit from the arrival of immigrants or face significant population ageing. It is estimated that 40% of European i-cities with a population of 200,000 or more have

lost population. 'Shrinking' i-cities are often connected to radical changes in economic specialization (e.g. the decline of steel, mining and metal industries in Katowice, Poland, and Timisoara, Romania). This is another key challenge that EU urban policy has recently taken up[173] – especially in terms of rural-urban relations and the promotion of mid-sized or intermediary cities as nodes in polycentric national urban systems.[174]

**Traditionally, cities have been highly relevant in Europe's regional and national policies**. As an evidence of this trend, the Dutch Presidency of the Council of the EU promoted, in May 2016, the approval of the 'Pact of Amsterdam', a new EU urban agenda that now informs the policy debate about EU development priorities, including decentralization and empowerment of cities and their local governments. The Pact builds on the legacy of key strategic European urban policy documents – the Leipzig Charter on Sustainable European Cities (2007), the Toledo Declaration on Urban Development (2010), the Riga Declaration on the EU Urban Agenda (2015) – and couples the EU's urban policy vision with the comprehensive EU2020 objectives and the challenges that the EU faces, up to 2050. Like its strategic predecessors, the Pact of Amsterdam was the initiative of the EU Member State holding the Presidency of the Council of the EU at that time, demonstrating how the EU and its institutions can progress urban policy.

On the one hand, the Pact of Amsterdam is key to recognizing the intense relationship between EU urban policy and European cities. The urban level is, after all, where a myriad of EU legislative acts are implemented, and the urban context has historically fostered successful cooperation experiences and experiments, e.g. the European Territorial Cooperation Programme (URBACT); the European Observation Network for Territorial Development and Cohesion (ESPON); as well as European cities and local government

Photo: Andrea Ciambra - Palermo (Italy).

networks like Eurocities, the Council of European Municipalities and Regions (CEMR), Eurotowns, and dozens of thematic networks. On the other hand, the Pact serves as a roadmap for the future of EU urban policy, setting out next institutional steps towards better regulation, funding and knowledge-sharing, with a common consistent stance in international institutions and frameworks, including Habitat III. Many of the strategic visions developed at the European level, moreover, revolve around the role of intermediary or mid-sized cities. The large proportion of the European population living in these settlements; their role in the face of today's economic, social and environmental challenges; and their support to the functioning of larger agglomerations and metropolises, are all key tenets of the long-term policy plan developed by the Pact, as well as several other key European urban policy documents.

On the path to the 2016 Habitat III meeting, moreover, the representatives of the European members of the UN Economic Commission for Europe (UNECE) approved, in March 2016, the Prague Declaration on the 'European Habitat'. This document collects the key strategic points that are shaping the urban debate in Europe. While focusing on pressing threats such as climate change effects, marginalization of vulnerable communities and inclusive local governance, the Declaration also invites national governments to consider 'strategic planning of human settlements in a polycentric and balanced territorial development' – a testament to the importance of territorial integration in Europe's urban tradition and a key strategic horizon for i-cities.

**European urban policy also has a lasting effect on domestic policies, since it sets the background for the development of national frameworks and plans**. This has been the case in a number of national experiences, sometimes regardless even of the differences in institutional organization and national governance. France, for instance, is a traditionally centralized country yet its cities are nonetheless a constant policy interlocutor.[175] France's structural *Politique de la Ville*, originally devised in the 1980s, has been significantly reshaped in the 2010s, with a systematic attempt to promote, in line with international and European guidelines, strengthened cross-level dialogue, easier access to financial resources for local governments, and a cut in the bureaucratic process. Territorial fragmentation has been simplified, several agencies have been set up to tackle different issue areas,[176] and channels of local participation in decision-making have been improved.[177] The central government maintains its prerogatives of 'legality checks' and monitoring tasks, but shares budget management directly with the local governments through the *Contrat de Ville*. The role of newer agencies, like the National Agency for Urban Renewal (ANRU), has been crucial in bridging the gap between national policy and European objectives.

Germany, on the other hand, is a federal state with strongly multi-layered urban governance[178] that distributes the authority and capabilities to shape a common urban policy at the local, regional and national level. The 2007 memorandum, 'Towards a National Urban Development Policy in Germany', is currently the main roadmap in the definition of a consistent national urban policy. This builds on active collaboration between the local level (through the German Federation of Towns and Municipalities and the German Association of Cities) and the *Länder* (federal states). The policy is promoting open platforms for horizontal cooperation, as well as enhanced funding mechanisms for self-governance initiatives. The role of the federal government as a mediator and 'consensus-broker' at the European level, however, remains critical.

Issues such as integrated urban governance and economic development (e.g. Serbia), rural-urban development inequalities (e.g. Norway), or centre-periphery disparities between a metropolitan area and its surroundings (e.g. Moldavia) have informed the debate on NUPs, also in those European countries that are not part of the EU. Even though horizontal cooperation at the continental level has had an impact in this regard, framing issues in a global context – such as Habitat III – has helped shape urban policies in a way that is consistently 'European' in its goals and methods.

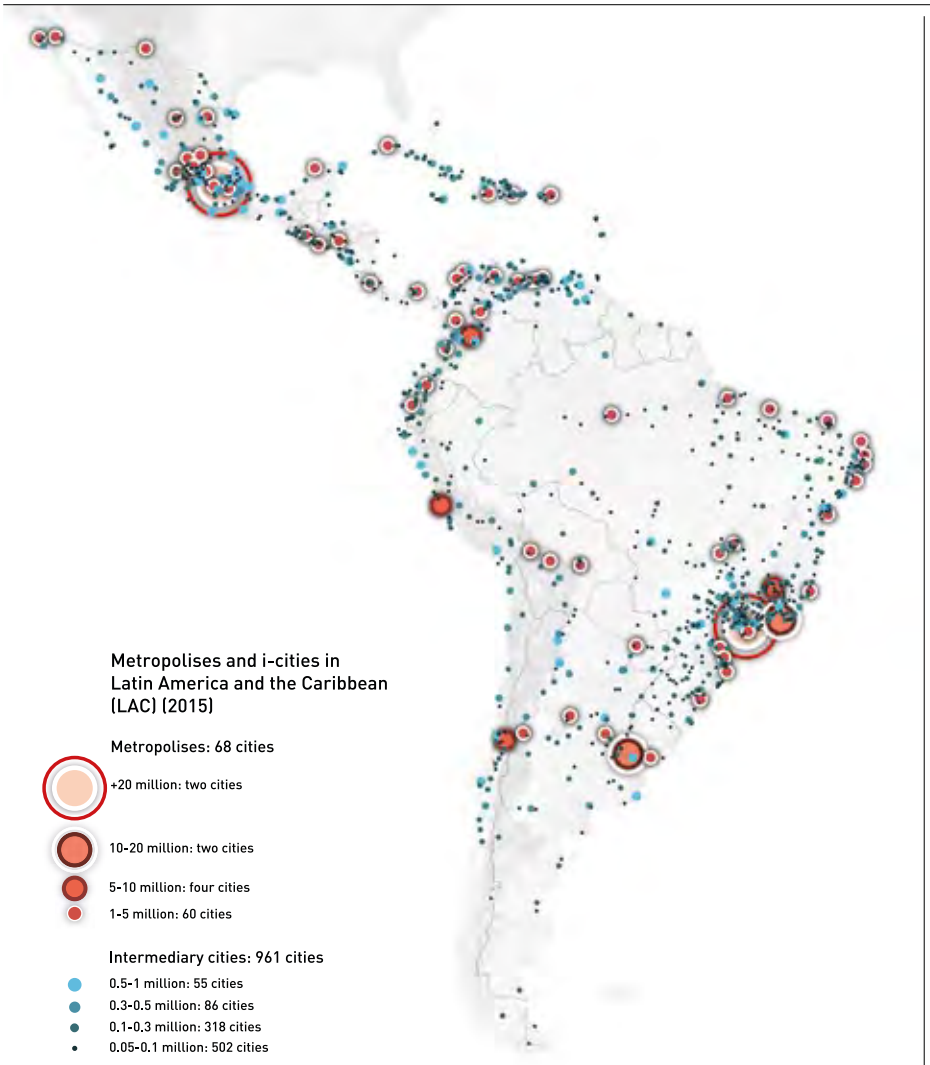
The examples above show that in spite of the diversity and fragmentation that characterizes governance in Europe, especially when it comes to the relationship between the centre and the local level, NUPs have been guided by structural, overarching stimuli at the European level. The strategic documents that have paved the way towards an EU Urban Policy Agenda are proof that the European level is finally creating the conditions and providing the resources for NUPs to converge on common objectives and shared values and visions.

**The strategic documents that have paved the way towards an EU Urban Policy Agenda are proof that the European level is finally creating the conditions and providing the resources for NUPs to converge on common objectives and shared values and visions**

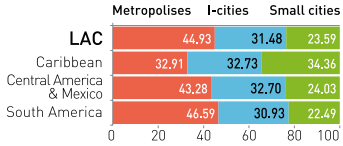
# 3.5
# URBAN SYSTEMS AND INTERMEDIARY CITIES IN LATIN AMERICA AND THE CARIBBEAN

Figure 3.7 **LATIN AMERICA AND THE CARIBBEAN urban agglomerations and distribution of population by settlement size**

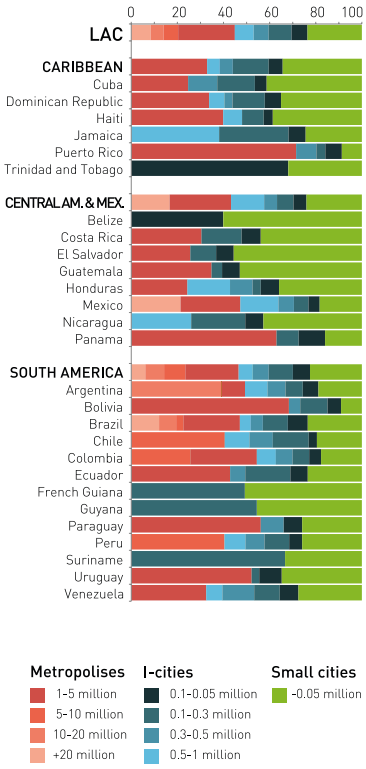
Source: UCLG and CIMES-UNESCO




Distribution of urban population in regions of Latin America and the Caribbean (LAC) by settlement size (%)



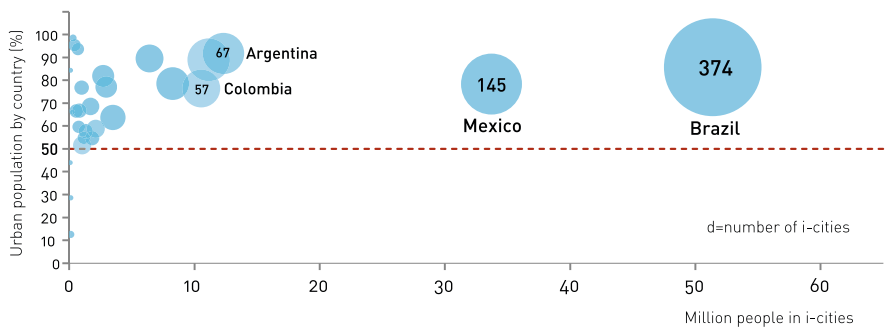

Distribution of urban population in countries of Latin America and the Caribbean (LAC) by settlement size (%)







Relevance of i-cities in Latin America and the Caribbean (LAC) by country (2015)



### 3.5.1 Spatial integration and functional balance of Latin American and Caribbean i-cities

Of Latin America's 961 intermediary cities, 693 (72.1%) are located in South America, mostly in the region's largest economy, Brazil. It concentrates over one third of all i-cities in Latin America, followed by Mexico (15% of the total), Venezuela (7.3%), and Argentina (6.9%). **Brazil and Mexico are also the region's main emergent economies**, accounting for 54% of the entire urban population of Latin America settled in i-cities. Cuba and the Dominican Republic, on the other hand, stand out amongst countries in the Caribbean Sea. They are the most populous countries in the region account for 57% of the Caribbean population living in i-cities.

#### *Monocentric/polycentric regional spatial structure in Latin America and the Caribbean*

**Most urban systems in Latin America and the Caribbean are dominated by monocentric or bicentric systems**. In South America, the urban systems of Argentina, Chile, Paraguay, Peru and Uruguay show a hypertrophic capital city pattern (their capitals concentrate between 32% and 56% of these countries' total urban population). Buenos Aires' population is ten times that of the two other largest metropolises in the country. I-cities in Argentina (67) host 32% of the urban population. The same population is concentrated in Chile's capital, Santiago, as in its 30 i-cities. Central American and Caribbean countries, although to a lesser extent, show a similar pattern. Panama City concentrates 63% of the urban population of the whole Republic. Guatemala City has 18 times the population of Quetzaltenango – the country's second largest city – while, at the same time, all of Guatemala's i-cities are located within a 100km radius of the capital. Bolivia and Honduras have a bicentric or tricentric model (two or three cities concentrate 68% and 43% of the urban population respectively). I-cities in these two countries host 22% and 39% of the urban population in twelve and eight cities respectively.

Brazil, Colombia, Mexico and Venezuela are the only countries with a more polycentric urban system pattern – even though in the former three, the largest city is much bigger than the next (Mexico City alone concentrates 21% of the urban population of the whole country; Bogota, 20%; São Paulo and Rio de Janeiro, 12% and 7% respectively). In Brazil, more than 50 million people – 30% of the urban population – live in 374 i-cities of mainly 100,000 to 300,000 inhabitants (10.8%) and 100,000 to 50,000 inhabitants (8.6%). Most Brazilian i-cities are concentrated in a radius of 300km from Rio and São Paulo, along the coast of the north-eastern states and in the States of Paraná, of Santa Caterina and Rio Grande do Sul in the South. Colombia has 57 i-cities that host 28% of the urban population, as well as six agglomerations with more than one million inhabitants (54% of the urban population). Mexico has the second largest megacity in the region, followed by 13 agglomerations with more than one million inhabitants and 145 i-cities, in which 34.3% of the urban population dwells (16.5% with between 500,000 and one million inhabitants). Venezuela hosts 33% of its urban population in its five metropolitan areas and 40% in 71 i-cities.

Photo: Lina Gast - San Juan de Pasto (Colombia).

#### Coastal, inland and landlocked Latin American and Caribbean i-cities

Approximately 42% of the population of Latin America and the Caribbean are concentrated in a 100km wide coastal strip,

which amounts to only 20% of an extensive territory of the Amazon. **In South America, however, apart from a number of coastal cities, there is a relatively sparse group of cities settled across the Andean mountain system, which in most cases evolved from pre-Hispanic settlements**. In the main, cities of colonial heritage that are heavily concentrated in coastal areas or along maritime routes of strategic value, have prospered during the process of industrialization in the second half of the 20th century, thereby preserving the competitive advantages of their location.[179] Similarly relevant is the development of Bolivia's 'half-moon', an intermediary hub across the country's eastern region, its plateau and the Mercosur region, where i-cities like Montero, Warnes and La Guardia have flourished around the metropolitan pole of Santa Cruz.

