# Managing Systems of SECONDARY CITIES



# Policy Responses in International Development

# Brian H. Roberts



"Secondary cities are the emerging engine of the rapid-pace urbanization the world will experience in the forthcoming decades. Already in Latin America, secondary cities represent close to 25 per cent of the country's GDP. Some of these cities are offsprings of large metropolises such as Mexico City, São Paulo and Buenos Aires that have encountered serious constraints in accommodating urban growth. Cities Alliance new publication *Managing Systems of Secondary Cities* clearly addresses the importance of these new urban actors in the New Economic Geography, illustrates their immediate challenges and proposes adequate policy responses from the development community. This document is a key contribution to today's discussion on urbanization trends."

ELLIS JUAN, GENERAL COORDINATOR OF THE INTER-AMERICAN DEVELOPMENT BANK'S (IADB) EMERGING AND SUSTAINABLE CITIES INITIATIVE (ESCI)

"This new report makes a significant contribution to our understanding of urban development by unbundling and demystifying the concept of secondary cities, which have often received less public attention than mega or capital cities. Secondary cities are viewed in this study in terms of their functions within national and subregional urban systems. These roles are growing in importance and complexity, while many secondary cities are insufficiently equipped to deliver on their promise. The book provides a useful diagnostic framework and can facilitate exchanges of knowledge and experience among city leaders, as well as with national urban policy makers, to help contribute to a better-integrated, more dynamic, collective of secondary cities and their regions."

CHRISTINE KESSIDES, FORMER URBAN PRACTICE MANAGER, WORLD BANK INSTITUTE *"Managing Systems of Secondary Cities* addresses the knowledge gap that exists surrounding the challenges and experiences of secondary cities. It provides useful analysis and evidence-based recommendations for equitable development in these cities across the world. UCLG, in partnership with Cities Alliance, has addressed intermediary cities as part of its agenda since 2013, in recognition of the vital importance of secondary cities. Our experience is that secondary cities have highly diverse leadership and can be very innovative. This publication is an important contribution to current debates and I wholeheartedly recommend it both to our members and urban professionals in general."

JOSEP ROIG, SECRETARY-GENERAL OF UNITED CITIES AND LOCAL GOVERNMENTS

"This is a timely book. As congestion and the sheer distances involved in moving around megacities and primary cities in many countries cause entrepreneurs to look for alternative bases for their companies, and as national infrastructure systems extend to the secondary cities, these cities are growing rapidly. This growth causes great stress on these cities, which have less resources than the primates, and a wide range of problems for their managers. The book seeks to give us a better understanding of this phenomenon and provides practical guidance for their managers as they seek to guide their cities towards sustainable growth."

MICHAEL LINDFIELD, FORMER CHAIR OF THE URBAN COMMUNITY OF PRACTICE, ASIAN DEVELOPMENT BANK

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Brian H. Roberts



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# Abstract

S econdary cities have become the subject of renewed interest by scholars and international development organizations. This report, for Cities Alliance, investigates the role played by secondary cities in the development of global regions and nations. It includes a literature review and redefinition of the term "secondary city" in the context of the role such cities play in global and national urban systems. Secondary cities are no longer defined by population size. Today, functionality and connectivity with global and national systems of cities has a significant influence on the way secondary cities are defined. The book discusses trends, influences and challenges, including the forces of New Economic Geography (NEG) facing the development of secondary cities in developing regions using a systems analysis perspective under the headings of urban governance, economic, development, social and environmental systems. Fifteen regional case studies are presented to illustrate the way countries in developing regions have approached urbanization, decentralization and other developments in support of secondary development. The role of international development assistance agencies and organizations in supporting the development of systems of secondary cities is discussed.

Key words: systems of cities; secondary cities; urban systems; urban development; development policy; international development assistance.

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ΔΟΟΔ	Asian Coalition for Community Action programme	INNURM	Jawaharlal Nebru National Urban Renewal Mission (India)					
ACHR	Asian Coalition for Housing Rights	LAC	Latin America & the Caribbean					
ADB	Asian Development Bank	LED	Local Economic Development					
AFC	Asian Financial Crisis	LGU	Local Government Unit					
AfDB	African Development Bank	LMSSME	Learning Management System for Small & Medium Scale					
ASEAN	Association of Southeast Asian Nations		Enterprise					
BMZ	Bundesministerium Für Wirtschaftliche	MDG	(UN) Millennium Development Goals					
	Zusammenarbeit und Entwicklung (German Federal	MENA	Middle East North Africa					
	Ministry for Economic Cooperation & Development)	MGI	McKinsey Global Institute					
BOO	Build, Own & Operate	NEG	New Economic Geography					
BOOT	Build, Own, Operate & Transfer	NGO	Non-Government Organization					
BOT	Build, Own & Transfer	NPA	National Planning Authority					
СВО	Community Based Organization	ODA	Official Development Assistance					
CCD	City Cluster Development	OECD	Organization for Economic Cooperation & Development					
CDI	Cities Development Initiative	PCSI	Pacific Cities Sustainability Initiative					
CDIA	City Development Initiative for Asia	PIA	Planning Institute of Australia					
CDM	Clean Development Mechanism	PPP	Public-Private Partnerships					
CPI	City Prosperity Index	PRS	Poverty-Reduction Strategies					
CPS	Country Partnership Strategies	RISP	Regional Integration Strategy Papers					
CSP	Country Strategy Papers	RMC	Regional Member Countries (African Development Bank)					
DKI	Daerah Khusus Ibukota Jakarta (Special Capital City	SCP	Sustainable Cities Programme					
	District of Jakarta)	SEDP	Socio-Economic Development Plan (Vietnam)					
DFID	UK Department for International Development	SEZ	Special Economic Zone					
EPZ	Export Processing Zones	SME	Small & Medium-Sized Enterprises					
ESDP	European Security & Defence Policy	SPA	Special Provincial Administrations (Turkey)					
EU		SPD	Special Projects Department (World Bank)					
EWB	Engineers Without Borders	SPPRB	Special Projects Branch of Urbanization and Regional Projects					
FAU	Food and Agriculture Organization	CC 4	Department (World Bank)					
FDI	Circle Coefficient	SSA	Sub-Sanaran Africa Superintendency for the Development of the Northeast (Prezil)					
	Gini Coefficient		Superintendency for the Development of the Northeast (Brazil)					
GDP	Gross Domostic Product		Transforming the Settlements of the Urban Poor in Uganda					
GEC	Global Einancial Crisis		United Cities & Local Governments Asia Pacific					
GIS	Geographic Information System		Urban Development Strategy					
GIZ	Deutsche Gesellschaft Für Internationale	UMP	Urban Management Programme (World Bank)					
	Zusammenarbeit (German International	UN	United Nations					
	Development Agency)	UN-Habitat	United Nations Centre for Human Settlements					
GHG	Greenhouse Gas	UNCTAD	United Nations Conference on Trade and Development					
GNI	Gross National Income	UNDP	United Nations Development Programme					
НСР	Healthy Cities Programme	UNEP	United Nations Environment Programme					
HDI	Human Development Index	UNESCO	United Nations Educational, Scientific & Cultural Organization					
HIC	Habitat International Coalition	UNHCR	United Nation High Commission for Refugees					
IADB	Inter-American Development Bank	UNICEF	United Nations International Children's Emergency Fund					
IBRD	International Bank for Reconstruction &	UNIDO	United Nations Industrial Development Organization					
	Development (World Bank)	UOP	Urban Operational Plan (ADB)					
IDFI	International Development Finance Institutions	USAID	United States Aid for International Development					
IFC	International Finance Corporation	USMID	Uganda Support to Municipal Infrastructure Development					
IFI	International Financial Institutions	WASH	Water Sanitation and Housing					
ILO	International Labour Organization	WB	World Bank					
IMF	International Monetary Fund	WHO	World Health Organization					
ISI	International Statistical Institute	WTO	World Trade Organization					
ICT	Information Communication Technology							
IUIDP	Indonesia Integrated Urban Infrastructure							
	Development Programme							
JICAJ	Japan International Cooperation Agency							

# **Executive Summary**

Cities are becoming increasingly interlinked and dependent upon each other to boost trade, investment and local economic development. Cities are also replacing nation states as the primary economic governance and driver mechanisms for trade and investment. As a result of these changes, a new order, or system, of cities is emerging. The traditional idea of a hierarchical classification of cities based on population size used to define systems of cities is being challenged. Functionality and linkage to global, regional and national networks of trade, knowledge, competitiveness and investment now have a significant impact on the status and functioning of cities within global and national urban systems.

Much of the economic literature on urban systems focuses on the role of mega- and primate cities in shaping the New Economic Geography (NEG) of development, global trade and investment; however, it is systems of secondary cities (cities that play a key role in supporting the development of subregional and subnational economies) that will have a greater influence upon the economic development of nations and larger geographic regions in the future. The role played by systems of secondary cities in shaping the NEG of cities and urban systems, especially in developing countries, is not well understood. Many of these secondary or intermediary cities systems are not well connected in national, regional and global contexts and many are falling well behind in the economic development stakes. How to improve the connectivity, economic development and performance of these lagging cities to attract and create jobs and investment is a significant challenge, especially in the regions of sub-Saharan Africa, Asia and the Pacific.

Secondary cities have become the subject of renewed interest by scholars and international development organizations. Systems of secondary cities fall into two spatial and economic typologies: subnational or submetropolitan cities. Their role in supporting national or regional development is important. However, many are struggling to manage urbanization, attract investment and meet the demand for housing, infrastructure and basic urban services. Many of the problems that have become associated with mega and large metropolitan regional economies in developing countries are manifesting themselves in secondary cities.

In 2012, Cities Alliance commissioned a background study on Systems of Secondary Cities in Developing Regions to inform a necessary debate on this blind spot in international development. The book includes a literature review on secondary cities, including definitions of the term and some key theories and concepts that have shaped current thinking on systems of secondary cities. Many concepts and models have strongly influenced ideas on urbanization and spatial planning of secondary cities. These include policies on decentralization, devolution of urban governance and balanced local and regional economic development. This book proposes a working definition for secondary cities that integrates past and contemporary thinking in the context of NEG and urban governance.

The report provides an extensive global and regional overview of urban trends and prospects related to systems of secondary cities, and a discussion on the impacts NEG is having on their development. Various push, pull and linkage factors shaping the growth and development of systems of secondary cities are described, along with the influences of environmental, technological and new urban governance factors. These trends and influences, and the slowness of many secondary cities to respond to them, have given rise to many challenges – especially regarding how cities should approach the management of these. These challenges are analysed in the book, using a systems perspective approach discussed under the headings of governance, economic, development, social and environmental systems.

The NEG of cities and technological change is having a significant impact on the development of secondary cities. NEG will bring new challenges to the development of cities, the most significant of which will be the relocation of production systems back to developing economies and the need to develop net endogenous growth models to develop domestic markets and boost consumption of secondary cities in developing countries.

While external environmental factors have an increasing impact on the development of cities, national and local governments can strongly influence the attractiveness and competitiveness of factors driving the development of secondary cities. These include policies used to stimulate decentralization, devolution and local economic development. Different spatial and economic planning approaches to secondary city development involving the development of clustered cities, growth poles and technopoles are discussed, along with the importance of cities becoming more specialized and developing as clusters.

The approach to the management and development of urban systems varies considerably between countries and regions. The book includes a series of case studies examining urbanization, decentralization and secondary cities development policies and approaches for fifteen developing, industrialized and post-industrialized countries in five geographic regions: Asia, Latin America, Pacific, Middle East and North Africa, and sub-Saharan Africa.

International development banks, the United Nations, international aid agencies, non-governmental organizations (NGOs) and foundations have had a significant influence in supporting secondary-order systems in city development in developing countries. The report outlines valuable lessons gained from the research, including programmes and examples of good practice.

The book identifies a number of useful findings and lessons, which are summarized as follows:



- Population size is still a determining factor in the definition of a secondary city, but in an age of growing competition, trade and exchanges between cities globally the meaning of the term has changed. A secondary city will likely have a population or economy ranging in size between 10 per cent and 50 per cent of a nation's largest city. Today, however, it is the function and the role that are increasingly defining a secondary city's status within the global system of cities.
- 75 per cent of the world's population lives in rural areas or urban settlements of less than 500,000 people.
- There are more than 4,000 cities in the world with populations exceeding 100,000 people. Around 2,400 of these have populations of less than 750,000 people. More than 60 per cent of these are located in developing regions and countries. Many of these cities are struggling with the problems of rapid urbanization, poverty and job creation.