Mexico hosts a significant number of large landlocked i-cities, like Chihuahua and Delicias, even in its arid northern states: the city of Hermosillo manages a municipal territory of 18,000km$^2$, an area equivalent to the whole of El Salvador. In South America, isolated cities are concentrated mostly in the Amazon provinces or the southern provinces of Argentina. I-cities with more than 300,000 inhabitants include Iquitos (Peru), Boa Vista, Rio Branco and Porto Velho (Brazil), all of which have important extractive industries. Heritage cities like Cuzco (Peru) and Potosí (Bolivia) are located in the Andean region and focus mostly on tourism. In Argentina, the largest isolated i-cities are Neuquen, Trelew, and Rio Gallegos, as well as Ushuaia, the southern-most city in the world. Cúcuta (Colombia), San Cristóbal (Venezuela), Pedro Juan Caballero (Paraguay) and Ponta Pora (Brazil) are other examples of isolated i-cities growing on a border enclave economy.

### *Functional balance of Latin American and Caribbean i-cities: clusters and corridors*

Most Latin American and Caribbean countries have now developed programmes aimed at the improvement of their micro, small and medium-sized enterprises' productivity and competitiveness. They have done so by also promoting the creation of clusters that have occasionally transcended the regional scale of domestic consumption and grown into global competitors. Five typologies of clusters can be identified:[180]

- Clusters of 'survivor' micro and small enterprises in low-specialization manufacturing sectors, generally located in larger i-cities and integrated within the informal sector, presenting alternative employment opportunities given the lack thereof;
- More advanced and specialized small and medium-sized enterprise (SME) clusters with stronger productivity capacities that have been steadily accessing national and international markets, as is the case with the shoemaking industry in Novo Hamburgo (Brazil), in the Porto Alegre area, or Rafaela's (Argentina) agro-industrial and metal clusters;
- Clusters of the farming, mining and logging industries, such as Colombia's coffee cluster that involves i-cities such as Manizales, Pereira, Armenia or Ibague, or the sugar cluster of the Cauca Valley, including nearly 40 municipalities;
- Service clusters linked to high added-value knowledge economy, such as those developed in Brazil by inner cities like Londrina and Maringá, in the State of Paraná, and connected to Campinas and Florianópolis, usually referred to as Brazil's 'Silicon Valley';
- Transnational clusters, such as the automotive industry clusters in Ramos Arizpe (Mexico) or Resende (Brazil), or cities with significant concentrations of the textile industry along the border between Mexico and the United States. These include Nogales, Agua Prieta, Ciudad Acuña, Piedras Negras (the most populous city of the state of New Laredo), and their 'twin' American cities on the other side of the border.

**Many urban corridors in Latin America and the Caribbean are articulated in i-cities of different sizes, mainly along the coast, but also in interior corridors adapted to the Andean orography**

Many urban corridors in Latin America and the Caribbean are articulated in i-cities of different sizes, mainly along the coast, but also in interior corridors adapted to the Andean orography. All the i-cities of Guatemala, El Salvador and Nicaragua are aligned in a 1,000km corridor on the Pacific coast, from Tuxtla Gutiérrez, the capital of the Mexican State of Chiapas, to Granada, south-east of Managua (Nicaragua). The Caracas-Merida axis, along the Andes, and the Ciudad Bolívar-Barcelona corridor, linking the Orinoco basin to the Atlantic coast, are the key corridors of Venezuela. Chile's geography has inevitably favoured the emergence of a corridor along the Pacific coast, linking the resort city of Puerto Mont to Santiago with over ten i-cities in between, all with a population of fewer than 300,000 inhabitants, e.g. Talca and Curicó. In Brazil, the different

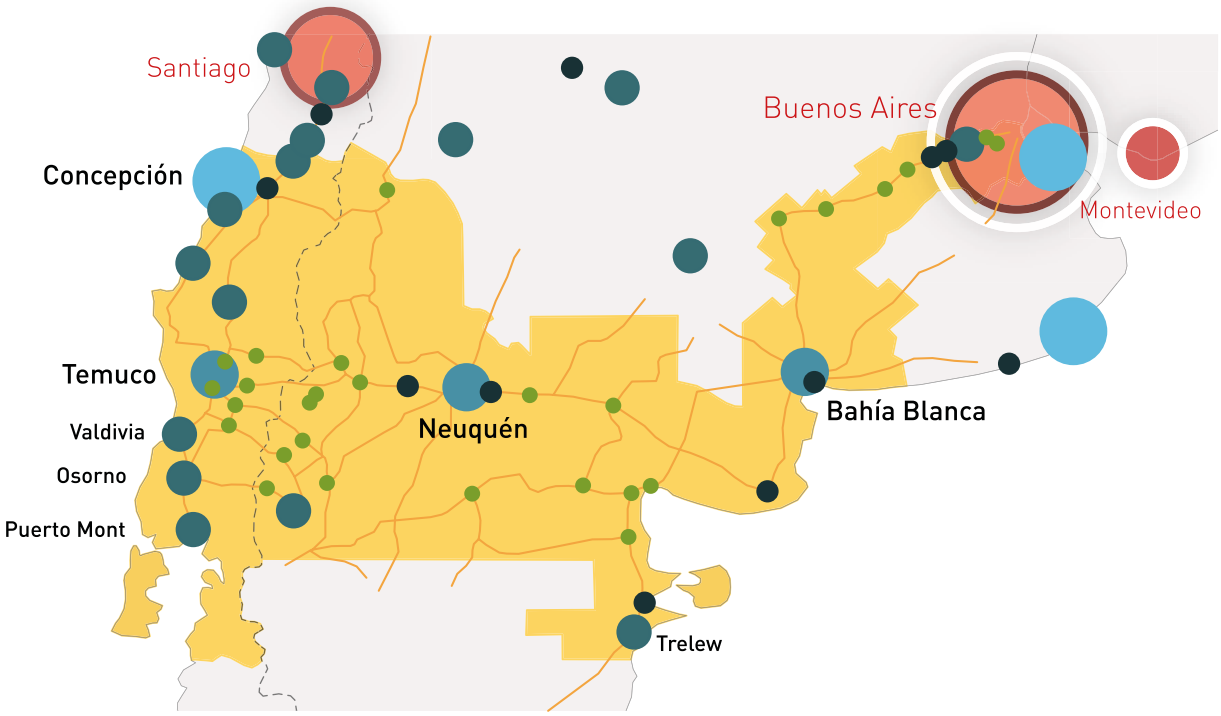
tributaries of the River Amazon marked the development of small i-city corridors linked to agro-industrial and extractive activities. On a different scale, the three megacities of the Southern Cone – Rio de Janeiro, São Paulo and Buenos Aires – form a regional corridor that supports more than 20 i-cities, many of them as important as Londrina, Maringá and Uruguaiana (Brazil) or Salto (Uruguay) (see Box 3.5). The area of São Paulo alone, however, concentrates a number of inner corridors, such as the São Paulo-Bauru-Aracuba-Tres Lagos axis; the São Paulo-Campinas-São José do Rio Prieto corridor, and the São Paulo-Ribeirão Prieto-Uberaba-Uberlandia corridor, which reaches the Federal District of Brasilia.

## BOX 3.5 LATIN AMERICA MERCOSUR TRADE AND ECONOMIC DEVELOPMENT CORRIDOR

The Mercosur (*Mercado Común del Sur or* Southern Common Market) is a sub-regional bloc that includes Venezuela, Brazil, Paraguay, Uruguay and Argentina.[181] This has the aim of establishing a free-trade area across South America. The Mercosur has laid the groundwork for the emergence of a trade and economic development corridor that runs from Rio de Janeiro (Brazil) to Valparaíso (Chile), through Mendoza (Argentina). This Mercosur-Chile corridor joins together a number of economic hubs connected to different major transport corridors. It covers an area of 3.46 million km$^2$. Its population comprises 36.8% of the five countries' total population.

The corridor links four of Latin America's largest urban economies with a network of smaller i-cities. It contributes to almost 46% of the total GDP of those countries that form the sub-regional bloc, which together had an average annual growth rate of 3.7% in 2012. The development of the corridor has brought about many benefits for i-cities, yet there are significant challenges when it comes to removing barriers to trade and investment among all the countries that together form the corridor. The map shows the Mercosur-Chile economic and development corridor.[182]

Map showing the Mercosur-Chile economic and development corridor



## 3.5.2 Trends and national urban policy responses in Latin American and Caribbean i-cities

Latin America and the Caribbean began their demographic and urban transition after the Second World War, with the significant impact of economic migration from Europe and internal displacements from rural areas towards both capital cities and the main secondary cities (e.g. Rosario or Córdoba in Argentina). At that time the main industrial and logistics infrastructure, essential to economic development, were being developed in those cities. A number of countries in the region progressively adopted policies of import substitution and industrialization after the 1929-1930 Great Depression and after the Second World War, in particular, large economies such as Brazil, Argentina and Mexico. In the 1970s, the global oil crisis stressed the risks of this model, triggering a debt crisis that 'conditioned' many Latin American economies until the 1990s (the so-called 'lost decade').

During this period, urban growth continued at different paces in all larger i-cities (and to a lesser extent in smaller ones) mostly through rural-to-urban migration but, in some areas, as a result of fleeing conflict zones, as was the case in Colombia (36% of urban population growth in the 1980s) and Central America. Since the late 1990s, 'demographic transition' in South America has stabilized (the urban population was 75% of the total population in 2000 and 80% 15 years later). Migration has turned into a mainly inter-urban phenomenon, whereby the younger employable population is moving from cities that offer fewer working opportunities to more dynamic ones. Significantly, these recipient cities are no longer just metropolises.

In most countries in the region, this process has merged with ongoing 'democratic transition'. This is eliciting administrative and fiscal territorial decentralization, strengthening the role of local governments, supporting democratization through participative democracy and innovative city governments (like Porto Alegre, Ilo, Villa El Salvador, Manizales and many others), at the same time designing more sustainable and balanced territorial development. Moreover, while urban growth in major metropolitan areas has increased at a slower pace in past years, i-cities have experienced continued increase in their population, even though in most cases they have not had adequate economic and technical resources to deal with the shocks and risks that stem from it. These weaknesses have prompted widespread peri-urban growth and the creation of new informal settlements, which, particularly in i-cities, require more effective public-driven land management policies to fight urban dispersion and fragmentation.

**In general terms, Latin American regions have evolved at variable speeds in the face of diverse realities and challenges. Inequality between and within i-cities and metropolitan areas has been increasing**. In landlocked i-cities in fragile ecosystems like the Amazon, urban expansion tends to aggravate the environmental problems created by extensive agricultural development and logging. Weak planning and territorial management beyond

Photo: Nico Kaiser - Mendoza (Argentina).

urban areas are still a vulnerability for many Latin American economies.

In recent years, along with restructuring their economic and regional systems, many countries have started urban reforms. There is increasing recognition that together with achieving a better balance of economic and social development, Latin American countries need to improve the management and development of cities to boost their attractiveness. Countries such as Brazil, Bolivia, Colombia, Ecuador and Mexico have developed NUPs with different priorities: control of urban expansion, urban mobility, metropolitan governance, i-city cooperation and more balanced territorial approaches (see Box 3.6 on the Colombian experience). Ecuador has developed a national territorial strategy, with nine zones for sustainable urban development. This is to strengthen municipal powers and includes the concept of *buen vivir* (good living) in the national constitution. Brazil initiated substantial legal reforms (e.g. introducing the Statute of Cities) and in 2003, created the Ministry of Cities (*Ministério das Cidades*), assisted by the Council of Cities (*Conselho das Cidades*), a deliberative entity of representatives from local authorities and civil society. This process provided impetus for the development of urban policies, with the aim of promoting more equity, efficiency and social inclusion in cities. As a result, by 2013, almost all municipalities with more than 500,000 inhabitants had adopted a master plan. However, the results are still uneven, as many reforms were only partly implemented and investments in urban areas remain insufficient.

In most cases, however, **national sectorial urban policies are primarily designed to address the problems of larger urban areas and tend not to contribute specifically to issues with which i-cities and smaller municipalities are concerned**. NUPs must acknowledge the contribution of i-cities to economic advancement, strengthen i-cities' regional leadership in rural areas, and support the creation of economic corridors and clusters that improve competitiveness and inter-municipal cooperation. This requires improvement of physical connectedness (transport, communications, energy), as well as bolstering lending capacity of administrative and social services and economic innovation. For many Latin American i-cities, cooperation with the hinterland and regional integration are gateways both to enhanced economic and social opportunities and the reduction of environmental and structural inequalities between rural and urban areas. Regional integration projects and institutional frameworks such as the Union of South American Nations (UNASUR), the Central American Integration System (SICA), and Mercosur should play a major role in policies that promote inter-city cooperation, rational infrastructural planning, and reduced bureaucratic red tape. In this regard, empowering institutional mechanisms such as Mercosur's Consultative Forum, that brings together municipalities, federate states, provinces and departments of Mercosur member states,[184] can be a valuable instrument of progress and cooperation.

## BOX 3.6 COLOMBIA AND THE CITY SYSTEM MISSION

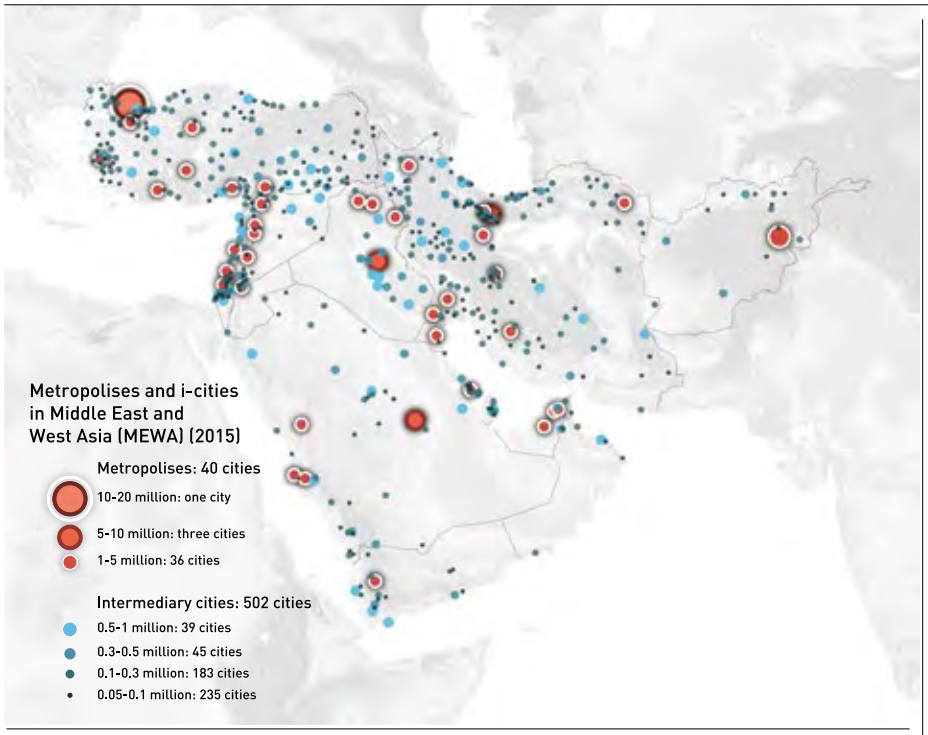
The Colombian government acknowledged, through its 'Prosperity for All' national development plan (NDP) 2010-2014, the need to bolster its city systems and reap the benefits of agglomeration economy and urban development as tools to break down regional inequality and poverty. The City System Mission set up by the NDP in 2012 published in 2016 a synthesis report *A National Policy for a System of Cities in Colombia with a Long Term Vision*. The Report highlights the physical isolation and weak economic specialization of many Colombian i-cities, a feature shared by many other middle-income regions in the Global South because of a general weakness in territorial infrastructures, institutional coordination, financial mechanisms and supra-municipal management. The Mission tried to overcome this situation by acknowledging the role of corridors and integrated urban-regional sub-systems. It identified three main groups of i-cities: a) associations of mono-nodal i-cities, e.g. Bucaramanga and Barrancabermeja; b) functional and economic corridors of i-cities e.g. the Cafetero and Montería-Sincelejo axesan the rural and the urban; c) historical corridors that have been steadily growing, e.g. the Bogotá-Fusagasuga and Bogotá-Cúcuta axes.