Valparaiso, Chile. © Florence Lozet, Cities Alliance (2013)

- Globally, there is a growing gap in levels of socioeconomic development disparities occurring between secondary and primary cities that has a significant consequence on their capacity to develop and compete for trade and investment.
- There is very poor data and information available on the economy, land, finance, infrastructure and governance of secondary cities. This situation is severely affecting their capacity to plan and manage urban development and promote employment and economic growth. There is an urgent need to support national and regional research centres.
- Most are subnational capital cities responsible for secondary level of government; a key manufacturing, primary or resource-industry centre or a global centre of cultural, natural or advanced-industry significance. They can also be major satellite cities forming a cluster of cities in a metro-region city.
- The development of inland secondary cities in developing regions lags well behind those located on coastlines or major river systems.
- There are three broad types of secondary cities economies emerging globally: "lead", "lagging" and "laggards." Most fall into the latter category and are located in sub-Saharan Africa and Asia. These cities are largely driven by population growth and consumption. Most are poorly managed, have weak infrastructure, poor communication systems within and between cities and are not very competitive.
- A secondary city's performance, in terms of the above categories, is largely shaped by the level, quality and global orientation of the connectivity of its supply chains and logistics systems that support the development of the local regional economy and trade and services it provides to cities nationally and internationally.
- There must be a greater focus on supporting endogenous growth in secondary cities, since many do not have the capacity or advantages to engage in exogenous, export-orientated growth. New combinations of exogenous and endogenous growth strategies are necessary to develop secondary cities in poor regions.
- International development agencies are showing interest in supporting the development of secondary cities because of their importance as hubs and catalysts in unlocking the development potential of subnational regions.
- International development partners could play a key role in unlocking the development potential of secondary cities by providing assistance through a Development Initiative for Secondary Cities (DISC). The focus of such an initiative must be on improving linkages and connectivity in urban systems management that will result in improved urban governance, building economic development capacity and investment in key strategic infrastructure to spark investment in local economies.

### Foreword

A s the world completes its urban transition, an increasing number of people live in small and medium-sized cities. It is in these cities where national economies need to be built, future generations educated and where solutions to global challenges, such as inequality and the impacts of climate change, need to be managed. A well-functioning national system of cities is essential for growth and development. The reality in many countries suggests, however, that secondary and small cities are not fully integrated in this new economic geography of cities. They have enormous backlogs, weak human capacity, high levels of under- and unemployment, and find it difficult to diversify and revitalize their economies.

However, not only due to their growing number – there are more than 2,400 secondary cities in the world today – the role of secondary cities in the national economy will have a significant influence upon the future social and economic development of nations and larger geographic regions. Estimates indicate that if secondary cities were better equipped to steer their economic assets and development, Gross Domestic Product (GDP) could be doubled or tripled, with significant benefits reducing rural poverty in the hinterlands.

This research was commissioned by the Cities Alliance partnership to address a real knowledge gap, and explores the opportunities as well as challenges facing secondary cities in the Global South. With fifteen regional case studies, the author makes a rich empirical argument and provides specific recommendations to international development partners. We hope that this contributes to a better understanding and appreciation of the vital importance of secondary cities in the national economy, and helps to increase their role in making relevant local contributions to the solution of shared developmental challenges.

WILLA

William Cobbett Director Cities Alliance

# Introduction

"A city's prospects – or a town's – depend critically on its place within the urban system, national and international."

Brundtland Commission, 1987 (World Commission on Environment and Development)

### 1.1 The Challenges Facing Secondary Cities

We inhabit a world where an increasing number of people live in cities. As a result, we are moving towards what Shlomo Angel has described as a "Planet of Cities" (World Bank, 2009:51), which is becoming intricately connected to a global system of cities. Modern cities are part of a New Economic Geography (NEG), which makes them increasingly dependent on systems of fast communications, trade, finance and investment to support their development. However, many parts of the global and national systems of cities are not benefiting significantly from the "new age" and economic geography of cities. Most of these are the secondary and small cities of less than a million people. Many of these are struggling to create or retain jobs, have high levels of unemployment, and find it difficult to diversify and revitalize their economies, retain capital and attract investment. Others are rapidly growing cities that do not have the capacity to manage urbanization. Many of these face a huge backlog in demand for infrastructure, housing and other essential urban services. How to improve the management and development of secondary cities is the central theme of this book.

Secondary cities is a topic that has been given little attention compared to megacities and metropolitan regions. These cities range in size from a few hundred thousand to several millions and there are more than 4,000 cities in the world with populations exceeding 100,000 people (Angel, Parent et al., 2012). Around 2,400 of these have populations of less than 750,000 people and they can be loosely described as "secondary cities" (World Bank, 2009:51): nearly two-thirds are located in Africa and Asia. Such cities perform a wide range of intermediary functions in national and global systems of cities, however they are very difficult to study due to definitional challenges and data often being severely limited and outdated.

There are growing disparities in the economic, physical and social development of global and national systems of cities. For example, cities such as Mumbai produce almost seven times the average national Gross Domestic Product (GDP) per capita of smaller Indian secondary cities. The disparities in per capita wealth, property values, investment, job creation and levels of service between the large metropolitan regions and secondary cities is widening in all but a few countries. The consequences of this trend are that income, poverty, advantage and investment in secondary cities are falling well behind more advanced and competitive cities. Many small regional secondary cities in developing economies struggle to raise capital, raise local taxes and attract the investment that is needed to build infrastructure, attract new business enterprises and create the vibrant communities necessary in order to be diversified and create more dynamic economies, improve livelihoods and grow jobs.

How to enhance the connectivity, logistics, efficiency, generate investment and employment in weaker secondary cities is a challenge. Most fall well behind in national measures of city competitiveness, many have weak logistics, governance and tax-base systems, while some have very high rates of informal-sector employment and large slum settlements. Strategic infrastructure is weak and often in disrepair. The lack of institutional and business capacity or knowledge of how to create more dynamic local economies, ensuring greater equity, development opportunities, and stimulating trade and competition between systems of cities nationally and internationally, hinders their development. However in rapidly developing secondary cities, those that are resourcerich or are not manufacturing-region governments struggle to play catchup with the demand for land, infrastructure and service.

The above situation results in a multiplicity of challenges facing governments everywhere on how to stimulate, manage, develop and revitalize secondary cities.

### 1.2 Scope of the Book

Secondary cities form a vital link in maintaining an efficient networked system of cities globally and in individual countries. The World Bank development report on New Economic Geography (NEG) (World Bank, 2008:2) notes "Just as a primary city forms the core of a country's metropolitan area with other adjacent cities, other large urban centers or secondary cities act as regional foci for both the economy and society" (World Bank, 2008:51). The economic prosperity and development of megacities and small towns and cities is thus very dependent upon developing and maintaining efficient systems of secondary cities.

The NEG of cities and technological change is having a significant impact on the development of secondary cities. NEG will bring new challenges to the development of cities, the most significant of which will be the relocation of production systems back to developing economies and the need to develop net endogenous growth models to develop domestic markets and boost consumption of secondary cities in developing countries. There is a large policy gap at central and local government levels, and within the international development sector, on how to intervene in supporting the development of rapidly growing and laggard secondary cities. There is need for more research on secondary cities to shape a new policy agenda that broadens the scope of the role of secondary cities from a national to a global level.

Many different policies, concepts and planning ideas have been applied to develop and manage systems of cities, but not all of these have been successful. Historically, the economic geography of cities was influenced by political, cultural, environmental and economic factors, and later by the industrial revolution and colonialism in developing countries. Today, the economic geography of cities is much more influenced by geopolitical and economic factors, policies on urbanization, decentralization, trade, investment and regional economic development. Comparative advantage has given way to a new focus on city competitiveness, where the drivers of business dynamics, governance, quality of life, logistics and openness to trade and investment play a key role in the development and prosperity of cities. These drivers significantly shape and determine how successful a city will be in attracting investment and making local economic development happen. Paying greater attention to these factors will become increasingly important for government in shaping the development of secondary cities in the future.

If secondary cities in countries and regions are to grow and develop sustainably, much greater attention must be paid to investigating, measuring and understanding what are the key drivers that underpin their development. Even in the least-developed countries, factors related to competitiveness and good governance matter in shaping the prosperity and development of cities. Secondary cities globally are struggling to compete for business, investment and jobs against larger metropolitan-region cities. The future development of secondary cities is very much in the hands of citizens and local governments developing smarter ways to overcome the economies of scale enjoyed by larger cities. Secondary cities that focus on a continued quest for competitiveness will do very well, but those that don't will struggle. How to make secondary cities, especially those in less-developed countries, more competitive and efficient is an underlying theme of the investigations conducted for this book.

The approach to preparing this book used three principal methods of evidence: a literature review, investigative case studies and consultations with urban experts from selected countries and regions. The literature review covers an extensive range of published reports and papers. Case studies of selected regions and countries: Latin America (Brazil and Colombia); the Middle East and North Africa (Tunisia and Turkey); Asia (Vietnam and Indonesia) and Africa (Angola, Ethiopia, Nigeria, Kenya, Senegal and South Africa) are included in the book. These draw upon more detailed case studies that were undertaken as part of the book. The case studies explore how different countries have addressed urbanization and policies related to secondary-city development. The book provides a great deal of information about what is happening with the development of secondary cities. The synthesis of this knowledge will, it is hoped, provide useful information for formulating more informed policies and programmes to support the development of secondary cities.

### 1.3 Contents of the Book

This book is presented in nine chapters. Chapter 1, this chapter, is the introduction, which sets the context and background of the book. Chapter 2 includes an extensive literature review of secondary cities, including definitions of the term and some key theories and concepts that have shaped current thinking on systems of secondary cities. Many concepts and models have strongly influenced ideas concerning urbanization and the spatial planning of secondary cities. A working definition for secondary cities, which integrates past and contemporary thinking in the context of new economic geography, is outlined.

Chapter 3 provides a more global and regional overview of urban trends and prospects, and the impact of new economic geography on the secondary-order systems of cities. Various push, pull and linkage factors shaping the growth and development of secondary cities are described.

Chapter 4 includes a discussion on the NEG of cities and the implications of globalization and technological changes in the development of secondary cities. NEG will bring many new challenges to the development of secondary cities, the most significant of which will be the relocation of production systems back to develop economies and the need to develop net endogenous growth models to grow domestic markets and boost the consumption of secondary cities in developing countries.

Chapter 5 outlines some of the challenges facing the development of secondary cities and approaches taken to manage some of these. These challenges are analysed using a systems perspective under the headings of governance, economic, development, social and environmental systems.

Chapter 6 is a discussion that focuses on national factors driving urbanization and the development of secondary cities in developing regions and cities. These include a wide range of push and pull factors, as well as policies used to stimulate decentralization and economic development. Different spatial planning approaches to secondary city development involving growth poles and techno-poles are discussed. Chapter 7 outlines policies and initiatives undertaken by regions and governments to stimulate urban-growth decentralization and an analysis of the policy gaps and lessons to be gained from secondary cities' policies in different countries. It draws upon experiences of developed and developing countries. The summary studies include a series of vignettes of urbanization, decentralization and secondary cities development for 15 developing, industrialized and post-industrialized countries.

Chapter 8 covers a brief overview of international development assistance programmes and policies by the World Bank, and other international development banks and agencies, in supporting secondary-order systems in city development.

Chapter 9 summarizes the key messages of the book and provides some concluding reflections.

# Secondary Cities: Definitions and Concepts

S econdary city is a term commonly used to describe the second-tier level of a hierarchical system of cities based on population thresholds. Most countries have orders, or levels, of cities starting at the primate, or primary, level. A primate city is defined as "the leading city in its country or region, disproportionately larger than any others in the urban hierarchy" (Goodall, 1987). It is likely to be a country's leading political, economic, media, cultural or university centre and be "at least twice as large as the next largest city and more than twice as significant (Jefferson, 1939). In some countries (Australia, Brazil, China, India and USA) there are multiple primate cities, so it is difficult to apply the concept of primacy in these places. The preference in this book is to use the term "primary" rather than "primate city". Primary cities are usually large metropolitan cities; however, primary cities in small-population countries can range from a few hundred thousand population. On a global scale, many smaller primate, or primary, cities have secondary or even lesser status, but they still perform primary-city functions within the context of the countries in which they are located.

There are many publications that seek to explain the hierarchical system of cities. Some of these were dated to the early part of the twentieth century (Auerbach, 1913; Christaller, 1933). They include explanations and theories about why cities have different forms, functions and sizes (Knox and Taylor, 1995). Patrick Geddes (1915) was one of the first to recognize a hierarchy of "world cities" and to define them. Zipf (1949) devised a theory of rank-size rule to explain the size of cities in a country based on a system in which second and subsequently smaller cities should represent a proportion of the largest city. While the theory applies in some countries, in a global context it is less consistent (Soo, 2004).

There is an extensive body of literature covering the subject of secondary cities and many definitions of the term. The term "secondary city" or "second-order city" has different meanings, depending upon the context in which it is used. It can relate to population size, administrative area, political, economic and historical significance of a system of cities below the primary order of cities within a country or geographic region. Most countries refer to secondary cities as part of a hierarchical classification of cities determined by population size or role; however, there are significant variations in the definition between countries.

UN-Habitat defines a "secondary city" as an urban area generally having a population of between 100,000 and 500,000 (UN-Habitat, 1996:13). This definition is based on a classification of cities developed in the 1950s (Davis, 1955). However, a secondary city today can have a population of several million people and in China some secondary cities have populations of over five million – a long way from being comparable in size to secondary cities in Ethiopia, which have urban populations of less than 200,000. In a recent study of South-East Asian cities, those generally considered to be "secondary" might have populations of between 100,000 and 3 million inhabitants (Song, 2013). Other authors (Christaller, 1933; Christaller, 1966; Hall, 2005) suggest that secondary cities are not so much defined by hierarchy but as part of an integrated functional system of a national or global system of cities (Abdel-Rahman and Anas, 2012). Angel et al. (2012:146) also refers to the satellite cities that make up large metropolitan regions as secondary cities.

Writers such as Freidman (1986:71) suggest that secondary cities have a core and semi-periphery structure within the economic geography of regions. "Within core countries, secondary cities tend on the whole to be somewhat smaller than cities of the first rank, and some are more specialized as well (Vienna, Brussels and Milan). In semi-peripheral countries, the majority of secondary world cities are capital cities. Their relative importance for international capital depends very much on the strength and vitality of the national economy which these cities articulate."

There is no universally agreed definition for the term "secondary city" (Song, 2013), although most scholars agree that they form part of the order, or systems, of cities in a country or a global system of cities. Most scholars also agree that secondary cities play a very important functional role, depending on whether they are considered as part of a a country- or global-level system of cities. Secondary cities are thus not primary cities, nor are they likely to be small cities with populations of less than 100,000, but they are everything in between. Many of them are growing very rapidly and are facing enormous urban-development and growth-management problems.

The lack of a universal definition for the term "secondary city" does not preclude the usefulness of studies that investigate the attributes and problems associated with their development. Secondary cities perform important functions in the national and global system of cities. They are secondary hubs, spokes and centres in a complex network of production-distribution supply chain and waste-management recovery systems connecting different spatial levels of human settlement at both a national, but increasingly global, system of cities. Studies on functions and operations of systems of secondary cities are important, as they can provide useful insights into the types of urban-development policies, planning actions, infrastructure, investment and resources needed to support their management and development.

When secondary cities fail to perform essential functions necessary to support the efficiency of national or global supply chains, the consequences, in terms of lost economic opportunities, social disadvantage and poverty, especially in rural regions, can be significant. The failure of secondary cities to attract investment, provide and maintain efficient logistics and to generate sustainable employment is one of the principal factors creating distortions and disparities in the regional economic development and poverty in many countries. Many of these distortions can only be rectified by governments and business and international development banks and agencies playing a greater role in the development of secondary cities. By studying systems of secondary cities in different geographic regions, much can be learned about them and, in addition, ways to improve their management and development can be identified.

### 2.1 Literature Review

The term "secondary city" was popularized by Rondinelli (1982) in the 1980s. His definition explained secondary cities as being urban settlements with a population of at least 100,000, but without including the largest city in the country (1983:47-48). His research work was originally intended to help develop policies to stimulate the economies of rural areas surrounding secondary cities (Rondinelli, 1983; Mason, 1989). Since the late 1950s many countries have introduced policies to support



Source: United Nations Department of Economic and Social Affairs (2012)

decentralization and devolution of government and the spread of economic development. Some policies were deliberately intended to address the problem of overcrowding and congestion in large cities; however, most were introduced because there was recognition that centralized government decision-making was not the most efficient form of governance, nor was it creating competition and expanding new markets to encourage greater trade between a nation's system of cities. The origin of this planning approach began with the development of new towns around London, Paris and other European cities. More recently, many developing countries have embarked on decentralization policies with varying degrees of success.

The 2011 United Nations Urbanization Prospects Report (2012) outlined a systematic approach for classifying cities. The report identifies the confusion over basic definitions that was also identified by Rondinelli (United Nations, 2012). The report set out definitions for village, town and city and more complex terms such as "megacities" and "urban agglomerations" and the "process of growth" as one develops into another. Figure 2.1 depicts the cycle of development as outlined by the UN Urban Prospect Report.

With reference to developed countries, Friedmann (Friedmann, 1986) states that secondary cities tend to be somewhat smaller than cities of the first rank. The South African Cities Network states that secondary cities are a group of cities that sits somewhere below the group at the very apex of an urban hierarchy – an apex occupied by "primary cities" or "primate cities" (John, 2012). All attempts at defining secondary cities state that they must be considered with respect to the total national space economy and settlement hierarchy. When considering cities in the international context of globalization trade and investment, the notion of the national space economy becomes less relevant (World Bank, 2009).

During the 1990s, UN-Habitat began to take a strong interest in secondary cities, producing a series of reports on the management of regional secondary cities. In 1991, it published five case studies of sub-Saharan African secondary cities in a report for the countries of Côte d'Ivoire, Kenya, Nigeria, Zaire and Zimbabwe (1991). Secondary cities, the sub-Sahara report argues, rank low in the priorities and budgets of central governments, and since their ability to compete for resources is weaker than that of larger cities, provision of services and management of urban infrastructure is often inadequate.

In 1995 and 1996, UN-Habitat published a report on secondary cities in Latin America and South-East Asia that addresses many of the institutional problems associated with their development. The study did not look at economic geography factors shaping secondary cities extensively, but pointed out the role played by traditional "informal" institutions and community organizations in the management of secondary cities in sub-Saharan Africa, because many formal institutional structures were failing to deliver urban services.

Since the UN-Habitat series of studies in the 1990s, there has been relatively little in-depth research undertaken on secondary cities. This is because, in the context

of globalization, the term "secondary city" has presented a definitional problem in relation to the New Economic Geography (NEG) of cities. In recent years there has been renewed interest in secondary cities by governments and international development agencies, because of the widening gap occurring between the development of metropolitan regions and secondary cities (Bolay and Rabinovich, 2004; Klaufus, 2010; Torres, 2011; John, 2012; OECD, 2012; Song, 2013) and the imbalance this creates in terms of spatial economics and social development in many countries. However, there remains a lack of clarity on what constitutes a secondary city and the role it plays in national and global systems of cities. There is a need to review the definition and broaden the context with which we view secondary cities if we are to develop meaningful policies and strategies to support their management and development.

### 2.2 Broadening the Definition of Secondary Cities

In the present era, secondary cities' development is shaped by an increasingly complex range of governance, economic, social and environmental factors. Both primary and secondary cities have become far more specialized in an endeavour to compete for trade, investment and economic opportunities for development (Stimson et al., 2006; Sassen, 2009). The internet has led to a large boost in trade, business and information-sharing between cities so that city economies are becoming increasingly virtual and economic activities spatially concentrated (Arup, 2010; The Conference Board, 2011). The efficiency of cities' logistics and governances' decisions are therefore vitally important to the development of vibrant city economies.

This rapid growth of Information Technology Communication (ITC) presents significant challenges to traditional approaches and thinking on the way governments go about managing, planning and developing the physical and spatial economic development of cities (Berggruen and Gardels, 2012). Many planning concepts based on hierarchy, thresholds, norms and one-size-fits-all no longer provide the solutions needed to address many urban-development problems. The design of spatial functional systems of land use, transport, employment and urban services have become more polycentric than hierarchical and improving functionality will become increasingly important – especially in the way we go about planning and developing secondary cities.

Many governments and businesses do not fully appreciate that the functions and status of secondary cities have changed. Their development is being driven more by external factors, over which governments at all levels have less control. The functional roles and impacts of some secondary cities extend well beyond national boundaries, as, for example, the dominance that Seattle and Toulouse demonstrate. These are secondary cities in terms of a traditional national urban hierarchy, but they are primary cities in that they are global centres in the airline manufacturing industry. The function and specialization of cities is very important in the competition for growth, economic development and investment attraction. The classification of cities is moving more towards systems and functions of cities (Hall, 2005). This does not suggest that city size and hierarchy is no longer relevant in the definition of secondary cities. They are – but function and scope add an important dimension, which must be included in the definition of a secondary city.

A new working definition is required, which incorporates the importance of function and the links some secondary cities have in national and international urban systems (World Bank, 2011). Merging hierarchical and functional attributes of cities into a concept referred to by Peter Hall (2005) as "networked cities" seems necessary. To do this we need to know how the functional and economic systems of cities (sector, spatial and dynamics) relate to scale, specialty and development potential within networks of closely linked cities. By mapping spatial supply chains and drivers of secondary-city economic development competitiveness systematically, it should be possible to identify specific demands for resources, strategic infrastructure, capital, policies and initiatives, and incentives needed to position secondary cities again in a position of competitive advantage and to realize latent (below the surface) development potential. Few secondary cities really understand what they need to do to become competitive and how to realize latent development potential.

### 2.3 Redefinition of the Term "Secondary City"

Several concepts have underpinned the definition of the term "secondary city". The merging of traditional hierarchical, systems and functional typologies of cities brings forth a new hybrid and perspective of secondary cities that should be included in the definition. Consideration of these concepts is important in devising a definition that can be used by international development agencies in drawing up policies and programmes to support their development. In seeking to redefine what we understand a secondary city to be, it is useful to review past and contemporary thinking in the field of hierarchy, typology, systems and functions of cities.

### 2.3.1 Hierarchy of Cities

Countries have long used a hierarchy of urban settlements as an instrument for the organization and operations of government, defence and commerce. John (2012), in seeking to encourage conversation on the development of secondary cities in South Africa, provides a good overview of elements of hierarchy associated with systems of cities. Some countries have a system of cities that is very hierarchical, for example there is a single, very large, dominant city, such as Jakarta (population 12 million), and a long list of lessersized urban settlements, tailing down to small towns of fewer than 20,000 people. In the order of urban-systems hierarchies, megacities prevail. The term "megacity" refers to large metropolitan, regional cities with populations of more than 10 million. Megacities are primate cities and they sit at the apex of a system of global cities. However, in some countries, for example the USA, Brazil and China, there is more than one mega/primate city, so the apex principle of a single dominant city in a country does not apply. The rise of multiple megacities in countries such as India and China presents a definitional problem for a hierarchical classification of cities based on an orderly pyramid structure.

In the global context, not all primate cities are megacities. Many, for example Kuala Lumpur (Malaysia) and Auckland (New Zealand), have relatively small populations but demonstrate strong attributes of primacy. A primate city is likely to generate a disproportional percentage of a nation's Gross Domestic Product (GDP) for its size. The ratio of GDP per capita in some primate cities can exceed many times the national average per capita figures. It is clear that while primacy is a significant factor in the economic geography and hierarchy of urban settlements in countries, in the context of the global urban system, some primate cities are secondary or lower-order cities.

### 2.3.2 Functional Hierarchy of Cities

The first attempt to systemize a hierarchy of cities based on functions was Christaller's Central Place Theory (1933). Christaller theorized that hierarchical urban systems could be based on market, transport and administration factors. He refers to these as "K principles". There are 3K principles for hierarchical structure markets related to levels of services. If the arrangement of the markets in the country serviced is according to K=3 principle, the theoretical number of settlements will progressively divide the previous order by three, for example one primate city servicing three secondary cities and nine tertiary cities, and so on.

The transport principle uses a 4K system, in a stepped hierarchy of metropolitan, city, town, village and hamlet. Thus, depending on the hierarchy, a megacity might be serviced by three cities, nine towns and so on. Each level on the hierarchy is a multiple of four of its predecessor.

Christaller's third principle was based upon the political or administrative order. The 7K principle suggests an arrangement whereby a higher-order centre or a city overlays and shares catchment with a layer of six lower-order centres: so-called hexagonal-order centres. All the six lower-order centres would be fully subordinate to the higher-order centres, which, therefore, dominate the equivalent of seven market areas at the next-lowest level, hence the K7 principle.

Central Place Theory describes and organizes the spatial pattern of urbanization, depending on the principles used, although it has not been observed in practice. The theory breaks down in the modern era, as cities of many different sizes compete across global regions for trade and investment. Also, the structure and operations of markets is less constrained by national boundaries and government control over the ways cities go about their business in national economies.

Many of the ideas behind the theory have provided a basis for planning systems related to industrial and commercial-centre development found in both socialist and free-market-based planning systems. The theory can be adapted as an analytical tool as a useful way to analyse and explain primary factors that act as drivers in shaping and defining a hierarchy or order of urban centres within countries and regions.

### 2.3.3 System of Global Cities

Peter Hall (2005) has suggested that the Christaller hierarchy could be supplemented by at least two, and perhaps three, additional levels of K factors, producing a hierarchy of six or seven levels within a global city system. The essence of the cities can be summarized as:

- Global cities, which Hall refers to as "alpha" cities, are typically five million and more people within their surrounding regions. These cities serve very large global territories. They have large clusters of service or manufacturing industries and are heavily engaged in global trade and business.
- Sub-global cities ("beta" and "gamma" cities), with typically between one and five million people and up to perhaps 10 million in their urbanized regions, performing global-service functions for certain specialized services (banking, fashion, culture and media) and an almost complete range of similar functions for more restricted national or regional territories.
- Regional (Christaller's Landstadt) (population 250,000-1 million); some of these have characteristics that show evidence of World City Formation. Many of these cities are becoming more engaged in the global economy.
- Provincial (Christaller's Provinzstadt) population 100,000-250,000.

Hall (2005) has proposed another system based on a European Spatial Development Perspective (ESDP) to capture geographical relationships in terms of functionality and productivity within the European urban hierarchy. He categorizes these as:

- Central high-level service cities: major cities (national capitals) and major commercial cities that have the highest multi-modal transport accessibility within the European Union.
- Gateway cities (sub-continental capitals): national capitals and major commercial cities outside the primary service hubs of Europe.
- Smaller capitals and provincial capitals, which are smaller equivalents of the above, commanding less space in terms of population and economic production.
- "County towns", which are described as the typical rural administrative and service centre for a surrounding area 40-60 kilometres in radius.



Bach Ninh, one of a series of new cities clustered around Hanoi, Vietnam. © Hanoi Architectural University (2014) Hall cites many examples of the cities that might fall into the above classification. He suggests that there are polycentric structures or functional systems of cities, somewhat akin to Christaller's hierarchical concept of cities.

### 2.3.4 Typology of Secondary Cities

Secondary cities take many different forms, which are largely determined by economic geography and function. There are three broad typologies, or patterns, of secondary cities' development.