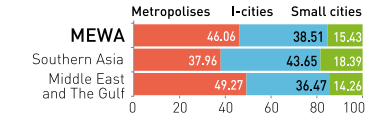
Ultimately, metropolitan areas are still the most relevant example of supramunicipal management in Colombia's system of cities, and certainly are a model for many i-cities now beginning to cooperate. Similarly, the 'Plan Contracts' legislation introduced in 2012 has proved to be a valuable tool to foster territorial cohesion. This has improved coordination between central government and territorial entities to identify strategic projects with regional impact, especially as far as transport infrastructure, basic services, participation and diverse funding sources are concerned.[183]

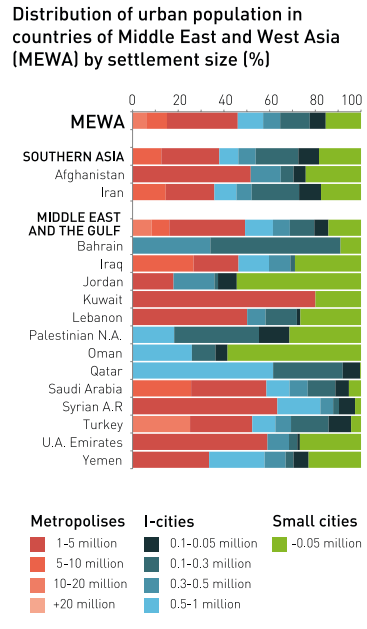
# 3.6
# URBAN SYSTEMS AND INTERMEDIARY CITIES IN THE MIDDLE EAST AND WEST ASIA (MEWA)

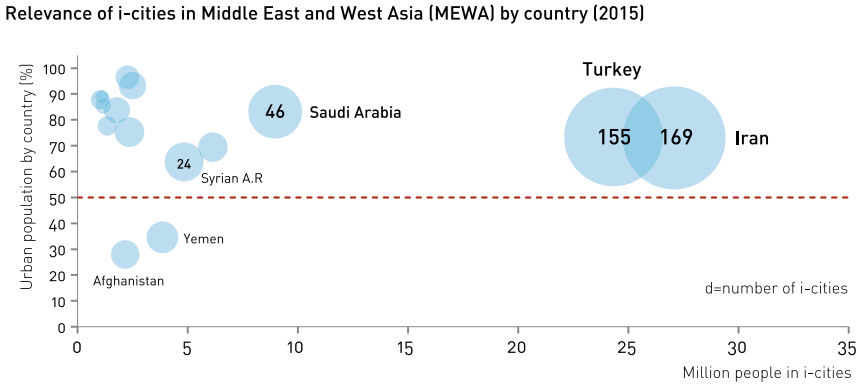
Figure 3.8 **MEWA distribution of population by settlement size and urban population weight in i-cities**

Source: UCLG and CIMES-UNESCO




## 3.6.1 Spatial integration and functional balance of i-cities in the MEWA region

The MEWA region has 502 intermediary cities, which in turn host 38.5% of the country's 236 million urban dwellers. These figures make the region's level of urbanization (67.8%) the third highest in the Global South, after Latin America and Oceania. Iran and Turkey are the region's most populous and dynamic economies. They have the highest concentration of i-cities (65% of all i-cities in the MEWA region), 57% of the i-city population and 22% of the urban population. This is followed at quite a distance by Saudi Arabia (46 i-cities), the Republic of Syria (24

i-cities), and the rest of the smaller countries on the Mediterranean coast and the Arabian Peninsula. All these countries, however, tend to record high levels of urbanization, with the sole exception of Yemen (34.6%) and Afghanistan (28%).

### *Monocentric/polycentric regional spatial structure in the MEWA region*

The structure of the systems of i-cities in the MEWA region varies significantly, according to the countries population, area, climate factors and the number of cities they include. Countries that are mostly rural such as Afghanistan and Yemen have developed hypertrophic metropolitan areas. Kabul (Afghanistan) concentrates 51.7% of the country's urban population, Yemen's capital, Ṣan'ā' 33.5%. Smaller Gulf countries concentrate almost their entire population in their capital cities' metropolitan areas, as is the case for Kuwait City (with the important i-city industrial suburb of Hallawy), Dubai (Qatar), and the Sharjah-Abu Dhabi-Ajman metropolitan area in the United Arab Emirates (UAE).

**The largest and most populous countries in the MEWA region tend to develop polycentric urban systems**

Conversely, the largest and most populous countries in the MEWA region tend to develop polycentric urban systems. Iran, Iraq, Saudi Arabia and Turkey all share this pattern. Iran's urban population is distributed across eight large cities and provincial capitals (35.6%) and 169 i-cities (46.6%), most of them in the smaller provinces in the north of the country, between the borders with Turkey and Iraq and the Caspian Sea. Most of Iraq's 14 i-cities are located in the Tigris and Euphrates' basin while its five larger agglomerations are all in the northern provinces. Despite having one of the world's most dynamic megacities in Istanbul (hosting 25% of the country's urban population), Turkey has developed a polycentric urban system articulated in seven metropolises and 155 i-cities distributed homogenously across the country's geography. Several concentrations of i-cities have grown up in the regions surrounding Istanbul and Izmir, on the southern Mediterranean coast, and along the Syrian border. In contrast with general trends elsewhere, about 40% of the urban population live far from the coastline or navigable waterways.

### *Coastal, inland and landlocked MEWA intermediary cities*

The MEWA region was historically the cradle of stable urban human settlements, and some of its i-cities have in fact been urbanized for several millennia. I-cities in the MEWA region tend to be heavily concentrated along the coastline. On the Mediterranean coast, many important ports service large hinterland areas and inland cities, e.g. Tripoli, the second city of Lebanon, has been a northern infrastructural 'anchor' for a string of i-cities that extend down to Beirut. Many of these ports are regional centres of i-city size (e.g. Latakia and Tartous in Syria or İskenderun in Turkey), rely on a broad mix of trade, services and industries and have traditionally also been terminals for cross-regional hydrocarbon transit. I-cities have also spread along the Black Sea coast (e.g. Eregåğli, close to Istanbul, and the Samsun-Giresun-Trabzon corridor in northern Turkey). In Iran, many i-cities are located on the Persian Gulf coast (e.g. Bandar-e 'Abās) and along the Zagros mountain range. In the Gulf States and Saudi Arabia, large-scale urban industrial development has been located in specific export processing zones (EPZs).

**The 'Fertile Crescent', delimited by the Tigris and Euphrates river system, hosts several inland i-cities**. Inland systems of cities have also developed at the Turkish, Syrian and Iraqi border and well into Iran. Most inland cities in the MEWA region, however, are generally poorer, smaller and less accessible and developed than coastal cities. Many inland i-cities have grown according to a tight design and with high density, a tendency imposed by water scarcity and climatic conditions (e.g. Homs in Syria and Kayseri in Turkey), in contrast with the more common low-density 'garden city' design of coastal cities. Many inland i-cities of Afghanistan, Iraq, Palestine, Syria and Yemen, for instance, have been severely damaged by years of war and conflict in the last three decades. Other i-cities in the MEWA region are located in earthquake risk zones, e.g. Bam (Iran), which was badly hit in 2003. These factors are inducing massive population movement, demographic shifts and skill losses in portions of the region, where youth flee in search of opportunities in larger cities or other countries. **Conflict-prone for over a century, many areas of the MEWA region have traditionally suffered from structural difficulties, and obstacles to establishing thriving, stable and efficient states and economies**. Within their urban systems, i-cities are among the most vulnerable to this kind of uncertainty and instability.

### *Functional balance of MEWA i-cities: clusters and corridors*

I-city clusters have been a more recent development in the MEWA region. These have generally grown around valuable economic locations and interconnectivity and logistical assets. Around Istanbul, for example, an automotive industry cluster has developed in the Marmara region, reaching the Bursa metropolitan area and the i-city of Adapazari. This is mostly thanks to its reliable technical, transport, logistical and educational infrastructures. Exports – especially to the EU – have also been a driver for clustered industrial development next to logistical mainstays. Management difficulties and inefficiencies have hindered the development of i-cities around the larger Istanbul metropolitan area, increasing the pressure on land-tenure accessibility and service provision in the peri-urban areas of the capital. In other parts of the region, as mentioned above, conflict and political instability have also prevented positive phenomena of i-city clustering, e.g. along the Lebanese and Palestinian coastline of the Mediterranean. In Palestine, the Israeli blockade and consequent control of territorial resources – especially when aggravated by war destruction – has been a determinant factor.

Clustering and agglomeration outcomes have been different in areas richer in resources. Jīzān (Saudi Arabia) has developed its local economy through heavy industries in the energy and steel sectors, together with secondary textile, pharmaceuticals and biotech industries. To shift economic growth to its secondary cities, Saudi Arabia has also been improving the infrastructure of the areas surrounding Asir, Hail, Hofuf, Tabuk and Taif.[185]

There is an emerging pattern of i-city corridor development in the region, in particular along the Turkish and Lebanese coastlines. These corridors, especially between Beirut and Tripoli (Lebanon), Antalya and Alanya, and Istanbul and Marmara Ereğlisi along the Sea of Marmara (Turkey), extend for over 100km and link various smaller towns and cities in a continuous linear agglomeration punctuated by cores of business activity. The developments are putting significant pressure on smaller local authorities to make it possible for these *de facto* i-cities to provide adequate essential services, deal with the impact on traffic and congestion, and promote sustainable development along coastline sectors that are expected to be subject to increased erosion and inundation risks. In the Gulf States, the phenomenon is mostly in the form of a

Photo: Reibai - Shah Cheragh Mosque, Shiraz (Iran)

series of planned urban-growth nodes along the inter-regional highway networks. In the Gulf area, a USD 25 billion project has been developed with the aim of creating a regional rail system. Additionally, Saudi Arabia is developing the Saudi Landbridge Project, a 1,000km rail line connecting Jeddah, Riyadh and Bahrain. If completed, these rail corridors would further consolidate the MEWA eastern coasts' settlements as a relevant and cohesive extended metropolitan region.[186]

### 3.6.2 Trends and national urban policy responses in the MEWA region

The driving factors of urbanization in the MEWA region are complex. Consequently, systems of the city and urban patterns tend to differ significantly from one country to another.[187] This is due also to variations in income and resources, politics and economics, political stability, recent history of conflict, social cohesion, and modes of production across the region. Doha, the metropolis capital of Qatar, has a GDP per capita of over USD 93,000 per year, compared with just USD 2,900 in Palestine, and even less in Gaza (USD 876).[188] These vast differences translate economically into a significant contrast in the quality of urban space and the design of urban policies.

The most advanced urban economies of the Gulf countries have world-class metropolises that have grown into global financial centres. Meanwhile, fragile economies like Afghanistan, Yemen or Iraq face a constant challenge in just guaranteeing a minimum level of effective basic services for their inhabitants as well as governance for their cities, in particular in those smaller centres located farthest from larger metropolitan areas or close to areas of conflict. Accordingly, Afghanistan, one of the world's weakest economies, looks to its NUP and spatial strategies as a means of guiding its urbanizing transition during the next three decades, and promoting geographically balanced development. The spatial strategy should aim to reduce the inward migration pressure on the capital, Kabul (already a primate city), by stimulating regional hub cities, harnessing resource and city corridors, and improving urban economy and job creation capacity. Afghanistan's NUP should promote more citizen-oriented urban development, with a strong focus on the respect, protection and promotion of human rights.[189]

Photo: Andrew Moore - Muscat (Oman).

National urban policies in MEWA countries cannot neglect the consequences of war, political conflict, and instability in the region. I-cities such as Irbid or Az-Zarqāʾ (Jordan) have experienced the impact of refugee inflows from neighbouring Syria (Mashreq countries, in general, are hosting 50% of the world's registered refugees). This is even though the Jordanian government has judiciously promoted policies to strengthen urban infrastructure and services for exposed communities and municipalities, so as to be prepared and adequately welcome and manage these mass movements. Similarly, the inflows of millions of migrants have made dozens of eastern Turkish i-cities the hosts of the highest concentrations of refugees in the country. They face the management of refugee inflows often without adequate resources and support. Cities like Tripoli (Lebanon), however, have shown remarkable resilience in post-conflict situations, introducing city plans to revitalize deprived and war-torn inner-city areas. In spite of all the improvements, however, **the refugee crises caused by both older and present conflicts are still a pressing issue for the governments of Turkey, Syria, Jordan, Lebanon, Afghanistan, Yemen and the Palestinian National Authority, one that affects national development and has had overwhelming consequences for urban governance**.

Gulf economies, on the other hand, face the challenge of diversification, as their one-commodity economies are increasingly vulnerable to external factors (e.g. raw material prices on the global market and reserve availability). Prospects are more favourable for those producers far-sighted enough to successfully diversify their economies and promote more sustainable development and smart growth at the urban level (e.g. the UAE).

Emerging economies such as Turkey and Iran are struggling with the modernization of urban areas and the limitation of peri-urbanization processes. They are in dire need of modernizing legislation, both to better manage the processes of irregular settlements and increase the government's ability to prevent, regularize and/or upgrade informal settlements and activities. This is even more pressing in i-cities, especially in Turkey, built in landslip and earthquake-prone areas. A comparable lack of regulatory discipline has also affected the urban systems of Lebanon, Jordan and Iraq, resulting in generally poor-quality construction, road networks and basic service provision. In central areas of Turkey, Iran and Yemen, inland i-cities in inhospitable or arid territories lack the fundamental connectivity to larger urban areas and access to logistics or more valuable markets and human capital to engage effectively in urban integration and development. The effect of this is even more apparent in the Kurdish areas of the region.

Despite the (often extreme) conditions experienced by the countries in this region and the historical, cultural, social and economic fragmentation of many of them,[190] several have made significant efforts to develop urban policies and/or promote urban reconstruction – as happened in Lebanon after the civil war, and Iraqi Kurdistan. Some countries have been discussing the development of urban policies. These include Kuwait (*2035 Vision*), Jordan (*2006 National Land-Use Plan*), Bahrain (*2007 NUP*), Oman (*2010 National Spatial Strategy*), and Saudi Arabia. Nevertheless, in most MEWA countries, the reconstruction of destroyed or severely damaged cities, and the effort to cope with refugee flows, will require intensive rehabilitation and sufficient capital for such all-encompassing plans. Funds will be needed to pay for housing, infrastructure and basic services to respond to fundamental human rights and needs. Reconstruction – not only physical but also economic, social and cultural – is likely to be the main challenge for conflict-torn countries, deprived as they currently are of human capital and basic resources. Development in the MEWA region, and in i-cities in particular, necessitates peace and stability in the first instance.

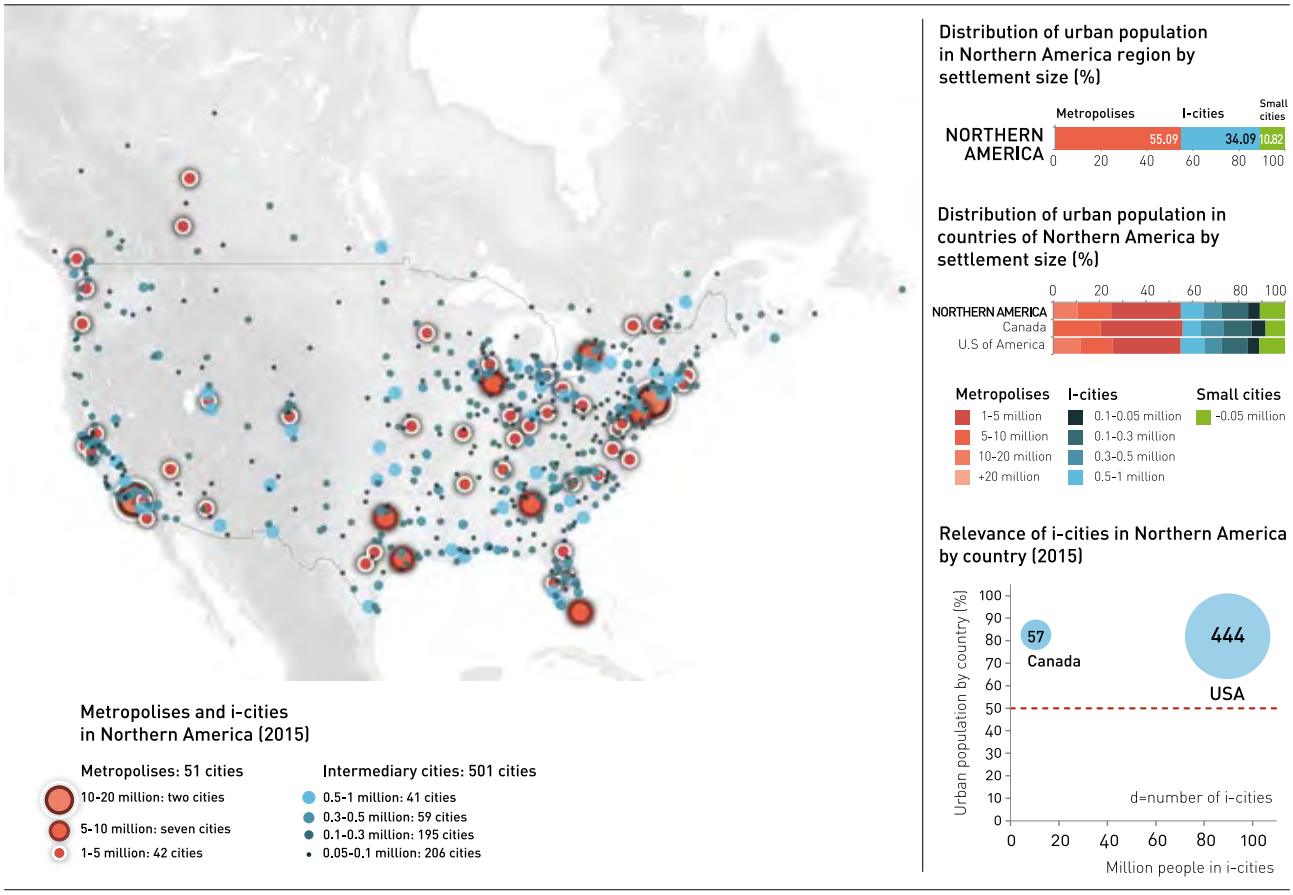
Strategic, comprehensive urban planning – taking into account cities and their surrounding areas and economies – is necessary to promote the kind of sustainable growth that upgrades, rather than degrades, urban and rural ecosystems. This needs to address serious concerns such as food and water security for the growing urban population amidst a growing rural-to-urban transition, in an integrated and balanced way. Sustainable and safe cities require a comprehensive assessment of natural risks and vulnerabilities, especially for i-cities in the less developed countries of the region. Mitigation efforts (e.g. improved design, and enforcement of seismic-ready building codes) will likewise be essential to reduce critical impacts.

**In most MEWA countries, the reconstruction of destroyed or severely damaged cities, and the effort to cope with refugee flows, will require intensive rehabilitation and sufficient capital for such all-encompassing plans**

# 3.7
# URBAN SYSTEMS AND INTERMEDIARY CITIES IN NORTHERN AMERICA

Figure 3.9 **NORTHERN AMERICA distribution of population by settlement size and urban population weight in i-cities**

Source: UCLG and CIMES-UNESCO




## 3.7.1 Spatial integration and functional balance of Northern American i-cities

The Northern American region includes Canada and the United States of America. Only 34% of the region's urban population live in i-cities (or 'middle-order' cities, as they are defined in the United States, a smaller proportion than in many other regions. There are currently 501 i-cities, 444 of which (88.6%) are in the United States. Systems of cities in the United States and Canada are strongly dependent on states and provinces. These have shaped the legal and institutional framework for local governments, thus creating huge diversity in urban systems throughout the region.

### *Monocentric/polycentric regional spatial structure in Northern America*

Three metropolitan areas – Toronto, Vancouver and Montreal – concentrate almost 30% of Canada's population. While the structures of the urban systems of Canada and the United States differ in metropolitan areas, they share similar patterns at the level of i-cities. Both countries host established, complex metropolitan corridors – e.g. the New York-Washington D.C. corridor, Florida's city system, and the coastal agglomerations of the San Francisco, Los Angeles, and Seattle-Vancouver areas. A large number of i-cities are located along these urban development corridors. A significant proportion of the

population, moreover, lives in interior i-cities: the Great Lakes system and the large basins along and around the Mississippi River and its tributaries host significant urban concentrations.

Northern America has one of the world's best-planned systems of cities. Most i-cities are connected by well-developed rail, road and airline networks. The pattern of i-city development revolves ostensibly around automotive transport and low-density expansion. The recurring blueprint of urban development implies a concentrated central business district, surrounded by dispersed peripheral industrial estates. Many of the more mature i-cities are still addressing the challenges created by structural adjustment programmes and policies of the 1990s and the 2008 global financial recession. Other i-cities – concentrated especially in the states of California, Texas and Virginia, and in the New England area – have shown resilience and an ability to diversify their economies, thanks primarily to substantial investment in information and knowledge technology, as well as advanced extractive industries. Technology investment in Toronto and Vancouver, for instance, has prompted the emergence of various spin-off businesses in smaller i-cities.

### *Coastal, inland and landlocked Northern American i-cities*

The East and West Coast of the United States host one of the world's largest concentrations of cities. On the East Coast, the regional metropolitan conurbation of Boston, New York, Philadelphia, Baltimore and Washington D.C., is home to about 40 million inhabitants, a figure relatively similar to that of the regional agglomeration of Tijuana, San Diego, Los Angeles, San Francisco and Sacramento on the West Coast. The Great Lakes area concentrates the country's third largest conurbation. From Washington D.C. down the East Coast to the metropolitan area of Miami, the Atlantic coast is scarcely urbanized, with significant distances separating many i-cities. The same pattern characterizes the West Coast north of San Francisco up to Seattle.

**Most of the United States federate states are landlocked. Many concentrate their populations in their respective state capitals, which are connected in a dense conurbation by a road network that favours private motorized traffic**. In the four least populous states – Montana, Wyoming, North Dakota and South Dakota – the state capitals and the main economic centres (e.g. i-cities such as Bismarck, Billings or Rapid City) perform the key functions of regional i-cities. Besides their role as administrative centres, these cities have structured the country's most productive dairy and agro-alimentary industry. In Mid-Western states like Kansas, Oklahoma, Arkansas and Tennessee the network of i-cities becomes relatively denser: Wichita and Tulsa, core i-cities in Kansas and Oklahoma, effectively articulate the economy of the rural environment of these two states.

In Canada, the consequences of distance and isolation due to the climatic and geographical characteristics of the country are far more apparent than in the United States and have a significant impact in i-cities such as Saskatoon and Regina, in the scarcely-populated western province of Saskatchewan.

### *Functional balance of Northern American i-cities: clusters and corridors*

A few metropolitan regions in Northern America are experiencing the development of i-city clusters. In the Washington D.C. area, the bordering states of Maryland and Virginia have included intermediary and small cities within a 100km radius from the Washington metropolitan area in their shared development strategic planning. The Carolina Research Triangle is a portion of North Carolina clustered around North Carolina State University, Duke University and the University of North Carolina at Chapel Hill. These are high-level R&D centres that have revitalized the joint economic and policy frameworks of i-cities like Raleigh, Durham and Chapel Hill. The Research Triangle developed into an advanced technology-intensive cluster that benefits from a direct link to Washington's economy and the federal government's procurement in the defence, information technology (IT) and bio-technology industries.[191] Many large companies and public agencies are taking advantage of lower operating costs to relocate their back-office functions, administration and deliveries and R&D activities in expanding i-cities that are grouping into city clusters at the border of metropolitan regions. A similar pattern of development has taken place in the areas around the Dallas-Fort Worth agglomeration in Texas, Chicago, Los Angeles and Toronto.

Over the last few decades, several complex i-city corridors have expanded throughout the Northern American region,

**Northern America has one of the world's best-planned systems of cities. Most i-cities are connected by well-developed rail, road and airline networks**

especially along the routes drawn by the large interstate thoroughfares that cross the continent. Unlike i-city corridors in other regions of the world, in Northern America, a tradition of good planning and comprehensive administration has prevented extensive building along highways. I-city corridors in Northern America are developing rather as a series of hubs and nodes of smaller cities that maintain, nonetheless, the urban features of i-cities. Salem (in the state of Oregon) has a population of 160,000 inhabitants and has been very successful in capitalizing on the development of specific international trade corridors under the North American Free Trade Agreement (NAFTA) to create jobs and establish new kinds of industry in the area.

### 3.7.2 Trends and national urban policy responses in Northern American i-cities

**The 'belts' discourse gave a reliable picture of the American economy for years, but the recent economic downturn, both nationally and globally, has radically changed the productive map of these areas – as well as of the country as a whole**

The Northern American system of i-cities is a tale of two sets of cities. One is a system of successful and dynamic cities; the other is a set of cities in a state of stress and decline. Historically, especially in the United States, systems of cities were described using a 'Sunbelt and Rustbelt' narrative. Sunbelt cities were thriving urban agglomerations with steep growth rates concentrated in the southern-most third of the country, stretching from one ocean coast to the other. Since the 1970s, i-cities along the Sunbelt have benefited from more favourable taxation, high-income retirement-driven migration, warmer climate for the agro-alimentary industry and, more recently, from the boom of the technology and knowledge-driven economy, especially in the South-West. Conversely, the Rustbelt moniker identifies a region across the northern Mid-West and Atlantic coast of the United States that, though flourishing thanks to the metallurgic industry in the first half of the 20th century, has entered a period of steady socio-economic decline since the 1980s. The functional economy established in the area around labour-intensive steel and manufacturing industries did not manage to compete in the global market and never really recovered from its extensive decline. With varying degrees of success, at least until the financial crisis of the late 2000s, certain i-cities had managed to reconvert and diversify their economic activities. The 'belts' discourse painted a reliable picture of the American economy for years, but the recent economic downturn, both nationally and globally, has radically changed the productive map of these areas – as well as of the country as a whole.

Specialized regional clustering has been a fundamental component of the new map of economic productivity and performance (see Box 3.7) that emerged in the aftermath of the crisis and the beginning of recovery throughout the United States. I-cities embedded in clusters now tend to fare much better as regards wealth and competitiveness, especially those that are strategically located in technologically advanced regions with a tradition of investment in innovation and ICT. Areas with logistics infrastructure or privileged access to inter-regional or international trade – e.g. border areas of California, Texas, Washington and the Great Lakes region – record the most improved economic performance and job creation rates.[192]

The approaches to urban policy development in Northern America are very similar to those of Australasia. Northern America has a strongly decentralized federal form of government, wherein urban policy is a state-level responsibility. The United States, however, was one of the first countries to establish a Housing and Urban Development (HUD) department at the federal level. The United States and Canadian governments have, at times, sought to address sought to address national housing policy issues, but they never managed to broker consensus among the federated states on urban policy and development matters.[193] Similarly, states have generally focused on competitiveness for metropolitan regions and developing cities, but even in the most proactive contexts most decision-making has stalled on vertical dialogue across the different levels of government.

At the same time, direct expenditures on the improvement of logistics and transport infrastructure for efficient supply chains among different city systems have been traditionally hard to implement. Northern American i-cities will be more and more dependent on increased efforts by local governments and businesses to reduce transaction costs and boost competitiveness and efficiency. The region has substantially underinvested in the critical infrastructure needed to support modern services and technology-based economies. Distance from markets and suppliers, the lengthy supply chains and the narrow skills base have limited opportunities for some i-cities in declining areas of Northern America to recover, innovate and develop again. Northern American i-cities will need to become more efficient and sustainable,

## BOX 3.7 MILKEN'S 2013 BEST-PERFORMING CITIES INDEX IN THE UNITED STATES

Source: http://www.best-cities.org/best-performing-cities-2015-map.html

For the last few years, the United States and Canada – not dissimilar from Europe and Japan, among other developed economies – have struggled with jobs, investment, and economic growth in their i-cities. In certain areas, the i-city population has been declining. Whereas coastal and southern cities once in the Sunbelt economy were prosperous and growing, thanks to internal migration from Rustbelt cities, the traditional binomial relationship has crumbled under the pressure of common economic and social development problems. Especially in the aftermath of the 2008 global economic crisis, local governments, businesses and civil society alike have worked to revamp the most affected urban areas, socio-economically. Moreover, the explosion of the tech-driven, knowledge-intensive economy throughout the country has contributed to a radical, paradigmatic shift in the distribution of opportunities, wellbeing, wealth and, ultimately, happiness across the United States. The Milken Institute publishes an annual classification (see figure below) of United States metropolitan and urban agglomerations with a normalized index of performance, taking into account a number of variables spanning economic productivity, innovation, generated wealth and inequalities (both economic and social).