### Subnational Secondary Cities

The most common type of secondary city development is a subnational administrative capital, transport hub or large manufacturing or natural resource industry centre. Many of these are historic cities, created for administration or development purposes by colonial governments or past dynasties. Some also happen to be administration centres for kingdoms and cultural groups, such as Kumasi in Ghana. Many of these are the location of major transport junctions or ports along coastlines and navigable river systems. Others are administrative and logistics centres for vast natural resource- or agriculture-rich regions. Typically these cities have populations of over 200,000. All have a range of regional government, cultural, education, health and social facilities

and services. Many have a single-city governments, although many that have grown rapidly comprise large urban-fringe areas located adjacent to local governments.

Many subnational secondary cities play a vital role in the development of national and, in some cases, the global economy – especially those that are engaged in exports. Belo Horizonte in Brazil is a secondary city servicing one of the world's largest metals and minerals export regions. Others, such as Cusco, Peru, are important World Heritage tourist centres (Steel, 2013). Bangalore, India, has become pivotal to the world's ITC industry, while Mecca, Saudi Arabia, is the centre of Islam. Most subnational secondary cities, however, play a key role as hubs and spokes in a national system and hierarchy of service and distribution centres within countries. A few, such as Vancouver and Basel, support the hinterland of adjacent countries when located close to a national border.

### Metropolitan Secondary City Clusters

Secondary city cluster development is a phenomenon associated with the development of metropolitan regions and the new towns movement. As cities expand, there is a point where economies of scale and externality costs associated with accessibility, land, rental and development costs, impact upon the competitiveness and efficiency of large cities. This leads to a process of decentralization and deindustrialization, as firms relocate manufacturing and back-office servicing to new industrial areas, where they have room for expansion, on the periphery of cities. Many of these industrial areas involve a mixture of economic enterprise zones, business parks, regional shopping facilities and residential estates. Some of these are well planned; many are not. For many large developing cities such as Johannesburg, São Paulo, Lagos and Dhaka, these secondary cities have become very large and absorbed into the metropolitan urban fabric. Most are independent cities and many are poorly governed with very limited resources to support a huge backlog of infrastructure and services demand from an expanding population.

Most cities with populations in excess of 5 million show evidence of metropolitan secondary-city clustering. Many of these cities are located less than 50 kilometres from an historic city centre. These cities are integral to the functioning of the core city that provided the catalyst for them to grow and develop – a phenomenon associated with this is the transformation of the economic structure of the old city core. Old industries and warehousing, idle or disused port areas and underutilized military land are being transformed into a more service-driven economy, while the metropolitan clustered secondary cities become the drivers of generally lower-skilled manufacturing, logistics and processing jobs. In many cases this leads to high levels of social stratification and the growth of gated communities, where the growing number of middle-class families desire to live (Klaufus, 2010). The lack of clean, safe and convenient public transport between the central city and metropolitan clustered secondary city development new



Children earn a living by transporting goods inside the Zaatari Refugee Camp, Jordan. © Mohamed Azakir/ World Bank (2014) towns create a reliance on the private automobile, leading to high levels of congestion that plague most of the world's cities.

Metropolitan clustered secondary city development presents particular development problems for city managers. With weak local government and a general failure of metropolitan management, many of these secondary cities in developing countries lack basic infrastructure, housing and community services for the poor. Poor planning and land administration and management results in distorted land and property markets coupled with high levels of inflation and disputes. Land acquisition could add as much as 50 per cent to infrastructure costs, leaving little or no money to fund the backlog of infrastructure in low-income areas. Subsequently racketeering in water, housing and electricity services becomes rife. Gini Coefficients (GC) of poverty are subsequently high, as are levels crime and corruption. Despite these problems, many metropolitan clustered secondary cities are beginning to address these urban-management problems,



but it will take many years to develop the infrastructure and services in these areas.

A recent feature of metropolitan secondary-city development are migrant and refugee cities. These spring up very quickly, with makeshift accommodation, poor sanitation and street access. Most are not large when they begin, but they soon develop into more permanent settlements, especially when cities expand, leaving these areas as enclaves. Many African cities have large informal-settlement areas of urban development that have grown into large dispersed secondary cities on the periphery of large metropolitan centres. Many Middle Eastern countries, such as Jordan and Pakistan, have large refugee settlement cities. In all likelihood these will remain as permanent urban settlements as refugees carve out a livelihood in these cities and decide not to return to their homelands when conditions improve. Migrant and refugee secondary cities are the most challenging to manage. Many governments are unwilling to assist in providing even basic services in the fear that residents will choose to stay on once the factors that contributed to their development have passed or changed. Dadaab, in eastern Kenya, has become a city complex of five camps hosting 402,361 people, while Al Zaatari, Jordan, hosts more than 130,000 Syrian refugees. While some of these camps have a planned layout, such as Al Zaatari, many others do not, with high rates of disease and malnutrition. Managing the transition from temporary to permanency of these cities will be a major challenge for governments in the future.

### **Corridor Secondary Cities**

The growing levels of trade and travel between cities is resulting in the emergence of a new type of secondary city developing along trade or economic growth corridors (Song, 2013). The improvement to national road and rail networks (in the case of China) between cities provides opportunities for the establishment of new growth poles. Many of these cities start as small subnational government administrative centres or market towns. With the improvements to national transport infrastructure, national and international firms are seeking opportunities to develop new manufacturing and processing factories closer to sources of raw materials and cheap labour. In many cases, there are opportunities to develop new infrastructure without the constraints associated with metropolitan clustered and subnation secondary city development.

In a study of South-East Asian secondary cities (Song, 2013), the author encompasses towns and smaller cities along the East-West Economic Corridor, connecting Myanmar, Thailand, Laos and Vietnam, the proposed high-speed railway connecting Thailand, Laos and China, and the like, as secondary-city growth centres. "These are undergoing rapid growth and change amidst regional economic integration and labor influx. In grouping such varied urban formations together as 'secondary cities' and examining common trends in the context of national economic development and regional economic integration, we seek to highlight the role of city-to-city connections in deepening economic integration, promoting sustained and inclusive economic growth, and improving urban governance."

Corridor secondary city growth centres offer many advantages to business. A significant proportion of freight-carrying capacity between cities is underutilized. Trucks and trains carry goods to regional cities, often returning home empty. Many transport companies are realizing the opportunities for discounting freight rates for the back-loading of goods. Secondly, intermediate secondary cities along transport corridors offer opportunities for value adding and reducing the need to dispose of waste if materials have to be transported to factories located in primary or large regional secondary cities. Waste management is becoming increasingly expensive in large cities, so that reducing unwanted or unusable materials can generate significant costs savings for business. Agriculture and other wastes by-products offer opportunities for corridor secondary cities to use these in the cogeneration of electricity and production of construction materials.



Source: Corporacion Andina de Fomento (2014)

### 2.3.5 Functional Specialization of Secondary Cities

There are growing levels of functional specialization occurring in secondary cities. Historically, most secondary cities developed as subnational regional administration centres and later as industrial/logistics centres. Others developed as the result of some form of natural or historical advantage. The increasing level of trade and competition between cities is leading many secondary cities to become more specialized. Some secondary cities have developed to a level where they are global leaders in knowledge and advanced manufacturing industries. Table 2.1 lists types of functional specialization emerging in secondary cities, with selected examples from different regions. Most secondary cities perform multiple functions and many will have small- and mediumsized established or emerging industry clusters that add to the diversity of the base economy. Some secondary cities have been able to develop industries that are highly competitive globally.

A similar functional typology is defined by Song (2013), arguing "secondary cities are less defined by population sizes, surface areas, or other statistical measures than their structural positions within urban networks and regional, national, and global economic systems" (see Table 2.2 for typology of functions of secondary cities).

### 2.4 Merging Hierarchy and Functions of Systems of Secondary Cities

The concepts and measures described in Table 2.1 suggest that scope, scale, functions, networks and market/business orientation are essential elements of a working definition of secondary cities. There is also a need to include social and cultural capital dimensions, since some secondary cities have a high presence of this form of capital.

### TABLE 2.1

	•				
Functional specialization	Examples of cities				
Culture & religion	Mecca (Saudi Arabia), Amritsar (India), Lourdes (France), Hue (Vietnam), Bethlehem (Palestine), Kandy (Sri Lanka), Timbuktu (Mali)				
Government	Abuja (Nigeria), Brasília (Brazil), Islamabad (Pakistan), Washington (USA), Canberra (Australia), Pretoria (South Africa)				
Heavy industry	Lille (France), Busan (South Korea)				
Advanced manufacturing	Toulouse (France), Basel (Germany), Seattle (USA), Pusan (South Korea), Curitiba (Brazil)				
Knowledge services	Cambridge (UK), Yogyakarta (Indonesia), Seattle (USA), Kumasi (Ghana)				
Logistics	St Louis (USA), Vladivostok (Russia), Cape Town (South Africa), Manaus (Brazil)				
Media & entertainment	Wellington (New Zealand), Gold Coast (Australia)				
Primary production & processing	Medellín (Colombia)				
Mining & resource extraction	Belo Horizonte (Brazil), Perth (Australia), Bloemfontein (South Africa)				
Tourism & leisure	Luxor (Egypt), Chang Mai (Thailand), Cusco (Peru), Arusha (Tanzania)				
Trade & commerce	Aleppo (Syria)				

### Examples of Cities and Functional Speciality

Source: Land Equity International/Brian Roberts (2014)

### **TABLE 2.2**

Type of urban function	Description			
Regional market	The city is a driving force for the production and exchange of goods and services at the level of the local and immediate regional economy.			
Service centre	The city offers a number of public services: health care, secondary and tertiary educational institutions as well as private services, banks, businesses, leisure and information centres – for both the urban community and the surrounding population.			
Regional capital	The city hosts various provincial and/or national political and administrative institutions for the territory in which it lies.			
Tourist centre	The city makes use of its comparative advantages – location, natural resources, historic legacy, culture, etc., to promote activities linked directly to domestic and/or international tourism.			
Communication hub	Owing to its strategic location and the development of relevant infrastructure, the city acts as a platform for the exchange of persons, goods and information.			
Economic location	The city's geographic location (border zone, coast, city-state) and its development strategy (duty-free zone, international tourism) endow it with a strategic role in the national, regional and global economy and related exchange mechanisms.			

### Typology of Urban Functions of Secondary Cities

Source: Song (2013) adapted from Bolay and Rabinovich (2004)

Integrating these factors, it may be possible to develop a framework describing attributes of secondary cities that can be used to define strategic infrastructure, logistics and governance arrangements necessary to support the management and development of secondary cities in developing countries and regions.

Scope and scale clearly matter in the new economic geography of cities. For simplicity, we can usefully classify cities by population as supra, mega, metro, meso, micro and mini. "Supra" involves an interlinked system or clusters of very large cities that form a conglomeration of populations in excess of 50 million. Supra is a new term, but already it is being applied in China and India (DMIC, 2010; China Daily, 2011). For convenience, "megacities" are defined as large metropolitan regions of 10 million plus; "metro", populations 5-10 million; "meso" 1-5 million; "micro" 200,000-1 million; and "mini", cities less than 200,000 population.

There will always be debate on the population range used in this classification of city scale; however, we need to find a basis of scale that can be linked to the function of cities in a global context, and to define a realm in which there are commonalities of city forms and function that can be classified as "secondary" within the order of cities. Figure 2.3 shows, conceptually, how we could link scale, spatial global order and functionality of cities.

In the figure, primary cities have dominance in global market orientation, scope and function. Global primate cities are important logistical and market centres and hubs,

they contain concentrations of large multiple-industry clusters and have a command position in global trade and investment. However, primary hubs are (though not always) capital cities that dominate the national political, economic, administrative and defence systems. For small nations, the primary city may have a population of only a few hundred thousand people, but they are national centres of governance and the economic system. Small primate cities certainly do not have the political or economic power of megacities and are relegated to secondary or lower systems of order in a regional and/or the global context.

There is a subglobal category of secondary cities linked to Peter Hall's classification of European cities. There can be several orders of these, but their orientation is primarily towards supporting the geographic regions in which they are located, but they will have a significant proportion of their economy orientated to global business activities and exchange. Most will have international airports, the important logistical subregional hubs and have a number of specialized industry clusters engaged in manufacturing and higher-value services.

Overlapping with the primary cities is a wide range of systems of secondary cities, with populations ranging from a few hundred thousand to over 5 million people. The functions of these cities are predominantly directed towards servicing subnational concentrations of population and economies orientated towards domestic markets. The level of export orientation will vary significantly, in some cases. In the context of lesser-developed economies, trade will be predominantly inwards and the economy is driven by domestic consumption and trading.

### FIGURE 2.3

					-		
Order of city	Functional & market orientation	<b>Supra</b> 50 m	<b>Mega</b> 10 m	<b>Metro</b> 5-10 m	<b>Meso</b> 1-5 m	<b>Micro</b> 0.2-1 m	<b>Mini</b> > 0.2 m
Global	Large multiple clusters of high-value services and manufacturing engaged in global trade						
Subglobal	Clusters of services and manufacturing engaged predominantly in regional trade			Primary			
National	National government, logistics, services and manufacturing centres						
Subnational	Subnational provincial government, logistics, services and manufacturing centres				Seco	ndary	
District	District-level government, services and processing						
Subdistrict	Resource rural-based service industry centre					lertiary	

### Spatial, Scale, Functional, Framework for Defining Systems of Secondary Cities

Source: Land Equity International/Brian Roberts (2013)
Most secondary cities are capital or administrative regional centres of subnational levels of government, for example provinces, states, subnational regions, divisions or districts. In developing economies it is very likely that government services will be a significant driver of economic activities. Systems of secondary cities' governments will have a high dependency on inter-governmental transfers, access to higher-level business services and governance systems.

Tertiary systems of cities are predominantly small-scale, orientated towards supporting the needs of subnational populations. In some countries, especially China and India, tertiary cities may have populations of more than 1 million. Many of these cities will have significant regional manufacturing industries, providing parts or components to larger factories in secondary and primary-order cities. Many smaller tertiary cities are likely to have sizeable domestic and international export economies based on natural resources and primary production, especially in more advanced economies. In most rapidly urbanizing countries, tertiary cities have mainly trade-based economies, often with high levels of informal employment. Many sub-Saharan African cities fall into this category.

#### 2.5 New Working Definition of the Secondary City

In reworking the definition for the term "secondary city", we need to recognize that population size still has a significant influence on the importance and classification of cities, but that function, specialty, logistics and trade importance and competitiveness are other determinants of a secondary city's status. In relation to function, there is also a need to recognize that there are two distinctive types of secondary cities: one associated with subnational regional development, the second associated with submetropolitan regional development.

A hybrid definition is proposed below for a secondary city, which integrates size, function and role within a network of national, regional and global system of cities.

A secondary city generally falls into one of three types:

- (a) Subnational urban centres of administration, manufacturing, agriculture or resource development.
- (b) Metropolitan clustered secondary cities, which develop on the periphery of metropolitan or urban regions and take the form of new towns, spillover growth centres and linear cities. These could also include migrant and refugee cities.
- (c) Corridor secondary cities, which develop as growth poles along major transportation corridors.

#### TABLE 2.3

#### Functional Attributes of Secondary Cities

Function	Description of range of functions
Economic	<ul> <li>Primary subnational playing a key role as subnational division in the national economy or wider subregion. Economy is likely to range between 10-50% of the largest city in the country, depending on the country's overall population and number of cities.</li> <li>Primary subnational centre of economic activity engaged in subnational inter-regional trade, investment and development.</li> <li>Primary subnational centre of manufacturing, energy, tourism or resource development indicating the presence of industry clusters supporting national economy and some international export markets.</li> <li>Primary subnational centre of employment and business services.</li> </ul>
Administrative	<ul> <li>Level of government with administrative responsibility over a geographic national subregion such as a province, state or district, large metro region/municipality.</li> <li>Subnational centre responsible for the delivery of government services including legal, community, health, security and welfare.</li> </ul>
Logistics	<ul> <li>Important subnational or subregional hub for logistics involving the movement and transfer of goods, services, people and communications.</li> </ul>
Knowledge & learning	<ul> <li>Secondary subnational level of knowledge development and learning, with an established university or higher-learning institution.</li> </ul>
Cultural & sports	• Centre of culture, meeting subnational, subregional cultural needs. It can include centres holding national religions, arts, music and other related cultural events. The centre may possibly support a national first- or second-division soccer team.

Source: Land Equity International/Brian Roberts (2014)

These three forms of secondary city play a vital role in national systems of cities. In some cases their role and functions may expand to a geographic region or global realm as primary centres and hubs of business, logistics and trade in an increasingly international system of cities.

Normally, secondary cities have populations ranging between 10-50 per cent of a country's largest city. Most have populations between 100,000 and 5 million, depending on the size of the country – although a few are smaller or larger than this. Most secondary cities are administered by a single local government or authority, and have a mandate to deliver a range of local and regional infrastructure, education, knowledge, health, community and security services. Some have special city status, such as a national seat of government, cultural and religious capitals, or specialized industrial enterprise centres.

All secondary cities play an important role in the development of nations. They provide the secondary link in national systems of cities and are catalysts, logistics hubs and markets, which support a wide range of national, regional, submetropolitan and sometimes international economic activities. Many have the presence of industry agglomeration and clusters; a system of well-developed localized supply chains and

networks; a diversified economic and employment base, and a broad housing mix. Many secondary cities in poor, climate- and conflict-affected regions and countries support the needs of migrants and refugees as a first point of entry, shelter, asylum and informal employment for the most impoverished and disadvantaged people living in cities.

## 2.6 Elaboration of the Functions of Systems of Secondary Cities

The above definition incorporates both scale and functional roles that secondary cities play in the subnational development context of national economies. In some cases, their influence extends to a wider regional context and in a few cases the global economy. However, for most secondary cities their functions are orientated towards domestic exports and trade in goods and commodities, services that form part of a subnational hub of horizontally integrated supply chain and production system supporting large centres of manufacturing located in primary and megacities, and small cities within a defined geographic area. Table 2.2 lists various functions secondary cities normally perform, regardless of their population size.

In seeking to address the problems facing the development of secondary cities, it is the range, scale and efficiency of functionalities that will impact most on secondary city development and sustainability. By developing a better understanding of measures of the functionalities of secondary cities, it is possible to develop rapid-assessment analytical tools and techniques to identify deficiency gaps in vital strategic infrastructure, investment and the enabling environment needs to begin designing programmes to address these.

# Secondary City Urbanization Trends and Patterns

Urbanization is an unstoppable force as we move towards a situation where the planet's urban areas cover more than 3 per cent of its land mass (Angel, 2012). Every year more reports are produced on trends and patterns of urbanization and city development. Unfortunately, most reports focus on the study of macro trends or the world's biggest, most competitive, cities. Less attention is given to the study and analysis of secondary cities and some of these are among the fastest-growing cities in the world, though data on many of them is very poor.

The rapid urbanization of many secondary cities has come at considerable environmental and social cost. Many secondary cities are poor and overcome by the pressures of development resulting from urbanization. Many have weak or dysfunctional governance systems; urban development takes place without any consideration of plans, there is little urban infrastructure and provided services, and little attention is given to building and development control. With almost 70 per cent of the world's population expected to live in cities by the middle of this century (with more than 40 per cent living in secondary cities), the fight for sustainable urban development will be won or lost in the way the growth and development of these cities are managed (United Nations, 2014). The following analyses some of the emerging global and regional urbanization trends and patterns in the development of secondary cities and the magnitude of some of the problems they face.

# 3.1 Urban Growth Trends

Cities account for more than 53 per cent of the world's population. This figure is probably underestimated, given that there is no universal agreement on what constitutes "urban" and many people living in peri-urban areas close to major urban centres are often not included in counts of city population. The 2010-estimated global urban population was 3.7 billion and this is expected to rise to 6.3 billion by 2050. The current rate of urbanization globally is around 1 per cent and projected to fall to 0.56 per cent by 2050 (United Nations, 2012). However, there are significant differences predicted between urbanization growth rates in regions, with sub-Saharan Africa being the highest.

The impact of an additional 2.6 billion people living in cities by 2050 will be enormous in terms of consumption of land, water and food, along with an increased demand for shelter, infrastructure and jobs. By then, employment growth in all but a few countries in Africa will occur in cities. More than 1.5 billion jobs will be added to the urban workforces by 2050. With rural populations and employment in decline and natural population growth rates stabilizing, the growth of urban areas will be primarily driven by rural urban migration (United Nations, 2012). Educating rural residents about living and working in cities must be an essential part of primary and secondary education curricula if these people are not to end up facing dramatic social adjustment and failing to gain secure employment once they move to cities.

The proportion of the global population living in cities will increase most in megacities (see Table 3.1). The proportion of those living in megacities as a proportion of total urban population is predicted to increase from 9.9 per cent to 13.6 per cent between 2010 and 2025. The population of megacities is predicted to increase from 352 million to 630 million for the same period, a compound growth rate of almost 4 per cent per annum. The biggest absolute growth in the population will be in the secondary cities of those of 1-5 million. These cities are expected to grow by 460 million between 2010 and 2025, compared to 270 million for the world's megacities. While most of the world's urban population will continue to live in small cities, the proportion of people living in these, as a percentage of the total urban population, will fall over the next 15 years. The annual population growth rate of smaller cities is predicted to fall globally from 1 per cent now to about 0.5 per cent per annum by 2025.

Over the next four decades, there will be a significant global regional shift in the

#### **TABLE 3.1**

# Global Population by Cities by Population Size, Proportion and Growth 1995, 2010, 2025 (estimated)

Size class of urban settlement	1990	2000	2010	2015	2020	2025	2010 %	2025 %	2010-25
	Population	Population	Population	Population	Population	Population	Ratio	Ratio	An % inc
10 million or more	145,005	242,814	352,465	451,145	560,211	630,005	9.9	13.6	3.95%
5-10 million	141,999	187,768	266,078	281,226	323,877	401,961	7.5	8.7	2.79%
1-5 million	455,502	597,943	759,919	887,590	999,814	1,127,589	21.4	24.3	2.67%
500,000- 1 million	205,417	269,117	353,802	403,053	450,436	515,720	9.9	11.1	2.54%
Less than 500,000	1,333,482	1,560,991	1,826,313	1,903,779	1,955,479	1,967,307	51.3	42.4	0.50%

Source: UN Urban Prospectus (2011)

structure and hierarchy of cities. Most population growth in urban areas will be concentrated in the cities and towns of the less-developed regions. Asia's urban population is expected to increase by 1.4 billion, Africa's by 0.9 billion and Latin America and the Caribbean's by 0.2 by 2050. Table 3.2 and Annex 1 provide a more detailed breakdown by region of the size and proportion of cities under the five categories shown in Table 3.1.

There will be significant shifts in the change in the proportional growth rate of cities globally and across regions. Table 3.3 shows that the highest change in the proportional growth rates will occur in sub-Saharan Africa and Asia. In Asia the megacities and secondary cities with populations of 1-5 million are likely to expand faster as a proportion of total urban growth. In Africa, particularly sub-Saharan Africa, the largest cities will absorb a higher proportion of urban growth. These estimates indicate that there will be significant pressure on population growth in larger secondary cities. In Latin American and Caribbean cities, the megacities and medium-size secondary cities are expected to absorb a higher proportion of urban population growth. In North America and Oceania medium-sized cities are expected to win an increased share of urban population growth. However, in Europe, overall population increases will remain low, but the megacities will absorb the most significant proportion of urban population growth. Annex 2 provides a breakdown of the percentage of people living in cities by population size.

It is apparent from the analysis of the data that while smaller cities will still house most of the world's urban population, they will continue to lose urban growth share as people move to larger cities in search of jobs and better living prospects (Satterthwaite,

#### **TABLE 3.2**

Percentage of Po	opulation Living in	Cities by City Siz	e 1995, 2010,	2025 (estimated)
J	J			

	>1	>10 million		5-1	5-10 million		1-5 million		0.5-1 million		ion	<0.5 million			
	1995	2010	2025	1995	2010	2025	1995	2010	2025	1995	2010	2025	1995	2010	2025
World	7.3	9.9	13.6	5.6	7.5	8.7	20.8	21.4	24.3	9.1	9.9	11.1	57.2	51.3	42.4
Less-developed regions	6.6	9.6	13.7	6.4	8.2	8.9	20.1	21.2	25.0	9.1	10.3	11.2	57.8	50.7	41.2
Africa	_	5.4	7.5	6.4	2.1	9.1	20.9	26.0	26.9	10.5	9.6	9.4	62.1	56.8	47.1
Sub-Saharan Africa	-	3.6	6.6	3.5	2.8	8.9	22.5	28.7	30.5	12.2	10.3	9.3	61.8	54.6	44.7
Asia	8.6	11.4	15.8	6.7	9.5	9.2	19.4	19.1	23.5	7.9	10.3	11.8	57.4	49.7	39.7
Europe	-	4.1	6.2	5.2	3.9	3.5	16.6	15.3	16.9	10.2	10.2	11.2	68.0	66.6	62.3
Latin America/ Caribbean	15.3	14.0	17.8	3.4	6.2	5.4	20.7	23.7	27.3	10.1	9.0	9.1	50.5	47.1	40.3
Northern America	12.4	11.8	15.4	3.4	11.3	17.0	35.3	33.8	31.4	10.4	9.9	12.4	38.5	33.2	23.9
Oceania				-	-	17.8	53.3	56.4	41.3	4.8	4.2	11.6	42.0	39.4	29.2

Source: UN Urban Prospectus (2011)

Proportional shift	>10 million	5-10 million	1-5 million	0.5-1 million	<0.5 million
World	3.7	1.2	2.9	1.2	-8.9
Less-developed regions	4.1	0.7	3.7	0.9	-9.5
Africa	2.0	7.0	0.8	-0.1	-9.7
Sub-Saharan Africa	3.0	6.1	1.8	-1.0	-9.9
Asia	4.4	-0.3	4.3	1.5	-10.0
Europe	2.1	-0.4	1.6	1.0	-4.3
Latin America/ Caribbean	3.8	-0.8	3.7	0.1	-6.8
Northern America	3.6	5.6	-2.4	2.6	-9.4
Oceania	0.0	17.8	-15.0	7.4	-10.2

#### TABLE 3.3

# Proportional Shift in the Growth Rate of Cities by Sizes by Regions (2010-2025) (estimated)

Source: UN Urban Prospectus (2011)

2007). In some regions of the world, particularly in Asia, the very large cities will experience increasing growth pressures, while in other regions, such as sub-Saharan Africa, the larger middle-order cities and cities in the 1-5 million range will experience the greatest growth pressures. The significant differences expected in proportional growth-rate changes in the population of cities in countries and regions will require governments to prepare and implement multifaceted urbanization policies, strategies and development programmes to deal with urban growth management.