The 2013 report draws an interesting map of economic performance in the United States, with some of the best-performing areas being clusters of i-cities outside the (traditionally more visible) largest metropolitan regions. The areas of Austin and San Antonio (Texas), Boulder (Colorado), Charleston (South Carolina) or Provo-Salt Lake City (Utah) have emerged as powerful, innovative, attractive competitors to the big drivers of this innovation and modernization process – such as the Bay Area (San Francisco, Oakland, San Jose) or the Los Angeles metro – particularly in the technology and energy sectors. Further initiatives to protect development and growth in i-cities – which traditionally enjoy fewer capabilities and risk-absorbing policy instruments – are certainly needed. But even though the report goes on to stress certain unsolved consequences of this specific type of tech-induced growth (growing wage inequalities by gender or ethnicity), it also emphasizes how this new wave of expansion and the centrality of smaller, more 'human-sized' i-cities have had positive effects in terms of social inclusion. These correlate positively with happiness and wellbeing indicators in similar studies.[194]

Milken Institute's 'best-performing cities' index, visualized on a map.

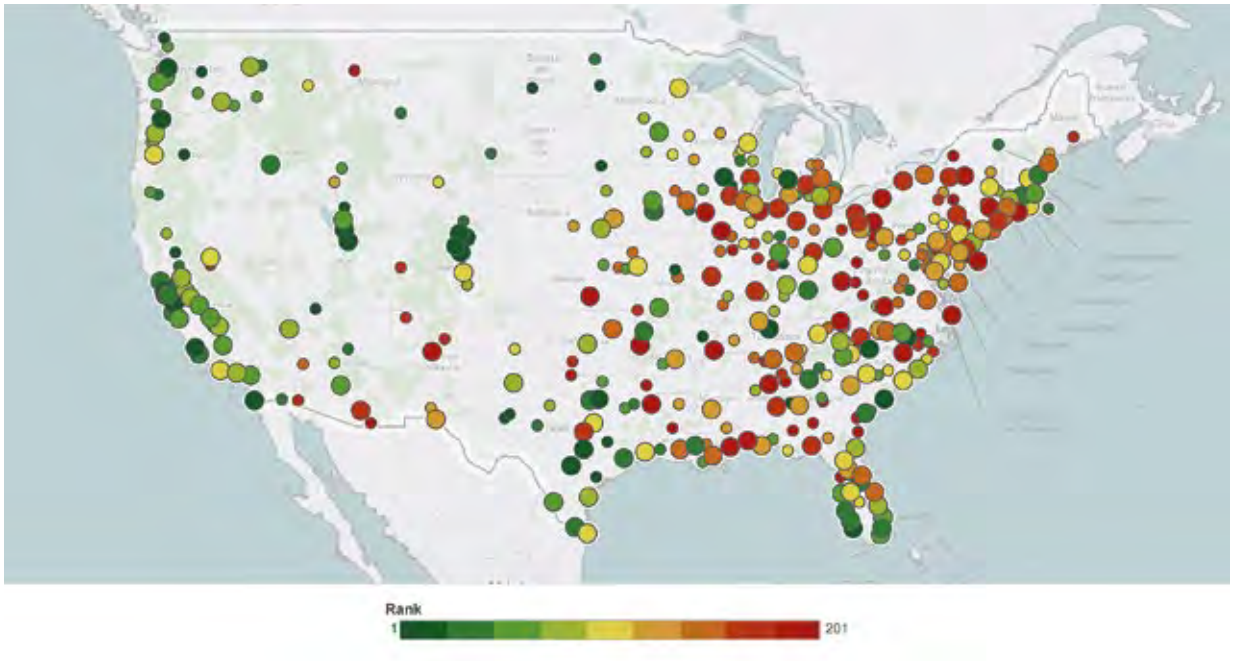


Photo: Steven Pisano - Long Island (United States).

especially by strengthening transportation, communication and trading networks, among as much as between themselves and larger metropolitan regions.

**Importantly, urban policies and their degree of integration and effectiveness have a serious and sizeable effect on the wellbeing and quality of the life of citizens**. The social and human implications of urban policies can be as relevant as economic ones even if not especially in the context of developed, technologically advanced economies like Northern America's. As mentioned above, low density and dispersion have been traditional elements of urban expansion in Canada and the United States. In a context of economic growth and high-income development, the pattern of land use and urban policy-making in Northern America has fostered urban sprawl and gentrification - perhaps the two most important social phenomena of urban development.

**Urban sprawl in the United States demonstrates several features peculiar to this region**. There are long-standing data that prove that income inequality is much higher in low-density medium and small urban agglomerations.[195] Given also their rising gentrification rates, i-cities have become a breeding ground for a number of key socio-economic factors intimately connected with urban expansion, wealth distribution and social inequality. This gentrification is a by-product of rising income inequality in the booming cities of this century's 'smart economy', pushing traditional residents out of refurbished, dense, central neighbourhoods due to higher land, tenure and service costs. These phenomena affect the fabric of communities and jeopardize their integration, quality of life and, to a growing extent, environmental justice. Inclusion, public deliberation and social engagement should be crucial components of urban policy of the near future – especially for booming Northern American i-cities.[196]

## 3.8 MAIN TRENDS IN NATIONAL AND REGIONAL URBAN SYSTEMS AND I-CITIES

This brief overview of urban systems and the place of intermediary cities in the national urban policies (NUPs) of the world's different regions aims to provide fresh insight into the dynamics and changes that have transformed national and regional systems of i-cities. It also seeks to provide a better understanding of the current role and trajectory of these cities within the global urban landscape.

The review stresses the heterogeneous development experienced by i-cities. The

factors that make i-cities successful vary significantly across regions. As well as their scale, the review highlights the importance of factors such as countries' levels of development, location, functions, connectivity and interaction with other systems of cities. Analysis of polycentric versus monocentric systems, and the difference between coastal, inland and landlocked cities, emphasizes variations in their accessibility and availability of opportunities.[197]

**All regions have undergone significant changes in the structure of their urban systems**. As mentioned in the introduction to this section, hierarchical organization remains the structural basis of national urban systems, even though new dynamics have emerged to make them more diverse and complex. A new generation of successful cities are challenging the predominance of old hierarchical urban systems, developing new functional linkages and dynamic models. However, in many regions this process has led to distortions and growing inequality in spatial concentration: large agglomerations are driving urban development while i-cities are undergoing a different and dual process. Some are booming in regions closer to dynamic metropolitan areas, creating clusters and urban corridors and densifying the urban fabric; others are stagnating or even declining in areas more entrenched in an 'old' economy or in regions that are more that are decentred from the core areas. Environmental threats, at same time, are hitting more vulnerable i-cities, especially those located in coastal areas and insular regions, as shown in the Asia-Pacific region.

In both Latin America and Asia, i-cities are expanding within the most dynamic economic areas, often close to major urban agglomerations and within corridors linking these areas. The polarization between the main agglomerations and dispersed urban areas is also growing in transitional economies, e.g. Eastern Europe and the Caucasus. In developed economies such as in Northern America, there is a growing contrast between innovative i-cities, strongly-performing metropolitan areas and more traditional mature cities, e.g. Rustbelt centres in Northern America that are steadily declining. In Europe, despite a more balanced urban system, differences between prosperous i-cities closer to core economic areas and decentred shrinking i-cities are increasing. Addressing these matters is particularly challenging, especially in developing regions such as Sub-Saharan Africa. Here, i-cities are considered the 'missing link' in urban systems, differences within systems of cities are the greatest, and capacities to promote a more balanced urban management are weak.

The emergence of i-city clusters, in particular around large urban agglomerations and new urban poles, is fuelling the imbalance in national systems of cities in almost all regions. Many of the problems associated with the development of metropolitan areas have spilled over into these city clusters. But local governments in these areas do not have access to the same resources and capacities as metropolises and are struggling to support the provision of critical services and infrastructures. The evolution of these i-cities will require specific policies to strengthen the collaboration between, and the complementarity of, metropolitan areas and the surrounding rural areas, currently experiencing the greatest urbanizing pressures.

I-city corridors close to major transportation axes between large cities are growing rapidly, especially when they are linked by international corridors, such as in Northern America and Europe, Africa, Asia and Latin America. However, without adequate planning and infrastructures, many of the corridors in developing regions (e.g. Western Africa) are facing increasing problems of congestion, pollution, accidents and obstacles to trade (e.g. border-crossing issues). National governments and regional institutions should consider enhancing support to emerging corridors and, when necessary, facilitating cross-border cooperation between i-cities to boost their development potential.

**Many countries in the world have or are developing urban policies and reforms along with the restructuring of their economies and regional systems**. In most cases, national sectorial urban policies are primarily designed to address the problems of larger urban areas and booming economic regions, and to strengthen their competitiveness. Beyond the few exceptions mentioned above, NUPs tend not to consider systematically the specific issues facing i-cities and smaller municipalities. I-cities are also weakly addressed by regional declarations within the preparatory process towards Habitat III. Only Europe has a long-standing tradition of associating urban policies and territorial cohesion with specific programmes that try to build on the role of intermediary or mid and small-sized cities.

**Beyond the few exceptions mentioned above, NUPs tend not to consider systematically the specific issues facing i-cities and smaller municipalities**

Reforms in urban, regional or national planning, in economic development policies, and in strategic infrastructure investment are needed in all regions to address these imbalances and open up new opportunities for i-cities. This will not be possible, however, without a new approach to urban and territorial governance. There is a pressing need to create more collaborative governance systems that involve all levels of government and integrate sectoral and territorial policies. This calls for an effective multilevel governance approach that fosters holistic urban and territorial development strategies and policies. Larger involvement of i-cities in consultation and consensus processes to define national urban strategies is imperative.

**The widening of socio-economic differences between metropolitan regions, i-cities and rural regions contributes to increasing inequalities, elicits migration to larger cities, and accelerates the marginalization of peoples and territories – a situation that benefits none of these areas**. Since i-cities have a direct impact on small settlements and rural areas, their evolution has wider consequences on regional economies and societies, thus affecting territorial cohesion and integration. I-cities are thus pivotal to maintaining an economic and social balance between rural and metropolitan areas, as well as promoting regional development.[198]

On the other hand, i-cities must learn to operate on a different scale, to capture and create opportunities linked to the new trends in the global economy. They face formidable challenges to nurture growth and development, especially if they are not adequately connected or located in rapidly growing regions and urban systems. They should demand multi-level frameworks to push for national policies that support a more balanced approach to urban and territorial development. At the same time, i-cities should themselves exploit the collaborative advantages that come from working together rather than competing with each other, e.g. building sub-regional systems of i-cities, strengthening their cooperation within clusters and corridors, while also working closely together with metropolitan areas. Collaboration between i-cities will be one of the most crucial factors in creating opportunities for their communities and re-establishing them as a vital link in national and global systems of cities. If this is not addressed, the increasing level of distortion between urban systems and territories will have a critical impact on the achievement of the New Urban Agenda and the Sustainable Development Goals (SDGs).

Photo: UCLG - Mozambique.

# 4.

# CONCLUSIONS: SHAPING THE AGENDA FOR INTERMEDIARY CITIES

The specific character and challenges of intermediary cities have, until recently, received limited attention in global literature and debates. Their pivotal role in the achievement of more balanced and sustainable urban development processes, and the reduction of territorial inequalities, demands that i-cities become more prominent within the New Urban Agenda and its implementation.

In the framework of the preparatory process of Habitat III, a few references to i-cities have been introduced to the global discussion. Within UN-Habitat, the resolutions on Agenda 2030, for example, have attached i-cities to the ongoing 'rural-urban linkages' debate, stressing the need for 'the reduction of disparity along the rural-urban continuum', and for less 'reliance on primate cities, as a strategy to promote decentralized growth'.[199] A more developed and comprehensive document was produced during the Thematic Meeting, 'Intermediate Cities: Urban Growth and Renewal', organized by the Habitat III Secretariat in Cuenca, Ecuador, on 9 – 11 November 2015.[200] Only the African and Asian Regional and the Latin American Declarations for Habitat III include brief references to 'mid-sized' or 'intermediate' cities, while the draft version of the New Urban Agenda mentions 'intermediate cities' once.

Building on the analysis of the previous sections, and taking into account some of the key messages presented in the Cuenca Declaration for Habitat III, this section will summarize key lessons to enhance the debate on the role and potential contributions of these cities to the New Urban Agenda and the achievement of the SDGs. Finally, the text presents messages and recommendations for possible actions.

## 4.1 MAIN TRENDS IN THE GLOBAL EVOLUTION OF I-CITIES

I-cities host 20% of the human population and are the connective tissue that links the 58% of the world's population that live in rural areas and small towns with the 22% that live in larger metropolitan areas. The efficiency and performance of i-cities are crucial to the cohesion of these territories and to national prosperity and wellbeing. Their involvement is essential to the achievement of most of the goals of Agenda 2030.

The traditional role, location and scope of i-cities is being functionally redefined in the context of evolving national and global systems of cities. I-cities throughout the world now face common challenges resulting from the increased asymmetry of performance, both between i-cities and metropolitan areas, and between i-cities themselves. The internationalization of finance and other trade sectors; growing exposure of national economies to worldwide competition and structural reform; and radical changes in production systems and the organization of

**I-cities throughout the world now face common challenges resulting from the increased asymmetry of performance, both between i-cities and metropolitan areas, and between i-cities themselves**

trade, have subjected i-cities to unprecedented pressures. In developed economies, de-industrialization and knowledge-driven technological development are two of the most visible symptoms of this shift. Local cultures, identities and traditions have suffered similar pressures from more globalized and 'standardized' cultural products.

**The traditional role of i-cities as regional centres and providers of administrative and social services, oriented around local economic activities, has been called into question**. Governance reforms have delegated responsibilities to elected local authorities in many i-cities, often without dedicating commensurate resources and powers. Many have developed advanced clusters serving major cities, or evolved into urban corridors that sometimes even straddle national boundaries. But for other i-cities, particularly those located outside or on the periphery of more dynamic regions, the reality is one of stagnation and decline.

**When i-cities have adequate powers and capacities, experience shows that local leaders can mobilize their communities and take advantage of opportunities and foster innovation, leading to enhanced local development**

An inevitable consequence of these macroeconomic trends is that the movement of capital accelerates from low-productivity to high-productivity urban systems.[201] Spatial reorganization can lead to strongly dualistic wealth accumulation effects. While capital gains are concentrated in growing urban systems and economically dynamic regions, shrinking cities are being affected by a depreciation of their assets and declining investments. Tackling this urban dualism requires diversified policies and investment strategies for 'core' and 'non-core' cities, to correct imbalances within countries and regions. Changes of such magnitude have disrupted the economic and social equilibrium of many territories around the world.