# 3.2 Growth in the Number of World Cities

A recent publication by the Lincoln Institute (Angel, Parent et al., 2012) estimates that there are approximately 4,000 cities in the world with populations in excess of 100,000 people and this number is expected to increase to 6,000 by 2050. Table 3.4 shows the number of cities by population size in 1995 and 2010 and the expected number by 2025. A more detailed breakdown of figures on a regional basis is provided in Annex 3.

There are presently 23 megacities with populations of over 10 million, accounting for 9.9 per cent of the world's urban population. By 2025, there will be 37 megacities, accounting for 13.6 per cent of global urban population. Cities of less than 1 million account for 61 per cent of urban population. The trend is towards increasing urban concentration in larger cities, as seen in Figure 3.1. By 2025, it is projected that an additional 184 cities will grow to 1-5 million and 237 will have populations of 0.5-1 million. China will add 59 cities of 1-5 million and 77 cities of 0.5-1 million.

#### TABLE 3.4

	>1	>10 million		5-1	5-10 million		1-5 million		0.5-1 million		ion	
	1995	2010	2025	1995	2010	2025	1995	2010	2025	1995	2010	2025
World	13	23	37	19	38	59	270	388	572	338	513	750
Africa	-	2	3	2	1	9	26	47	81	36	55	91
Sub-Saharan Africa	-	1	2	1	1	7	21	40	71	29	44	71
Asia	7	13	22	11	25	32	119	188	305	139	274	424
Europe	-	2	3	3	3	3	47	49	57	77	83	96
Latin America/Caribbean	4	4	6	2	4	5	37	55	74	51	60	73
Northern America	2	2	3	1	5	9	36	43	50	34	39	60
Oceania				-	-	1	5	6	5	1	2	6

#### Number of Cities by Population Size 1995, 2010, 2025 (estimated)

Source: UN Urban Prospectus (2011)

Asia is expected to experience the most significant increase in the growth and development of secondary cities. More than 60 per cent of the increase in the number of cities (population range 05-0.5 million) will occur in Asia. However, in Africa, particularly sub-Saharan Africa, growth pressures will fall proportionally in the development of secondary cities in the 0.5-1 and 1-5 million city sizes. An additional 27 cities of 1-5 million and 31 of 0.5-1 million people are expected to develop in sub-Saharan Africa by 2025. Figure 3.1 shows the expected number of cities by size by region 2010-2025.

# 3.3 Geographic Primacy and Dispersion of Cities

The geographic primacy and dispersion of cities vary significantly between countries and regions. Table 3.5 shows the proportion of cities, by type, with populations of more than 500,000 for different regions and subregions of the world. Regions where the proportion of smaller-sized cities (0.5-5 million) is higher than the global average tend to have a more dispersed (D) geography of cities. Regions where this is lower tend to have higher levels of primacy (P). Although the assessment approach used is general, it does provide a useful indicator of the dominance of a small number of large cities on the urban economic geography of regions. Factors such as climate, resource abundance and political economy can have a significant effect on shaping the economic geography of cities. However, the level of primacy and dispersion of cities will have a significant impact on how governments formulate policies and programmes for urban and regional economic development.

There are significant regional differences in the geographic patterns of systems of cities. In Asia it is generally dispersed, with countries such as India and China having



#### FIGURE 3.1

Source: UN Urban Prospectus (2012)

a very wide range of cities of varying types and sizes distributed across the country. There are some countries with exceptions to this pattern, such as Korea, the Philippines and Thailand, where a high proportion of the country's population live in the national capital. The geography of central-Asian cities is much more primate, with one or two large urban centres dominating the system of cities, population and economic activity. The historic nature of the political economy has had a significant impact on this pattern of urbanization in central Asia.

In Africa, the geographic pattern of urban settlements is generally more dispersed, except in middle Africa, where there is greater dominance of primate cities, such as Lagos, which have a significant impact on the concentration of population in that country. Latin American cities tend to have much higher levels of primacy, particularly in countries such as Argentina, Peru and Mexico, where there are very large concentrations of population living in the capital city. In European, North American and Oceanian cities the trend is more dispersed.

#### 3.3.1 Levels of Primacy-Selected Countries

The distribution of primacy levels for secondary cities varies significantly between countries. Figure 3.2 shows the primacy distribution for various countries. This is measured by dividing the population of a city by the population of the largest cities. Only cities with primacy levels up to 8 per cent of the largest cities are shown for the 10 largest cities in the country. Chinese cities have the uniform hierarchical distribution of population hierarchy, followed by India and USA. Mexico, Brazil, Nigeria and Indonesia have the sharpest fall in the primacy level curve for secondary cities. The

#### TABLE 3.5

Primacy and Dispersion Patterns of Cities by Percentage in Geographic Regions

	>10 million	5-10 million	1-5 million	0.5-1 million	D/P
World	2.4%	4.0%	40.3%	53.3%	
Africa	1.9%	1.0%	44.8%	52.4%	D
Sub-Saharan Africa	1.2%	1.2%	46.5%	51.2%	D
Eastern Africa	0.0%	0.0%	45.0%	55.0%	D
Central Africa	0.0%	6.7%	53.3%	40.0%	Р
Northern Africa	5.3%	0.0%	36.8%	57.9%	D
Southern Africa	0.0%	0.0%	87.5%	12.5%	D
Western Africa	2.3%	0.0%	37.2%	60.5%	Р
Asia	2.6%	5.0%	37.6%	54.8%	Р
Eastern Asia	2.2%	4.5%	35.3%	58.0%	D
South-central Asia	3.8%	5.4%	40.8%	50.0%	Р
Central Asia	0.0%	0.0%	28.6%	71.4%	D
Southern Asia	4.1%	5.7%	41.5%	48.8%	Р
South-eastern Asia	2.2%	8.9%	35.6%	53.3%	Р
Western Asia	1.8%	3.6%	42.9%	51.8%	D
Europe	1.5%	2.2%	35.8%	60.6%	D
Eastern Europe	1.8%	0.0%	36.8%	61.4%	D
Northern Europe	0.0%	5.3%	42.1%	52.6%	Р
Southern Europe	0.0%	7.1%	28.6%	64.3%	Р
Western Europe	3.0%	0.0%	36.4%	60.6%	D
Latin America/Caribbean	3.3%	3.3%	44.7%	48.8%	Р
Caribbean	0.0%	0.0%	66.7%	33.3%	D
Central America	2.2%	0.0%	35.6%	62.2%	Р
South America	4.2%	5.6%	48.6%	41.7%	Р
Northern America	2.2%	5.6%	48.3%	43.8%	D
Oceania	0.0%	0.0%	75.0%	25.0%	D

Source: Data derived from UN (2012) P = Strong primacy D = Predominantly dispersed

third- or fourth-largest cities in these countries have populations of less than 30 per cent of the largest city. The most acute distribution of cities is Argentina, Mexico, UK, Indonesia and Nigeria.

# 3.4 Urban Footprints

Shlomo Angel's et al. (2005) studies on urban density and urban footprints show convincing evidence, using time-series satellite imagery data analysis, that urban land areas are growing more than their population growth rates, resulting in a global fall

in urban population density. The most recent study by Angel (Angel, Parent et al., 2012) confirms that the trends identified in earlier studies are continuing, with densities falling more than in previous decades. The study uses a methodology to measure urban population density based on the actual built-up areas of towns and cities, rather than administrative areas that give an erroneous indication of the true density of cities. Both studies by Angel show that the development of peri-urban areas and economic hinterlands of cities are becoming more widespread. The global trend towards falling urban population densities in cities is counter-intuitive to the perceptions most people have about the population density of cities.

#### FIGURE 3.2





There are significant differences in population density of cities between regions. The density of Asian cities is far

Source: Land Equity International/Brian Roberts (2014)

greater than that of Latin American and African cities. Angel et al. (2005) estimated that the built-up area urban density of Dhaka, the capital of Bangladesh, in 2000 was 55,500 persons per square kilometre, followed by Hong Kong at 53,000 persons per square kilometre. The population density of Asian cities exceeds US cities such as Tacoma and Washington, D.C. many times. In the US the 10 largest cities have densities of around 1,570 persons per square kilometre.

Regions with the highest densities of cities are east and south Asia; north, east and central Africa, and central America. Densities range from 10,000-16,000 persons per square kilometre. Southern African cities have densities in the order of 6,000-8,000 persons per square kilometre. The densities of European and South American cities range from 4,000-8,000 persons per square kilometre. USA, Argentina and Australasian cities have population densities of less than 2,000 persons per square kilometre. In nearly all countries, the large cities tend to have population densities 40-70 per cent greater than secondary cities. This is also reflected in land market values, rents and lower building heights, and floor-space ratios.

The total built-up area of land used for urban purposes is unknown. It was estimated by Angel et al. (2005) in 2000 at around 605,000 square kilometres. Half of this was estimated to include cities in the developing world (Angel et al., 2005:1-2). These cities

contain 75 per cent of the world's urban population. In both developing and industrialized countries, average densities of cities have been declining rapidly, which Angel estimates at an annual rate of 1.7 per cent over the last decade in developing countries, and of 2.2 per cent in industrialized countries (Angel et al., 2005:1-2). Urban density is falling at more than 3 per cent per year in some Asian countries (Roberts and Kanaley, 2006).

The continuation of this form of development is unsustainable and will have a significant impact on the logistics, economic efficiencies and cost of running cities in the future. The continuation of the current conversion of land to urban use according to a United Nations report (UN, 2012) would result in the land occupied by cities having 100,000 people or more, increasing by a factor of 2.75 by 2030. The report estimates that if the current patterns of urban settlement continue, every new resident in developing countries will convert, on average, some 160 square kilometres of non-urban land to urban land during this period. This would require more than 175,000 square kilometres of land conversion by 2025.

While the fall in density is a concern about the efficiency and performance of cities, secondary cities have the highest falls in urban density and rates of growth in urban footprints appear to be highest. Urban population densities between megacities and secondary cities can vary significantly. For example, the urban density in Mumbai, India, fell from 466 persons per hectare (pph) to 436 pph between 1990 and 2000 (0.7 per cent per annum), while urban density in Hyderabad, a secondary city of 5.7 million (2000), fell from 282 pph to 180 pph (-3.7%) over the same period. Overall, the rate of growth in urban areas and fall in density in secondary cities appear one to two times that of major urban centres. This has important implications for the resource planning, efficiency and competitiveness of secondary cities.

There are significant differences between the percentage growth in urban area, populations and change in density in the regions between primate and secondary cities. Latin American cities have relatively stable rates of growth and density change. In Chinese, Indian and African cities, rates of urban sprawl and the fall in urban density is high in both primate and secondary cities (Table 3.6). Primacy shown in the Table is the ratio of the size of a secondary population to the largest city in the country.

#### 3.4.1 Spatial Distortions in Economies of Secondary Cities

Cities contribute between 75 and 80 per cent of global Gross Domestic Product (GDP). The McKinsey Global Cities report estimated that the world's largest and middle-order cities, representing 22 per cent of the global population or around 45 per cent of urban population, contributed to about 60 per cent to global GDP (Cadena, 2011). Most of these cities have populations of more than 500,000 people. On this basis rural areas, smaller urban cities and settlements, and smaller secondary cities produce less than 20 per cent of global GDP. Thus around 70-75 per cent of the world's population are dependent on 25 mainly regional cities and towns for many of their basic needs. The

# TABLE 3.6

# Annual Change in Urban Area, Population and Density for Selected Primary & Secondary Cities 1990-2000

Country	City	Population 2000	Population per hectare 1990	Population per hectare 2000	Annual increase urban area	Annual average % population growth	Annual average % change in density	Primacy
Bangladesh	Dhaka	9,196,964	636	555	4.9%	3.5%	-1.3%	1
	Rajshahi	599,525	452	296	5.8%	1.8%	-3.8%	15
Brazil	São Paulo	15,481,476	102	100	1.8%	1.6%	-0.2%	1
	Ribeirão Preto	512,239	48	51	1.3%	1.8%	0.4%	30
	Guarujá	277,993	71	76	1.9%	2.6%	0.7%	56
China	Shanghai	14,133,931	166	122	5.0%	2.3%	-2.6%	1
	Changzhi	928,518	109	81	6.1%	1.3%	-4.5%	13
	Leshan	966,091	175	97	6.0%	0.4%	-5.2%	12
	Yulin	3,387,078	225	135	6.6%	0.7%	-5.5%	4
Egypt	Cairo	13,083,621	278	230	2.8%	1.6%	-1.2%	1
	Alexandria	3,378,392	268	180	3.4%	0.7%	-2.6%	4
India	Mumbai	16,161,758	466	436	2.8%	2.1%	-0.7%	1
	Hyderabad	5,707,677	282	180	5.2%	1.3%	-3.7%	3
	Jaipur	2,779,119	360	197	8.3%	2.5%	-5.4%	6
	Kanpur	2,674,116	160	151	3.3%	2.8%	-0.5%	6
Iran	Teheran	7,803,538	161	165	2.3%	2.5%	0.3%	1
	Ahvaz	1,258,713	58	57	3.5%	3.4%	0.0%	6
Korea	Seoul	14,546,082	266	206	2.6%	0.5%	-2.0%	1
	Pusan	3,485,359	271	177	2.9%	-1.2%	-4.0%	4
Mexico	Mexico City	17,224,096	185	163	2.8%	1.6%	-1.1%	1
	Guadalajara	3,669,578	97	91	2.8%	2.1%	-0.7%	5
Philippines	Manila	17,335,085	328	274	4.5%	2.4%	-2.0%	1
	Cebu	1,524,080	212	239	1.8%	3.0%	1.2%	11
South Africa	Johannesburg	4,695,165	40	47	1.4%	3.2%	1.8%	1
	Pretoria	659,834	29	39	1.4%	4.8%	3.4%	7
Thailand	Bangkok	9,761,697	121	95	5.8%	2.4%	-3.2%	1
	Songkhla	244,403	159	129	3.0%	1.0%	-1.9%	40
Turkey	lstanbul	8,826,758	199	166	4.3%	2.9%	-1.4%	1
	Malatya	852,864	77	62	4.2%	2.0%	-2.2%	10
USA	Los Angeles	13,218,754	35	34	1.1%	0.9%	-0.2%	1
	Philadelphia	5,238,892	27	22	1.9%	0.3%	-1.6%	3
	Houston	3,656,247	23	20	3.9%	2.2%	-1.6%	4
	Minneapolis	2,167,795	22	20	2.5%	1.2%	-1.3%	6

Source: Angel et al. (2005)

differences in GDP per capita between large cities and secondary regional cities and towns is significant. In some countries, such as India, Thailand and Nigeria, it is greater than three. This has resulted in major differences in both the economic and spatial structure between large urban regions and secondary cities, especially in lesser-developed regions.