Meanwhile in developing economies, i-cities have often absorbed large informal settlements and economic activities and are struggling to manage growth effectively in order to deliver essential services and opportunities. As highlighted in Section 3, these phenomena are particularly acute in Sub-Saharan Africa and Southern Asia, which will be the recipients of the most intense urbanizing flows and, at the same time, have the weakest local government capacity to manage them. Preventive planning and improved land management will be key instruments to bolster the capacity of local governments, facilitate the integration of new dwellers into i-cities, and 'use' i-cities as buffers for migration from rural to metropolitan areas.

In this regard, as mentioned throughout the report, i-cities can take advantage of proximity and human scale to grow more resilient to external shocks, strengthen their social and identity fabric, and mobilize local capacities and assets. This degree of cooperation, innovation and local self-reliance is not often found, even in larger metropolitan areas where homogeneity is much less strong. This chapter highlights the experience of i-cities that have been able to capitalize successfully on their size, role and unique position. The many cities mentioned have managed to strengthen their link with the hinterlands; develop shorter and more efficient economic flows; support local markets and production; improve inter-municipal cooperation in service and infrastructure provision; start the transition to more knowledge and technology-driven manufacturing and services; and become cultural centres with strong touristic attractiveness.

When i-cities have adequate powers and capacities, experience shows that local leaders can mobilize their communities and take advantage of opportunities and foster innovation, leading to enhanced local development. Effective decentralization policies, fiscal devolution, and capacity-building policies are crucial for urban management and local governments to be empowered to take greater responsibility for the development of sustainable i-cities. A strong enabling environment is essential to encourage and stimulate participation and grassroots engagement by local communities and partners in the private sector, together with NGOs, academia and civil society to develop sustainable i-cities. Even beyond formal legal frameworks and mechanisms, local leaders and authorities should promote the autonomous, free organization of their civil societies, providing them with adequate spaces and transparent conditions for their effective involvement in decision-making.

As discusssed in Section 3, inclusive, sustainable urban and territorial strategies are necessary to counterbalance increasing inequalities within countries, promote robust and well-balanced urban systems and enhance territorial cohesion. Several countries have developed national urban strategies. Many other central governments (or federated states in federal countries) are currently on course to establish urban strategies. Yet most countries around the world still do not have nor plan to have comprehensive urban policies at the national level. I-cities have often been

the 'Cinderella' of NUPs and strategies. This status quo is inadequate and ineffective in terms of promoting a more balanced approach to urban and territorial development. Multilevel governance mechanisms should guarantee the strong involvement of i-cities to enable ownership at all decisional levels, both in the definition and the implementation stages of consistent urban policies that endure across political cycles.

Widening inequality both between and within cities and territories could lead to serious social instability and environmental problems, to which the most disadvantaged cities will always be more exposed. The unrest that triggered the Arab Spring was sparked in a small Tunisian i-city. As the global debate around the SDGs has recently emphasized, inequality is one of the greatest emerging challenges of the 21st century. Urban and regional imbalances are a concrete expression of this trend. Several issues are spreading to i-cities, especially in developing countries. These include poverty, lack of affordable housing and opportunities, gender and minority discrimination, settlement and economic informality.

Environmental challenges also require mobilization of i-cities that, as the largest group of cities, could be decisive in the transition towards a more environmentally sustainable model and a lower carbon economy. I-cities can, thanks to proximity and more efficient urban management, generate urban structures and patterns of production and consumption that help reduce natural resources consumption and $CO_2$ emissions. This will help achieve the commitments made at the 21st Session of the Conference of the Parties (COP 21) in Paris, to 'hold the global average temperature to well below 2°C above pre-industrial levels and, if possible, limit the temperature rise of 1.5°C'.

Local authorities should take action and be given more opportunities and incentives to take the lead. The 'Right to the City' approach – as developed in the introduction and in the previous chapter on metropolitan areas – should be used by local authorities to guide local policies and transform i-cities into more inclusive, dynamic and liveable places.

**It is hard to anticipate the future scenarios and opportunities for i-cities. Changing models of production, consumption, and market and social organization give reason for optimism**. The advent of the 'third' industrial revolution, based on new digital technologies and in which agglomeration factors and economies of scale have a much lower importance, could diminish the 'tyranny' of mass production and reward economies and societies built on proximity rather than distance, and on human needs rather than mass consumption. The expansion of the service sector, including direct services to the consumer, and the growing integration of different stages of the product cycle (especially production, use and maintenance), are creating new market opportunities for certain functions that could either be better performed locally or traditionally carried out in a household environment (e.g. care of the elderly, early childhood care). The pace and scale of change gives rise to untold opportunities in our ever-transforming societies. I-cities could certainly reap the benefits of these changes – but they will have to be prepared for them.

Photo: Andrea Ciambra - Girona (Spain).

# 4.2
# KEY MESSAGES

This section presents key messages for national governments, local authorities, communities and international institutions, building on this chapter's analyses and on the Cuenca Declaration for Habitat III on 'Intermediate Cities':

**RECOGNIZE THE CRUCIAL ROLE OF INTERMEDIARY CITIES AS A MAJOR GROUP OF URBAN SETTLEMENTS**, for the achievement of Agenda 2030 and the New Urban Agenda. I-cities with visionary local leaderships and adequate support are key levers of local development, local democracy, social cohesion and enhanced cooperation between and among territories, focusing on the four pillars of sustainable development (social, economic, environmental and cultural).

**REDEFINE NATIONAL URBAN POLICIES TO SUPPORT INTERMEDIARY CITIES IN FOSTERING BALANCED AND INCLUSIVE URBAN AND TERRITORIAL DEVELOPMENT**. As regional hubs and anchors of regional development, i-cities act to counterbalance the polarization of urban systems that is fuelling spatial inequalities and artificial rural-urban divides in many countries. Equitable and effective national urban policies should be developed to address multilevel governance mechanisms, based on regular dialogue and collaboration. National urban policies should be supported by transparent and reliable funding mechanisms, to avoid leaving any cities or territories behind. In this regard, national, regional and intermediate governments should guarantee the strong involvement of i-cities in the definition and implementation of their national urban policies.

**UNLOCK INTERMEDIARY CITIES' POTENTIAL TO TAKE ON FULLY THEIR RESPONSIBILITY FOR URBAN MANAGEMENT AND DEVELOPMENT, THROUGH A FAIR DISTRIBUTION OF POWERS, FINANCES AND CAPACITIES**. Adequate funding should be a priority, empowering local governments with new ways to 'square the circle' in order to manage sustainable development and fulfil their potential. This requires adequate human, financial and technological resources to make decisions that are closer to, and respond better to, the needs of local citizens and businesses. With clear mechanisms and legal frameworks, their human scale could be a lever for local participatory democracy with the effective involvement of local communities and public and private partners (business sector, civil society organizations, etc.) in local development strategies.

**CAPITALIZE ON THE PROXIMITY AND HUMAN SCALE OF INTERMEDIARY CITIES BY STRENGTHENING URBAN PLANNING CAPACITIES AND LAND MANAGEMENT TO PREVENT URBAN SPRAWL AND REDUCE THE URBAN FOOTPRINT**. This must be a priority in developing countries facing rapid urban growth in the coming decade, and a necessary action to avoid unplanned peri-urban growth and slum expansion, especially in risk-prone areas.

**RAISE THE NATIONAL PROFILE OF INTERMEDIARY CITIES**. I-cities should make themselves more visible by branding and promoting themselves as centres of innovation, intermediation, service provision, cultural heritage and prosperity, and should make clear to national governments that they are capable and ambitious.

**FOSTER REGIONAL DEVELOPMENT BY ENCOURAGING CLOSER COOPERATION BETWEEN I-CITIES AND THEIR RURAL HINTERLANDS, AS WELL AS INTER-MUNICIPAL PARTNERSHIPS**. This will create economies of scale for infrastructure and public services, strengthen the flow of goods and people within the region, and improve the management of natural resources. Floating populations, unequal distribution of resources and responsibilities within territories,

and administrative isolation are pressing issues that i-cities need to tackle, making themselves heard by national governments while bolstering territorial cooperation and collaboration. This also requires the creation of adequate legal frames and technical tools to pool urban and territorial planning strategies, capacities and resources.

**DEVELOP AMBITIOUS LOCAL ECONOMIC POLICIES TO CREATE NEW OPPORTUNITIES AND OVERCOME NATIONAL AND GLOBAL ECONOMIC CHANGES**. Innovative policies can boost i-cities' economies and regional dynamics through the mobilization of local capacities and assets, and the promotion of 'short circuits' to support local social and collaborative economies. I-cities can do this by embracing the Third Industrial Revolution to help firms achieve economies of scale and overcome problems of distance and enable greater personalization and localization of the production of a wide range of goods and services that are currently imported. I-cities and national governments should take advantage of emerging clusters, trans-border, and regional economic corridors to anchor the role of i-cities in national and global economies. New technology, smart development and interconnectedness are all part of the future of i-cities and have huge potential to make them valuable actors on the global stage, and essential cogs in more innovative and productive national economies.

**TACKLE GROWING INEQUALITIES BY DEVELOPING SOCIAL POLICIES THAT ENSURE AFFORDABLE ACCESS TO BASIC SERVICES, HEALTH AND EDUCATION**. I-cities, despite their limited resources, must deal with greater pressures on housing and land tenure to ensure gender equality, respond to the demands of ageing populations, and create favourable prospects and opportunities for youth. Adequate social policies could help strengthen intermediary cities as buffers in the management of migration. This should also include enhanced resources and capabilities for those endemic issues and structural problems that tend to affect poorer communities and less developed economies and to which i-cities can be much more vulnerable, e.g. malnutrition, epidemics, HIV, poverty and discrimination.

**REDUCE THE URBAN ENVIRONMENTAL FOOTPRINT TO FIGHT ENVIRONMENTAL DEGRADATION, CLIMATE CHANGE, AND THE THREAT OF NATURAL DISASTERS**. Constituting a major group of cities worldwide, but also with the comparative advantage of human scale and valuable proximity to their hinterland, i-cities should contribute to the transition from a fossil fuel to a green economy model. Many i-cities, however, still have scarce resources and limited capabilities to face increasingly frequent natural disasters and the effects of climate change. They should, therefore, cooperate to pool their resources and knowledge to make adaptation and mitigation strategies more accessible and applicable, and advocate for resilience strategies at the national and global level.

**ENSURE ACCESS TO AND PARTICIPATION IN CULTURE AND CULTURAL LIFE FOR ALL.** Culture is a vital element of citizenship, social integration and co-existence. I-cities should build on their local identities as well as their cultural and heritage potential to promote a sense of place and identity, belonging and creativity. Central governments should integrate the cultural dimension of their cities into their sustainable development plans.

**ADOPT THE 'RIGHT TO THE CITY'** approach to ensure respect for human rights at the local level, stressing the necessary links with social inclusion, gender equality, enhanced political participation, quality public spaces, inclusive economy, environmental sustainability and the protection of common goods, for current and future generations.

## NOTES

1 Urban systems and systems of cities are very difficult to define. They are composed of trading and information networks that have developed among urban settlements over time. The internationalization of the global economy has created a network of cities that are inextricably woven together and thus interdependent. Urban systems tend to be open tend to be open, enabling exchanges with the environment as well as being open to change, including the introduction of technical or social innovations. They also overlap as part of interlocking networks (see, for instance, Bretagnolle, Daudé, and Pumain, *From Theory to Modelling*).
2 Giffinger et al., *European Smart Cities*, 16.
3 Rondinelli, *Secondary Cities in Developing Countries*.
4 Wood, *Intermediate Cities on a Resource Frontier*.
5 Bellet and Llop, *Ciudades intermedias*; Bolay and Rabinovich, *Intermediate Cities in Latin America Risk and Opportunities of Coherent Urban Development*; Gault, *Villes intermédiaires pour l'Europe?*
6 Angel et al., *Atlas of Urban Expansion*.
7 Parkinson et al., *Second Tier Cities in Europe: In an Age of Austerity Why Invest beyond the Capitals?*
8 Roberts, *Managing Systems of Secondary Cities*.
9 UCLG, *UCLG Frame Document for Intermediary Cities*. Other sources consider as 'intermediary' those cities with a population of between 100,000 and one million inhabitants (UN-Habitat, *An Urbanizing World*). The European Union defines intermediary cities as urban centres of between 20,000 and 500,000 inhabitants, while the World Bank (*World Development Report: Reshaping Economic Geography*, 2009) raises the threshold up to one million inhabitants. In South-eastern Asia, particularly in China, cities of between 100,000 and three million inhabitants are generally considered middle-sized cities. In Pakistan, on the other hand, the definition applies to cities of between 25,000 and 100,000 people. In the United States, cities are categorized as large, medium and small. 'Large' cities include those with a current non-farm employment base of at least 450,000 jobs. 'Mid-size' areas range from 150,000 to 450,000 jobs. 'Small' areas can have as many as 150,000 jobs. In Argentina, cities of between 50,000 and one million inhabitants are also considered intermediary cities.
10 Habitat III - Thematic Meeting, Cuenca Declaration for Habitat III on *Intermediate Cities: Urban Growth and Renewal*: '...the concept of 'intermediate cities' stems from their role as intermediaries within a territorial system, interacting with bigger cities, towns and other human settlements and more effectively articulating rural-urban linkages. Mindful of the differences of population size considered to define intermediate cities, which may vary in different regions, ranging from 20,000/50,000 inhabitants to 500,000 and up to one million in specific countries and regional contexts'. The full text of the Declaration is available on-line at this address: http://habitat3.cuenca.gob.ec/archivos/declaration/HIII-Declaration CuencaEN.pdf).
11 More information is available in the report's introduction.
12 A more detailed analysis is available in Section 2.1.
13 Based on the classic approach of Michel Porter (in *The Competitive Advantage of Nations*, 1998), industrial clusters and districts are defined as forms of territorial 'aggregation between companies operating in the same sector or branch and characterized by specific technical and social relationships among private and public actors. The cluster has a positive influence on: innovation and competitiveness, skill formation and information and growth and long-term business dynamics'.
14 Roberts, *Managing Systems of Secondary Cities*; Roberts and Hohmann, *Secondary Cities: Managing Urban Land Governance Systems*.
15 Rifkin, *The Third Industrial Revolution*.
16 Schwab, *The Fourth Industrial Revolution*.
17 UCLG, *UCLG Frame Document for Intermediary Cities*.
18 See Mercer's Quality of Living Ranking (top 100), Monoce Quality of Life, Numbeo Top 100, Eius Liveability Ranking, Innovation Cities Index (2014), EIU City Hot Spots, UN-Habitat City Prosperity Index, Econominst Intelligence Unit Liveability Index, A.T. Kearney Global Cities Index, Global Financial Centers Index.
19 European Commission, *Quality of Life in Cities*.
20 Top 100, Innovation Cities Index 2015, http://www.innovation-cities.com/innovation-cities-index-2015-global/9609.
21 Johnston and Bate, *The Power of Strategy Innovation*, 136.
22 *The Human Scale - Official Trailer*.
23 Institut d'Aménagement et d'Urbanisme de la Région d'Ile-de-France, *La Stratégie d'aménagement et de développement économique de la Randstad-Hollande*.
24 See McGranahan and Satterthwaite, *Urbanisation*.
25 Tacoli, McGranahan, and Satterthwaite, *Urbanisation, Rural-Urban Migration and Urban Poverty*, 8.
26 Battistella and Conaco, *The Impact of Labour Migration on the Children Left Behind*; Biao, *How Far Are the Left-behind Left Behind?*
27 Li and An, *Migration and Small Towns in China*.
28 UN-Habitat, *The State of European Cities in Transition 2013: Taking stock after 20 years of reform*, 62.
29 Angel, *Planet of Cities*.
30 ESPON, *Territories Finding a New Momentum*.
31 Roberts, *Gestionando Sistemas de Ciudades Secundarias*.
32 Ashton-Wyatt, *Cities beyond Perth. Best Bets for Growth in a New Economic Environment*.
33 Haughton and Hunter, *Sustainable Cities*, 70; Meligrana, *Redrawing Local Government Boundaries*.
34 New Geography, *Best Cities 2015*.
35 ESPON, *Second-Tier Cities and Territorial Development in Europe: Performance, Policies and Prospects*.
36 Bolay and Rabinovich, *Intermediate Cities in Latin America Risk and Opportunities of Coherent Urban Development*.
37 John, *Secondary Cities in South Africa: The Start of a Conversation*.
38 UN-Habitat and CAF, *Construction of More Equitable Cities*.
39 Council of Europe, *European Charter of Local Self-Government*
40 UCLG, *Decentralization and Local Democracy in the World*; UCLG, *Local Government Finance*. CEMR, *Decentralisation at a crossroads: territorial reforms in Europe in times of crisis*
41 Bachtler and McMaster, *EU Cohesion Policy and the Role of the Regions*.
42 In the Middle Eastern and Western Asian region, devolution to local government is only part of the constitutions of Lebanon, Syria, Iran and Turkey. See: UCLG, *Decentralization and Local Democracy in the World*, 207.
43 Cities Alliance and UCLG Africa, *Assessing the Institutional Environment of Local Governments in Africa*.
44 The opposition of a number of Pennsylvania's i-cities and small cities to fracking explorations and drilling on their territories – in spite of significant consensus and economic interest at higher levels of government – was one of the most visible recent cases in this regard.

[45] Abers, *Learning Democratic Practice: Distributing Government Resources Through Popular Participation in Porto Alegre, Brazil*; Gret and Sintomer, *Porto Alegre*; Schneider and Baquero, *Get What You Want, Give What You Can*; UCLG, *Basic Services for All in an Urbanizing World*.

[46] Certain intermediary cities in Africa, for instance, spent less than USD 1 per capita overall per year (for more details, see AfDB, OECD, and UNDP, *African Economic Outlook 2015*, 171).

[47] Joshi, Prichard and Heady, *Taxing the Informal Economy.*

[48] In Dakar, Senegal for example, the vast majority of informal settlement dwellers are still without a land title despite a national tenure regularization programme that was launched in 1987. Similar delays in the titling process have been observed in Accra (Ghana), Tanzania and Indonesia (see Payne, Durand-Lasserve, and Rakodi, *The Limits of Land Titling and Home Ownership*).

[49] While in countries such as Germany or Sweden many 'free' local services are financed by local taxes, Anglo-Saxon countries such as the United Kingdom or Canada tend to rely more heavily on the 'user-pays' principle. Furthermore, many i-cities have outsourced certain services, such as water, electricity or public transportation to external service providers, which become the beneficiaries of the fees and charges paid by service users and consumers of the services.

[50] Kaganova, *Guidebook on Capital Investment Planning for Local Governments*; Lall, *Planning, Connecting, and Financing Cities-Now*.

[51] De Mello, *Fiscal Responsibility Legislation and Fiscal Adjustment: The Case of Brazilian Local Governments*.

[52] Smoke, *Metropolitan Cities in the National Fiscal and Institutional Structure*.

[53] Ibid.

[54] UCLG, *Basic Services for All in an Urbanizing World*.

[55] Murray Jamer, Deputy CAO, City of Fredericton, Canada (2015)

[56] UN-Habitat, Urbanization and Development, Emerging Futures, calculated from Statistical Annex, Table E2. For more information on access to basic services, see Chapter 1 and UCLG ed., *Basic Services for All in an Urbanizing World*.

[57] Arnett, *London Gets 24 Times as Much Spent on Infrastructure per Resident than North-East England*; Mahadevia, *Inter-City and Intra-City Inequity in Infrastructure Development in Urban China*; Henckel and McKibbin, *The Economics of Infrastructure in a Globalized World*.

[58] Okeke, *Towards a New Growth Path in Africa: A Study of National Urban Policy Responses to Urbanization.*

[59] AfDB, OECD, and UNDP, *African Economic Outlook 2015*; UCLG, *Basic Services for All in an Urbanizing World*.

[60] Habitat III Regional Meeting, *Africa's Priorities for the New Urban Agenda*, Abuja, 24-26 February 2016, https://www.habitat3.org/bitcache/fa44aa3e9fa42963d526e8f88585c5c03849bef2?vid=574438&disposition=inline&op=view

[61] For a review of different approaches and experiences from the local government perspective, see also UCLG, *Basic Services for All in an Urbanizing World*.

[62] Orozco, *Remittances in Latin America and the Caribbean*; Orozco and Rouse, *Migrant Hometown Associations and Opportunities for Development*; Roberts, *Managing Systems of Secondary Cities*; Roberts and Hohmann, *Secondary Cities: Managing Urban Land Governance Systems*. Of all Philippine remitters working in Hong Kong, 63% contribute to migrant hometown associations (HTAs), as do 88% of all Indonesian remitters working in Malaysia (see Orozco and Rouse, *Migrant Hometown Associations and Opportunities for Development*). Considering that in such partnerships the focus of interest lies in the welfare of the community – by improving the provision of public goods and services such as clinics, classrooms or parks – rather than in making a profit, it should be easier for intermediary cities and their partners to identify suitable projects. In Mexico for example, 80% of HTA's coordinate their activities with municipal leaders.

[63] UCLG, *Basic Services for All in an Urbanizing World*, 211.

[64] Among them, Paris and Aix-Marseille enjoy a special status. The framework's criteria, for instance, define metropolis as any urban area of at least 400,000 inhabitants, located in a larger agglomeration of at least 650,000 inhabitants. Many French cities, therefore, have been granted the status of metropolis – Lille, Bordeaux, Nice, Nantes, Rennes, Grenoble, Brest, Strasbourg, Rouen, Montpellier and Toulouse – even though almost none of their metropolitan areas even reaches one million inhabitants. France's and the EPCI's definition of 'metropolis' challenges the conventional focus on the statistical datum, and rewards the ability of certain local governments – a number of i-cities among them –to create opportunities for their citizenship. The delegation of one key traditional competence of *Intercommunalités* - water and sanitation - from municipalities to such entities will become mandatory from January 1, 2020.

[65] UCLG, *Basic Services for All in an Urbanizing World*.

[66] UN-Habitat, *Planning Sustainable Cities*.

[67] Whereas in 2009 Europe had over 160 schools offering certified studies in urban and regional planning – compared to the United States' 88 and China's 97 – the whole of the African continent offered only 69 such centres, 39 of them in Nigeria. Ghana and the Philippines rely on just one planning school each (see Ibid).

[68] UN-Habitat approaches the category of spatial management plans through such concepts as a master plan, comprehensive plan, comprehensive city plan, general plan, layout plan or local plan, destination plan or building plan, strategic spatial plan, directive or development plan, land-use zoning, regulatory planning (see Ibid., 11).

[69] Ibid., 57.

[70] UN-Habitat, *Planning Sustainable Cities*. More information about the city development strategy from local governments' perspective is available in UCLG, *Policy Paper on Urban Strategic Planning: Local Leaders Preparing for the Future of Our Cities.*

[71] The Centro Iberoamericano de Desarrollo Estratégico Urbano (CIDEU) is a network of 121 Latin American cities and a number of different institutional members, established to promote the growth and socio-economic development of its members. More information is available on the network's website: http://www.cideu.org/index.php.

[72] UCLG, *Policy Paper on Urban Strategic Planning: Local Leaders Preparing for the Future of Our Cities.*

[73] More information is available online at: http://www.iadb.org/es/temas/ciudades-emergentes-y-sostenibles/ciudades-usando-el-enfoque-de-desarrollo-urbano-sostenible,6693.html#ciudades1

[74] UCLG, *Technical Exchange between Peers Decentralized Cooperation Brazil and Mozambique*.

[75] UN-Habitat, *Planning Sustainable Cities*.

[76] Source: Josep Maria Llop, UNESCO-CIMES. http://www.ceut.udl.cat/en/ciutats-mitjanes-i-intermedies/el-programa-uia-cimes/

[77] A city's compactness measures the physical relationship between the habitable volume built over time by the populace and the area of land used to make it possible. Compactness is an urban parameter that links together key indicators of sustainability such as 'density', 'urban footprint', as well as the scale of 'proximity' and 'cohesion'. An intermediary city of about 140,000 inhabitants usually contains approximately 70% of its population within a 2.5km radius, a range that generally favours pedestrian mobility and fosters citizen ownership of public spaces. In a city with a population between 140,000 and 390,000 inhabitants this circle expands to a 3.7km radius. The same radius can grow up to 8km in a city of 700,000 inhabitants and up to 10km as it nears one million inhabitants, when it takes on the features of a metropolitan agglomeration (see Bellet and Llop, *Ciudades intermedias*). This range also defines a territory's symbolic and functional core, making the services and the labour market offered by the city, as well as its unique cultural endowment, more or less accessible for its citizens and its hinterland (see also OECD, *Compact City Policies*, 83; Llop and Usón i Guardiola, *Ciudades intermedias*, 16).

[78] Banco Interamericano de Desarrollo, Cuenca. *Ciudad Sostenible,* 16.

[79] See also Nicolò and Bendech, *Street Food Vending in West African Cities: Potential and Challenges*.
[80] UCLG, *Planning and Management of Sustainable Urban Development of Intermediary Cities*, 7.
[81] Kewalramani, *India's Urban System and the Intermediate City*.
[82] UNECE et al., *Towards a City-Focused, People-Centred and Integrated Approach to the New Urban Agenda*, 9.
[83] For an approach to social housing in China see International Bank for Reconstruction and Development, World Bank, and Development Research Centre of the State Council, *Urban China*, 22.
[84] Ibid., 10; López Moreno and González Blanco, *Ghost Cities and Empty Houses: Wasted Prosperity*.
[85] More information on TECHO's initiative to map Chilean informal settlements is available online at http://chile.techo.org/cis/monitor/.
[86] Source: Regina Gregory, *Germany - Freiburg - Green City*, *The Eco Tipping Points Project*, more information at: http://www.ecotippingpoints.org/our-stories/indepth/germany-freiburg-sustainability-transportation-energy-green-economy.html
[87] See UNISDR, *Christchurch Re-Born after Five Years*: 'Over the last five years, 1,200 major buildings have been demolished and 68,000 homes have been repaired. It should be noted that the pace of the work was helped by the fact that 98% of people were insured. The Stronger Christchurch Infrastructure Rebuild Team (SCIRT) has completed 86% of horizontal infrastructure repairs including roads, storm water drains, drinking water and sewerage pipes'. Available online at this address: http://www.unisdr.org/archive/48110. The main reason Christchurch was able to respond so quickly was because of the establishment of the Earthquake Commission (EQC) in 1945 which had more than 5.3 billion NZ dollars in funds invested to be used to fund the recovery of this type of disaster. The New Zealand government was able to immediately release 10,000 NZ dollars to each household within days to support the recovery effort and the long-term reconstruction programme.
[88] Vu Kim Chi et al., *Coastal Urban Climate Resilience Planning in Quy Nhon, Vietnam*.
[89] Pauleit et al., *Urban Vulnerability and Climate Change in Africa*.
[90] D'Amico et al., *Evolution of the Cluster Approach to the EMAS Regulation in Italy*. The EMAS II Regulation (Eco-Management and Audit Scheme, EC Regn.761/2001 ) highlights the role of local authorities and intermediaries (Art. 11), which is further developed in the newer 2009 regulation (EMAS III) supporting SMEs. The regulation requires an initial environmental review of the entire region as a first step to register and to take a strategic coordinating role together with other actors in the cluster. This allows small businesses to achieve goals that they could not achieve individually, in particular through the provision of resources that are common to the whole cluster.
[91] See Choe and Laquian, *City Cluster Development*; Choe and Roberts, *Competitive Cities in the 21st Century*. The authors examine a number of examples (e.g. the knitwear industry cluster in Tiruppur, India, or the multi-industry clusters in Chiang Mai Thailand, or the education cluster in Sleman Indonesia).
[92] See Chapter 1, Section 4.1.1. 'The circular economy involves the distinct and careful management of two different types of materials within a closed-loop economy: materials of biological origin which can return to the biosphere as feedstock (biological nutrients, e.g. forest products) and technical materials which cannot biodegrade and enter the biosphere (technological nutrients, e.g. plastics and metals)', in Rizos et al., *The Circular Economy Barriers and Opportunities for SMEs*, 1.
[93] Roberts, *The Application of Industrial Ecology Principles and Planning Guidelines for the Development of Eco-Industrial Parks*.
[94] Jacobsen, *Industrial Symbiosis in Kalundborg, Denmark*.
[95] See also Journal Resolix, *Systèmes alimentaires territorialisés au Québec*, Février 2016; Carcenac, P., *Comment la ville d'Albi veut conquérir son autosuffisance alimentaire*, LeFigaro online edition, April 14, 2016, available on-line at this address: http://www.lefigaro.fr/actualite-france/2016/04/14/01016-20160414ARTFIG00180-comment-la-ville-d-albi-veut-conquerir-son-autosuffisance-alimentaire.php. See finally, 'Shop Local' movements in many countries, and Warhurst, P., *Incredible Edible*, available on-line at this address: http://www.incredible-edible-todmorden.co.uk/home. Many American cities are also engaged in Shop Local movements, but with different political aims.
[96] UCLG, *Urban-Rural Policies for the Promotion of Decent Work in Intermediary Cities*.
[97] See Pasto's *Plan for Territorial Planning 2015-2027: a Territory with a Logic* (also Ibid., 24).
[98] Juliá Igual and Meliá Martí, *Social Economy and the Cooperative Movement in Europe: Contributions to a New Vision of Agriculture and Rural Development in the Europe of The 27*.
[99] UCLG, *UCLG Frame Document for Intermediary Cities*.
[100] Tacoli, McGranahan, and Satterthwaite, *Urbanisation, Rural-Urban Migration and Urban Poverty*.
[101] OECD, *Rural-Urban Partnerships*.
[102] Ibid.
[103] See World Tourism Organization (UNWTO), *Global Report on City Tourism - Cities 2012 Project*. Moreover, according to Tourism Towards 2030, UNWTO's recently updated long-term outlook and assessment of future tourism trends, the number of international tourist arrivals worldwide is expected to increase on average by 3.3% each year between 2010 and 2030. This represents some 43 million more international tourist arrivals every year, reaching a total of 1.8 billion arrivals by 2030.
[104] Okech, *Socio-cultural Impacts of Tourism on World Heritage Sites*.
[105] See the International Association of Science Parks and Areas of Innovation's (IASP) statistics (2016) at this address: http://www.iasp.ws/statistics.
[106] UCLG Committee of Digital and Knowledge-Based Cities and Municipality of Bilbao, *Smart Cities Study.*
[107] UCLG Committee of Digital and Knowledge-Based Cities and Municipality of Bilbao. More information on the Committee's activities is available online at: http://www.uclg-digitalcities.org/
[108] A list of Indian cities that stand out in terms of their progress in technological development and knowledge-based implementation is available at this address: http://smartcities.gov.in/winningCityp1.htm.
[109] Nyangoro and Lubaale, *Informal Economy Monitoring Study*.
[110] *UN-Habitat, Gender mainstreaming in local authorities. Best practices, p.27*
[111] UCLG, *Basic Services for All in an Urbanizing World*, 211–12.
[112] McGranahan and Satterthwaite, *Urbanisation*.
[113] See International Cooperative Alliance, available on-line at this address: http://ica.coop/es/media/news/contra-el-viento-y-las-mareas-las-cooperativas-de-mujeres-de-palestina.
[114] See, in this regard, data available at UNESCO: http://www.unesco.org/most/easteur2.htm.
[115] Venables, *New Economic Geography*; World Bank, *World Development Report: Reshaping Economic Geography*.
[116] Christaller, *How I Discovered the Theory of Central Places: A Report about the Origin of Central Places*.
[117] A monocentric system of cities is one where more than one-third of the nation's urban population live in the primate city. Bicentric are where more than one-third of the nation's urban population live in the two largest cities and polycentric is if more than one-third of the nation's urban population live in the two or three largest cities.
[118] AfDB, UNDP, and OECD, *African Economic Outlook 2016*, 156.
[119] Benner, *Cluster Policy as a Development Strategy. Case Studies from the Middle East and North Africa*.