Inefficiencies and distortions in the spatial structure of secondary cities impose direct costs on governments, utility agencies, individuals, households and businesses. Alain Bertaud (2009) writing on South African Cities that the "current spatial structure of South African cities is partially responsible for increased income gaps between the poor who cannot afford the mobility required in large cities and the middle and higher income groups who are fully mobile and can take advantage of increased productivity".

Angel (Angel, 2012) has observed in the South African context that there are three critical concerns in relation to urban form and density. First, densities overall are very low in international terms, resulting in high costs of infrastructure provision, long and costly travel for individuals, inefficient logistics networks and low market thresholds. Second, the density gradient is frequently inverted: the highest densities are found in pockets of low-income settlements along the periphery, rather than closest to the urban centre. Third, spatial fragmentation of the labour market disperses available work (Bertaud, 2004, 2008). South Africa's metropolitan areas have an average density of 2,960 people per square kilometre, compared with 8,292 people per square kilometre for low- and middle-income countries and 3,100 people per square kilometre for high-income countries (Turok, 2011). Internationally, the only cities with lower average densities than South African cities and longer travel distances to work, are the

Cities	GDP/\$bn	Population	GDP/capita	PP/km <sup>2</sup>	GDP\$m/km <sup>2</sup>	City/national GDP ratio					
Ho Chi Minh City	\$32.3	7,162,864	\$4,513	3419	\$15	2.6					
Hanoi	\$17.7	6,448,837	\$2,750	1940	\$5	1.6					
Haiphong	\$3.2	1,837,302	\$1,750	1219	\$2	1.0					
Can Tho	\$3.5	1,187,089	\$2,980	854	\$3	1.7					
Da Nang	\$2.0	887,069	\$2,283	707	\$2	1.3					
Bien Hoa	\$2.8	784,398	\$3,600	2970	\$11	2.1					
Nha Trang	\$0.9	392,279	\$2,200	1563	\$3	1.3					
Buon Ma Thuot	\$0.3	340,000	\$980	919	\$1	0.6					
Hue	\$0.4	333,715	\$1,150	4006	\$5	0.7					
Thai Nguyen	\$0.7	330,000	\$2,190	1740	\$4	1.3					
National			\$1,755								

Differences in GDP Performance in Vietnamese Cities (2012)

# TABLE 3.7A

Source: General Statistics Office of Vietnam (2013)

## TABLE 3.7B

Cities	GDP/\$bn	Population/ m	GDP/capita	PP/km <sup>2</sup>	GDP\$m/km <sup>2</sup>	City/national GDP ratio					
Jakarta	\$156.5	10.2	\$15,340	10,048	\$154	2.8					
Surabaya	\$25.7	3.1	\$8,300	2,456	\$20	0.7					
Bandung	\$33.6	2.4	\$14,000	2,520	\$35	0.7					
Medan	\$16.7	2.1	\$7,960	2,080	\$17	0.6					
Semarang	\$9.0	1.55	\$2,400	1,584	\$4	0.4					
Makassar	\$10.1	1.33	\$7,600	1,760	\$13	0.5					
Denpasar	\$5.1	0.79	\$6,400	1,944	\$12	0.5					
Balikpapan	\$12.0	0.64	\$19,250	1,300	\$25	3.2					
National			\$4,923	3,557							

Differences in GDP Performance in Indonesian Cities (2012)

Source: Indonesian Bureau of Statistics (2013)

## TABLE 3.7C

Differences in GDP Performance in Brazilian Cities (2012)

Cities	GDP/\$bn	Population /m	GDP/capita	PP/km <sup>2</sup>	GDP \$m/km²	City/national GDP ratio
São Paulo	\$437.0	19.68	\$22,205	7,435	\$165	1.9
Rio de Janeiro	\$187.0	11.83	\$15,807	4,780	\$76	1.3
Brasília	\$106.0	3.78	\$28,122	480	\$13	2.4
Belo Horizonte	\$79.0	5.41	\$14,603	7,290	\$106	1.2
Porto Allegra	\$68.0	3.95	\$17,215	3,045	\$52	1.4
Campinas	\$65.0	2.9	\$22,379	1,360	\$30	1.9
Curitiba	\$58.0	3.15	\$18,430	4,030	\$74	1.5
Salvador	\$49.0	3.57	\$13,725	3,790	\$52	1.2
Recife	\$36.0	3.69	\$9,756	7,135	\$70	0.8
Fortaleza	\$31.0	3.61	\$8,587	8,100	\$70	0.7
Vitória	\$31.0	1.69	\$18,365	3,540	\$65	1.5
Manaus	\$31.0	2.1	\$14,762	1,730	\$26	1.2
Goiânia	\$23.0	2.17	\$10,599	1,600	\$17	0.9
Belém	\$15.0	2.1	\$7,143	1,320	\$9	0.6
Florianopolis	\$13.0	1.01	\$12,846	970	\$12	1.1
Grande Sao Luis	\$12.0	1.33	\$9,023	1,183	\$11	0.8
Natal	\$11.0	1.35	\$8,148	4,734	\$39	0.7
Joao Pessoa	\$10.0	1.19	\$8,375	1,200	\$10	0.7
National			\$11,747			

Source: McKinsey Global Cities of the Future: an interactive map (2014)

sprawling cities of North America, which rely heavily on individual passenger cars rather than public transport. Tables 3.7A-3.7C show differences in the performance of secondary cities to primary cities for Vietnam, Indonesia and Brazil.

## 3.5 Trade, Economic Growth and Development of Cities

Cities have always played a pivotal role in the development of trade between countries. Globalization, the establishment of free-trade agreements and trade liberalization driven by neo-liberal economic development theories focused on export development is leading to increasing trade, international and domestic, between cities. International trade increasingly defines the economies of large metropolitan cities: but not all metro cities are "global cities" in the way that researchers have defined the term. Many have only a small proportion of their economy focused on international trade and development, but they are touched by the processes of globalization by virtue of their distinctive specializations and positions in complex global supply chains (Berube and Parilla, 2012). Singapore, Hong Kong, New York, London, Tokyo, São Paulo, Buenos Aires and Seoul have become leaders in the production of advanced services. Many secondary cities have become globally significant manufacturing hubs. For example Wichita, Greenville and Portland rank among the US's most trade-oriented economies by virtue of their world-class local industry clusters (Berube and Parilla, 2012).

The increasingly rapid integration of the global economy will be among the most critical factors shaping the viability of urban economies in all countries in the coming decade. The next two decades (2015-2035) will see investment flows that support export and endogenous growth sectors flowing in those cities that provide better-educated and skilled workers, globally linked infrastructure, and flexible and responsible public and private organizations (Rondinelli et al., 1998). In the future, urban-de-velopment strategies across all cities need clear recognition that the competitiveness of urban enterprises is necessary to create the wealth that leads to job expansion, capital investment and expanding the tax revenue base to support provision of local public services. Wealth creation occurs when labour, management, knowledge and creativity in urban enterprises add value to products and services produced through technological innovation. Increasing productivity moves cities into world and domestic markets efficiently, effectively and rapidly. Wealth creation, increased productivity and technological innovation, in turn, enhance the capacity of cities to support even larger numbers of business transactions.

There is a propensity for cities to focus on the development of international trade to expand economic development. However, trade in domestic markets often exceeds a city's exports many times. One author (Henderson, 1988) estimated that 50-60 per cent of a city's labour force is likely to be engaged in the production of goods and services that are non-tradeable; the majority of which are locally produced, consumed and traded. In many developing cities in Africa and Asia this figure is likely to be much higher. The need for cities to focus on the development of competitive intra- and inter-city and metropolitan domestic trade (Anderson, 2004) is important in driving efficiencies in localized production systems, leading to the expansion of domestic markets in countries. It is through the expansion of domestic markets that cities can achieve economies of scope, scale and specialization, which create opportunities for cities to compete in global trade and investment.

#### 3.5.1 Growing Trade Between Megacities

Megacities dominate world trade and investment. The world's largest megacities contribute around 13 per cent of GDP, but the value of goods and services relayed through them is substantially higher than this. Trade data between cities is extremely difficult to obtain, especially for services. World Bank shipping data shows that the world's largest 50 ports in 2010 were responsible for more than 68 per cent of world twenty-foot equivalent unit container shipping. Most of these ports are megacities or very large secondary cities. In 2009, airports worldwide handled 4.8 billion arriving and departing passengers. More than 40 per cent of departures and arrivals were through the world's 50 largest cities.

The extent to which these mega and large metropolitan cities dominate trade, transport and communications has important implications in the way secondary cities act as hubs to primary cities. Building networks and links with supply chains and logistics systems, which feed through primary/large metropolitan cities, are thus very important for trade development, attracting business investment in secondary cities. Secondary cities that do not develop infrastructure and the capacity to link with markets and trade systems dominated by primary and large metropolitan cities will not only lose out on export opportunities, but also on opportunities to develop internal trade within domestic economies.

#### 3.5.2 Trade in Secondary Cities

Secondary cities play an important role in the urban and economic structure of their subnational regions. Many play important roles as engines for national and regional development, which occurs despite the concentration of a significant amount of economic activities being concentrated in one or more primary cities. Some, especially in Brazil, China, India, Indonesia, Mexico, Nigeria and South Africa, have large labour markets, concentrations of knowledge, resources and expertise, varied institutions and universities, and have established trading connections and good transportation routes compared to many smaller, third-tier cities and some larger regional cities (MacDonald, 2012). Many also offer a better quality of life than the primary city, as indicated in quality of life and liveability indicators (EIU, 2012a).

Secondary cities integrated into the national and regional economies tend to flourish and stimulate more economic growth and create jobs. This is certainly the case for many Asian secondary cities, but not those in Africa. Secondary cities, such as Curitiba (Brazil), Marrakesh (Morocco), Bangalore (India) and Denpasar (Bali, Indonesia) have focused on creating their own uniqueness, based on the real assets and advantages they possess, as they cannot compete on the same basis as primary cities. They have a strong pro-business environment, are people-friendly and sustain a higher quality of environment, paying attention to humanistic scale needs for education, recreation and the arts (Williams, 2004). These strategies are important to attracting highly skilled labour to develop a diversified workforce that will bring in investment and economic development.

Secondary cities have not been as competitive as primary cities in capturing and capitalizing on the increasing free movement of goods, services, investment and skilled labour between countries. As the traditional export markets in developed economies remain sluggish as a result of the global financial crisis, cities in all developing regions find themselves needing to explore how interregional trade can be developed to help offset falls in demand for overseas exports to sustain economic growth and employment in the period of uncertainty.

The importance of city-to-city networking and trade alliances is becoming an increasingly important strategy for secondary cities in the development of niche market opportunities, especially in the small-business manufacturing and service sectors. Many regional organization networks have been developing in the Asian region to support the development and expand trade between secondary cities. The ASEAN University Network and the ASEAN Foundation are helping to develop knowledge networks and a deeper understanding of the potential benefits of increased intraregional trade and the economic development opportunities that will flow from the creation of an ASEAN Economic Community (Williams, 2004). The ASEAN City Mayors Forum, which convened in Surabaya in October 2011, recognized the value of the economic benefits of focusing on the development of on-the-ground practices to stimulate city networks and open up opportunities to increase intraregional trade between cities in the region.

#### 3.5.3 Characteristics of the Economies of Secondary Cities

There are three broad characteristics associated with the economic development of secondary cities. The first is a group of secondary cities that have a strong growth paths and dynamic local economy. These cities are well connected nationally and internationally in a system of competitive trade, development and investment. They are lead secondary cities and have a strong export focus and outward orientation. In addition, they are star tourist, resource and manufacturing cities. Examples include Denpasar (Bali, Indonesia), Belo Horizonte (Brazil), Cusco (Peru), Toulouse (France) and Seattle (USA). The second group represents the moderate and boomtown economies, driven by



migration, a diverse range of economic activities servicing local and national markets. These tend to be the larger agricultural and manufacturing cities. The former often struggle to attract investment and create sustainable jobs, whereas the latter are located at the peri-urban fringe of large metropolitan cities. Many of these are growing rapidly as the result of deindustrialization and the development of export-processing zones, which provide the catalyst for their development, struggling to manage urban development and environmental issues. These are the meritocracy economies, which are striving to become more competitive. Cities in Brazil, China and India fall into this category.