[120] More information available online at: http://africanbusinessmagazine.com/region/west-africa/roll-first-made-nigeria-cars/.
[121] SWECO and NCG, *Review of the Implementation of the Trans African Highways and Missing Links*.
[122] Source: http://www.uemoa.int/
[123] Almost 70% of the 10 million urban dwellers that arrive in a Sub-Saharan city every year will only have access to informal settlements, and just 20% will have an opportunity to upgrade their living (see UN-Habitat, *Issue Paper on Informal Settlements*, 4).
[124] Turok and Parnell, *Reshaping Cities, Rebuilding Nations*; Okeke, *Towards a New Growth Path in Africa: A Study of National Urban Policy Responses to Urbanization*; Geyer, *International Handbook of Urban Policy. Issues in the Developing World*
[125] See also AfDB, OECD, and UNDP, *African Economic Outlook 2015*, 171, and AfDB, UNDP, and OECD, *African Economic Outlook 2016*, 148.
[126] The document is available online at this address: http://www.au.int/en/treaties/african-charter-values-and-principles-decentralisation-local-governance-and-local.
[127] African Union Commission, *Agenda 2063. The Africa We Want*, 10.
[128] Ibid., 2.
[129] South African Network of Cities (SACN), *Outside the core*.
[130] Federal Ministry of Works and Housing, *National Urban Development Policy for Nigeria*.
[131] UCLG, *Public Space as a Generator of Growth in African Cities*.
[132] A recent study (Brar et al., *India's Economic Geography in 2025*), stresses that India's semi-urban and urban districts are expected to overtake rural districts by 2025. Based on a 'granular' analysis, the document shows that in 2012 India included 153 rural districts, 219 'in-transition' districts, 84 semi-urban districts and 33 urban districts. Forecasts to 2025 show, on the other hand, 96 rural districts, 220 in–transition districts, 115 semi-urban districts and 58 urban districts. 'Urban districts' are defined as districts with a level of urbanization of 60% or higher, while semi-urban ones are those where between 35% and 60% of the population live in urban areas. According to the report, there is an 'inflection point' once the districts' urbanization levels reach 35% or more, when the average GDP per capita increases significantly due to a sharp fall in the agricultural share of GDP.
[133] Ibid., 39.
[134] Choe and Laquian, *City Cluster Development*.
[135] Brar et al., *India's Economic Geography in 2025*, 443–45.
[136] More information available at this address: http://www.dmicdc.com/.
[137] OECD, *OECD Urban Policy Reviews*.
[138] Ministry of Urban Employment and Poverty Alleviation and Ministry of Urban Development, *Jawaharlal Nehru National Urban Renewal Mission*; UN-Habitat and Cities Alliance, *The Evolution of National Urban Policies*, 47.
[139] More detail on the Smart City features: http://smartcities.gov.in/writereaddata/Smart%20City%20Features.pdf.
[140] The *National Socio-Economic Plan* and the 2008 *National Spatial Plan* put forward an agenda for the next 20 years. The national urban policy framework is further defined in the *National Policies and Strategies for Urban Development towards Sustainable and Competitive Cities for 2045* (KSNPP) document, released in 2015.
[141] The *National Urban Development and Housing Framework* (NUDHF) for 2009-2016 is the comprehensive plan, and is accompanied by different national development plans. The NUDHF 2009-2016 includes five main goals: 1) urban competitiveness; 2) poverty reduction; 3) affordable housing; 4) sustainable communities through market-based incentives; and 5) stronger local finances (see Ali and Dodson, *National Urban Policy. Asia and Pacific Region)*.
[142] Ibid.
[143] OECD, *OECD Urban Policy Reviews Korea*.
[144] Urban planning and management have become an important part of Vietnam's economic platform (*Socio-Economic Development Strategy 2011-2020*). The *National Urban Upgrading Strategy and Overall Investments Plan* (NUUP, approved in 2009) and the *National Urban Development Policy* (NUDP) for the period 2012-2020 have been the guiding policy blueprints for national urban development (see Ali and Dodson, *National Urban Policy. Asia and Pacific Region*, 81–83).
[145] Malaysia released its NUP in 2006, as part of the 8th Malaysian Plan 'to create a visionary city with a peaceful community and living environment through sustainable urban development', complemented by the national development plan, the *National Physical Plan*, as well as by the *National Land-Use Policy* (see 'Ibid', 123–26).
[146] Ibid., 104.
[147] Ibid., 24–26.
[148] Hildebrand, Kanaley, and Roberts, *Sustainable and Inclusive Urbanization in Asia Pacific*.
[149] Roberts, Lindfield, and Steinberg, *Shaping the Future through an Asia-Pacific Partnership for Urbanization and Sustainable City Development*.
[150] These territories include Kazakhstan, Kyrgyzstan, Tajikistan, Turkmenistan and Uzbekistan (Central Asia), Armenia, Azerbaijan and Georgia (Caucasus), and Belarus, the Russian Federation and Ukraine (Eastern Europe).
[151] The Soviet Union also included Estonia, Latvia, Lithuania and Moldovia.
[152] CER, UN-ESCAP, and UNDP, *Urbanization in Central Asia: Challenges, Issues and Prospects*, 26.
[153] UNECE et al., *Towards a City-Focused, People-Centred and Integrated Approach to the New Urban Agenda*, 24.
[154] CER, UN-ESCAP, and UNDP, *Urbanization in Central Asia: Challenges, Issues and Prospects*.
[155] This section is based on the following reports, UNECE et al., *Towards a City-Focused, People-Centred and Integrated Approach to the New Urban Agenda*; CER, UN-ESCAP, and UNDP, *Urbanization in Central Asia: Challenges, Issues and Prospects*.
[156] UNECE et al., *Towards a City-Focused, People-Centred and Integrated Approach to the New Urban Agenda*.
[157] Ibid., 11–12.
[158] Ibid., 12–13.
[159] CER, UN-ESCAP, and UNDP, *Urbanization in Central Asia: Challenges, Issues and Prospects*.
[160] UNECE et al., *Towards a City-Focused, People-Centred and Integrated Approach to the New Urban Agenda*, 12–13.
[161] CER, UN-ESCAP, and UNDP, *Urbanization in Central Asia: Challenges, Issues and Prospects*.
[162] ESPON and University of Geneva, *European Perspective on Specific Types of Territories*. ESPON recognize three groups of countries: 1) Countries with a balanced distribution of population between high-density urban clusters and small and medium-sized towns (Austria, Bulgaria, the Czech Republic, Denmark, Estonia, Finland, Italy, Latvia, Poland, Portugal, Romania, Sweden and Slovenia); 2) Countries with an overrepresentation of population living in smaller settlements (France, Hungary, Ireland, Lithuania, Luxembourg, Norway and Slovakia); 3) Countries in the central part of Europe, with high-density urban clusters as well as a large number of small and medium-sized towns, stretching from the south of England across the Benelux countries and west of Germany to north and north-east Italy. (ESPON – Towns and Territorial Cooperation May 2015)
[163] Ibid., 3.
[164] ESPON, *Territories Finding a New Momentum*, 8.

[165] Ibid., 41.
[166] Key official documents on the programme's renovation and expansion are available online at this address: http://ec.europa.eu/transport/themes/infrastructure/ten-t-guidelines/index_en.htm.
[167] The new budget for the TEN-T programme amounts to over 24 billion euros up to 2020, together with additional funding from the European Investment Bank and involved EU agencies.
[168] European Commission, *Core Network Corridors. Progress Report of the European Coordinators*.
[169] ETC Transport Consultants, *Transport Market Study for the Scandinavian Mediterranean RFC*.
[170] European Commission, *Core Network Corridors. Progress Report of the European Coordinators*.
[171] European Commission, *Communication to the European Parliament and the Council of the EU on the Urban Dimensions of EU Policies – Key Features of an EU Urban Agenda*.
[172] The case of Ireland's National Spatial Strategy is telling of the (horizontally and vertically) cross-cutting nature of urban policy, its challenges and the solutions it demands. The plan had to devise specific measures to foster urban sustainability and infrastructural interconnectedness throughout the Irish island, irrespective of the border with Northern Ireland (part of the United Kingdom), thereby promoting joint cross-border initiatives for territorial development.
[173] ESPON, *Second-Tier Cities and Territorial Development in Europe: Performance, Policies and Prospects*.
[174] Inteli, *Creative-Based Strategies in Small and Medium-Sized Cities: Guidelines for Local Authorities*.
[175] France hosts the largest number of municipalities (36,682) in Europe.
[176] Key actors, whose presence in the decision-making process has been enhanced include, among others, the General Commission for Regional Equality (CGET); the National Observatory of the Urban Policy (*Observatoire national de la politique de la ville*); the National Agency for Urban Renewal (ANRU); the National Council of Cities (*Conseil national des villes*); and the association of local government members *France Urbaine*, a merging of existing mayoral and local representative associations.
[177] The reform was enacted against the backdrop of France's long-established and effective frame for inter-municipal cooperation (almost all of France's municipalities are part of an *Intercommunalité*) and sought more proactive grassroots participation through the promotion of *Conseils Citoyens*, citizenship councils, to make the decision-making process more transparent.
[178] The relationship between urban agglomerations and governance levels is so apparent that the smallest *Länder* – Berlin, Bremen and Hamburg – are generally considered city-states, as they barely extend beyond city limits.
[179] UN-Habitat, *State of the World's Cities 2012-2013*.
[180] Altenburg and Meyer-Stamer, *How to Promote Clusters*.
[181] Bolivia is currently going through the accession process, whilst the remaining South American countries are officially Mercosur-associated countries. Mexico and New Zealand have an observatory status within the organization.
[182] Source: http://www.mercosur.int/
[183] Sources: CONPES 3819, *Política Nacional para Consolidar el Sistema de Ciudades en Colombia, Departamento nacional de planeación,* 2014 and Misión Sistema de Ciudades, *Una política nacional para el sistema de ciudades colombiano con visión a largo plazo*.
[184] More information on this body is available online at this address: http://www.fccrmercosur.org/.
[185] UN-Habitat, *The State of Arab Cities 2012*, 139.
[186] Ibid., 172.
[187] Madbouly, *Revisiting Urban Planning in the Middle East North Africa Region*.
[188] Data in this section obtained from the United Nations' country profiles at UNData: http://data.un.org/Default.aspx.
[189] UN-Habitat, *Issue Paper on Informal Settlements*, 24.
[190] Yousef, *Development, Growth and Policy Reform in the Middle East and North Africa since 1950*.
[191] UN-Habitat, *State of the World's Cities 2008/2009 – Harmonious Cities*.
[192] Florida, *2013's Best-Performing American Cities*.
[193] *OECD, Trends in Urbanisation and Urban Policies in OECD Countries;* Sapotichne, *The Evolution of National Urban Policy: Congressional Agendas, Presidential Power, and Public Opinion*.
[194] Florida, *2013's Best-Performing American Cities*.
[195] Pendall and Carruthers, *Does Density Exacerbate Income Segregation?*. Recent economic forces and pressures, especially in the aftermath of the global financial crisis, have catalyzed this kind of process, shifting the paradigm of urban poverty in the United States from deprivation in inner urban areas to a kind of 'suburban poverty' that upsets and reverts the idea of affluence that was traditionally linked to isolation in sprawled urban expansions (see UNECE et al., *Towards a City-Focused, People-Centred and Integrated Approach to the New Urban Agenda*, 22).
[196] Resnik, *Urban Sprawl, Smart Growth, and Deliberative Democracy*.
[197] Singh, Pathirana, and Shi, *Assessing Coastal Vulnerability*; Gao, *Regional Industrial Growth*; Kotkin and Schill, *A Map Of America's Future*; AfDB, OECD, and UNDP, *African Economic Outlook 2015*.
[198] See also the periodical OECD publication series: *OECD Territorial Reviews*. A full archive is available online: http://www.oecd-ilibrary.org/urban-rural-and-regional-development/oecd-territorial-reviews_19900759.
[199] UN-Habitat, *Contribution of UN-Habitat to the Post-2015 Development Agenda*. In a meeting organized by UN-Habitat on 'the role of intermediate cities in strengthening rural-urban linkages towards the New Urban Agenda' in Montería (Colombia), on 27 – 28 October 2015, a group of experts added to the UN-Habitat resolution, the need to promote multi-sectorial and multilevel approaches to strengthen the governance of small and intermediary cities; promote strong leadership and long-term visions and plans for cities and regions; and improve information and knowledge exchanges – and the role of ITCs, data collection, and the debate on food security issues. See UN-Habitat, *Communiqué on the Role of Intermediary Cities*.
[200] UN-Habitat, *Cuenca Declaration for Habitat III*.
[201] 'The spatial reorganization phenomena just described do not differ in nature from those that took place in the U.S. already in the second half of the 20th century and led the economic profession to develop concepts such as spatial equilibrium and agglomeration economies to explain urban growth and decline in the American continent' (Leanza and Carbonaro, *Socially Inclusive Urban Transformation after the Great Recession, Towards a New Civic Economy Model*). For a recent summary of the American debate on this issue see also Glaeser, *Cities, Agglomeration, and Spatial Equilibrium*.