The third group comprises highly depressed cities that contain large numbers of urban poor people. These are the "laggards". They fall into two types: the first are cities experiencing increasing urbanization, rising poverty, little investment and scant formal-sector job creation. Most secondary cities in Africa fall into this group. The second are cities in economic decline as they move into a post-industrial and decliningpopulation phase. Many secondary cities in Europe, North America and Japan fall into this category. They are becoming increasingly disadvantaged, disconnected and less able to compete for trade and investment within the national system of cities. These are the forgotten secondary cities. In the race for development, they are struggling to make any headway in lifting their economies, overcoming poverty and improving the liveability of the environment for those who live in them. Cusco, Peru, the gateway city to Machu Picchu. © Brian Roberts (2013)

#### 3.5.4 Differences Between Coastal and Inland Secondary Cities

Secondary cities located on coasts or on large navigable river systems tend to perform better than inland cities reliant on road or rail transport. Many have a broader industry base than inland cities with access to better port and regional road infrastructure, especially when located on coastal plains. Coastal secondary cities are often soughtafter locations for people in post-retirement, especially if there are good beaches and coastal waterways. However, environmental problems associated with water pollution and flooding tend to be more acute in coastal secondary cities. Many are located on flood plains or at the estuaries of river systems, making them also prone to tidal storm surge. Coastal ecosystems tend to be more heavily polluted and degraded in developingregion secondary cities. Many of these coastal cities often contain extensive slum housing areas built over coastal swamps and wetlands, giving rise to significant publichealth problems.

Inland secondary cities in developing economies tend to have much narrower-based economies that are highly reliant on agriculture, mining or a large-scale industry complex. As these cities grow, they tend to become more diverse, with some developing more specialized industry clusters. Inland secondary cities tend to have less-severe environmental problems, especially where they are built on open plains and are geographically dispersed. Income, GDP, population densities and consumption levels tend to be lower than in coastal cities, even in the US. Waste generation tends to be lower, but energy consumption is often higher because of the need for heating and, increasingly, air-conditioning, due to extremes in temperatures. However, this situation is not always the case, especially where secondary cities are located on smaller, more enclosed, river systems, where pollution can become highly concentrated.

The differences between the economic, social and environmental conditions between inland and coastal secondary cities may call for different approaches to planning, development and management of cities. There is increasing development and population pressures on coastal secondary cities, many of which are growing much faster than inland cities. In many countries, this is leading to coastal strip-ribbon

Typical homes, Mali. © Curt Carnemark/ World Bank, August (2008)



development, creating a lineal chain of secondary cities running for hundreds of kilometres and putting enormous pressures on the environmental services of coastlines. Mediterranean, Asian, North American, Australian and some Latin American countries are now facing serious coastal-management problems with secondary coastal cities' development, which is the result of the failure of planning systems to protect coastal areas from urban development. In inland cities, the problem is one of managing uncontrolled dispersed urban settlement.



Source: PRC Provincial Statistical Year Books (2012)



Source: Yahoo Finance (2012)

There are differences between the economic performances of coastal and inland secondary cities, especially land-locked cities. Transaction and import costs are higher for most inland cities, due to transportation costs. In land-locked countries, such as Bolivia, Rwanda, Ethiopia and Nepal, these costs make it prohibitively expensive to develop manufacturing-based industries, except where they can create competitive advantage through reduced raw materials and wages. GDP and other economic indicators for inland secondary cities tend to be lower, except where cities have importance as a major resource or exporting region. Figures 3.1 and 3.2 show differences between inland, river port and coastal cities. Where inland cities are dependent on manufacturing and agriculture GDP, figures tend to be around 20 per cent lower than coastal cities. Even in the US the GDP per capita of Atlanta in 2012 was approximately 80 per cent that of New York City. However, this is not the case in all countries. In Brazil it is inland cities, such as Curitiba, that tend to be more competitive and have a higher level of GDP per capita than coastal cities.

It is very difficult to obtain reliable data on most developing-city economies. Data on European and North American cities show differences between GDP and land values, and employment rates tend to be higher for coastal than for inland secondary cities (Arns, 2013). In developing countries, such differences between coastal and inland secondary cities tend to be much higher. Generally, the greater the ratio between primary and coastal cities, the less competitive and difficult it is for inland cities to attract capital and investment. In land-locked countries such as Ethiopia, the differences between secondary and primary cities tend to be more extreme.

#### 3.5.5 Competitiveness of Secondary Cities

There have been many studies undertaken on the competitiveness of cities. International companies and organizations such as McKinsey, Mercer and the Economic Intelligence Unit have all investigated economic competitiveness, business dynamics and liveability of mega- and larger secondary cities (EIU, 2012). Other studies have ranked the competitiveness of cities in regions. UN-Habitat (1991) has studied the performance and development of secondary cities in Africa and other regions.

Several studies have been published on the competitiveness of regional cities (Leke et al., 2010; Cadena et al., 2011; Dobbs et al., 2011). These studies show that secondary cities tend to be substantially less competitive than primate and large metropolitan ones. In the context of Africa, Asia and South America, the competitiveness of secondary cities is often less than 50 per cent of the leading primate city. There are exceptions found in some countries. In Brazil, India, USA and China, for example, some larger secondary cities compete very successfully with primate cities, but this is more the exception than the rule in most countries. Weak economic governance and strategic infrastructure systems, weak human capital and access to fiscal capital are the primary factors contributing to the lack of competitiveness in secondary cities in developing regions.

UN-Habitat recently published a report on the prosperity of cities (UN-Habitat, 2012). The report looks beyond economic competitiveness factors, focusing on five key dimensions of prosperity: quality of life, productivity, infrastructure development, equity and environmental sustainability. The report argues, rightly, that the economic development and competitiveness of cities is not dependent on economic factors alone. There are other factors, such as social and cultural capital, liveability and the "essence" of cities that are important factors in attracting capital to cities.

There are several studies that have been examining the liveability of primary and secondary cities (EIU, 2007; World Bank, 2009). These studies provide indicators of quality of life, showing that secondary cities tend to fall well behind primary cities. The Mercer Prosperity of Cities report identifies the importance of innovation, agglomeration, the development of networks, cultural factors and improvement to organizational governance arrangements in cities, particular secondary cities, as a key factor in contributing to improve the prosperity of cities. One of the biggest challenges, however, will be the creation of jobs, which was the key focus of the World Bank's *World 2012 Development Report* (2012c).

The knowledge gained from studies on the competitiveness, prosperity and liveability of cities has been useful, with many governments using the information to develop and implement policies and initiatives to support the development of secondary cities and to enhance their competitiveness, in an attempt to achieve a more balanced pattern of national, regional and urban development. However, in lesser-developed countries, very little is known about these factors, the economic geography and competitiveness of secondary cities, how they function, the assets they own, the jobs they create and the investment they attract. This places these countries and cities at a disadvantage in knowing how to compete for business and investment.

In a world of cities that is becoming increasingly competitive, this lack of knowledge about the competitiveness of secondary cities calls for better research using a range of rapid-assessment tools and techniques to measure and analyze the dynamics, governance, logistics and supply-chain systems, and deficiencies gaps in the local economies of secondary cities. This is needed to identify what strategic infrastructure is required, enabling environments and human-capital development gaps to be addressed to build competitive advantage – so that cities can become more prosperous and liveable.

# 3.6 Human Development Indicators and Poverty in Secondary Cities

The contribution of cities to the economic development of nations has been studied widely; however, comparatively few studies have been conducted on social and human development between cities in developing countries, especially secondary cities.

#### TABLE 3.8

London School of Economics City Health, Education and Wealth Indicators

Extended metropolitan region (EMR)	Nation	EMR population	LSE cities national health index	LSE cities national education index	LSE cities national wealth index
Beijing	China	17,487,816	0.585	0.524	0.558
Shanghai	China	19,553,651	0.585	0.524	0.558
Dalian	China	6,296,304	0.585	0.524	0.558
Jinan	China	6,296,304	0.585	0.524	0.558
Wuhan	China	8,060,882	0.585	0.524	0.558
Hefei	China	5,130,599	0.585	0.524	0.558
Delhi	India	30,141,583	0.421	0.381	0.468
Hyderabad	India	9,306,634	0.421	0.381	0.468
Ahmadabad	India	8,595,678	0.421	0.381	0.468
Bhopal	India	2,368,145	0.421	0.381	0.468
Jakarta	Indonesia	34,772,342	0.542	0.479	0.488
Surabaya	Indonesia	8,728,602	0.542	0.479	0.488
Medan	Indonesia	5,255,905	0.542	0.479	0.488
Makassar	Indonesia	2,579,112	0.542	0.479	0.488
Cairo	Egypt	24,243,250	0.543	0.479	0.534
Alexandria	Egypt	9,433,514	0.543	0.479	0.534
Lagos	Nigeria	15,373,213	0.2	0.375	0.417
Abuja	Nigeria	4,957,411	0.2	0.375	0.417
Ibadan	Nigeria	6,322,614	0.2	0.375	0.417
Kano	Nigeria	10,643,633	0.2	0.375	0.417
São Paulo	Brazil	26,193,667	0.574	0.562	0.602
Brasília	Brazil	4,164,421	0.574	0.562	0.602
Fortaleza	Brazil	3,950,596	0.574	0.562	0.602
Curitiba	Brazil	3,446,485	0.574	0.562	0.602
Bogotá	Colombia	9,840,818	0.597	0.563	0.578
Medellín	Colombia	6,065,846	0.597	0.563	0.578

The UN Human Development Index (HDI) (UNDP, 2011) is used to measure and benchmark the health and well-being of countries, and the performance of countries in meeting the Millennium Development Goals (MDG). HDI reporting has been attempted at subnational levels and some studies of cities have been undertaken in a few developed countries (Torre and Moreno, 2010; UNDP, 2010). The paucity of socioeconomic data on cities in many developing countries makes it difficult to assess or draw conclusions about the extent to which large metropolitan and secondary cities

#### TABLE 3.8 continued

London School of Economics City Health, Education and Wealth Indicators

Extended metropolitan region (EMR)	EMR to nation health factor	EMR to nation education factor	EMR to nation wealth factor	LSE cities EMR health index	LSE cities EMR education index	LSE cities EMR weallth index
Beijing	1.077	1.026	1.172	0.63	0.538	0.654
Shanghai	1.057	1.018	1.2	0.618	0.534	0.67
Dalian	1.049	1.02	1.176	0.613	0.535	0.656
Jinan	1.049	1.02	1.176	0.613	0.535	0.656
Wuhan	1.044	1.019	1.153	0.61	0.534	0.643
Hefei	1.036	1.004	1.071	0.606	0.526	0.598
Delhi	1.046	1.121	1.197	0.44	0.427	0.56
Hyderabad	1.274	1.108	1.205	0.536	0.422	0.564
Ahmadabad	1.21	1.125	1.187	0.51	0.428	0.555
Bhopal	1.142	1.109	1.144	0.481	0.422	0.535
Jakarta	1.063	1.063	1.036	0.576	0.509	0.505
Surabaya	1.02	1.064	1.001	0.553	0.51	0.488
Medan	1.078	1.104	1.023	0.584	0.529	0.499
Makassar	1.084	1.044	1.012	0.587	0.5	0.493
Cairo	0.997	1.038	1.02	0.541	0.497	0.545
Alexandria	1.016	1.035	1.024	0.551	0.496	0.547
Lagos	1.011	1.163	1.109	0.202	0.436	0.463
Abuja	1.052	1.052	1.116	0.21	0.395	0.466
Ibadan	0.968	1.083	1.048	0.193	0.406	0.437
Kano	0.834	0.887	0.904	0.166	0.333	0.377
São Paulo	0.019	1.031	1.105	0.585	0.58	0.666
Brasília	1.033	1.024	1.089	0.593	0.576	0.656
Fortaleza	1.052	0.996	0.919	0.604	0.56	0.553
Curitiba	1.026	1.034	1.095	0.589	0.582	0.695
Bogotá	1.023	1.077	1.078	0.611	0.606	0.623
Medellín	0.997	1.001	1.018	0.596	0.564	0.588

Source: Paccoud (2011)

are any better or worse in terms of levels of social and human capital development.

One interesting research project (Paccoud, 2011) conducted by the Cities Unit of the London School of Economics has explored the relationships between the design of the built environment, health and well-being in cities, with a particular focus on how urban density affects the experiences of different population groups. The research has been involved in building a dataset of indicators on health, socioeconomics and density data for more than a 129 cities worldwide. This study has been one of the first attempts at creating HDIs at the metropolitan level for a regionally representative sample of comparable metropolitan cities. The HDI indicators for a selected number of primate and secondary cities by regions are shown in Table 3.8. The table indicators provide a measure of health, wealth and education. The first three columns are national benchmark indicators, the next the ratio between city and national indicators and the final three columns indicators for the selected cities.

The Table shows that there are significant regional and country differences in health and well-being indicators. The world's top country for national health is Hong Kong (0.88), education, Sydney (0.89) and wealth, San Francisco (0.8). As seen in Table 3.8, a country such as Nigeria lags well behind in all three well-being indicators. The Table does indicate significant differences, globally, between the indicators of large and secondary cities; however, education and wealth indexes tend to be higher in large cities. Secondary cities tend to have better health indicators, suggesting that low-density and less-severe environmental conditions are less severe than in large cities.

Gini Coefficients (GCs), too, can be a good indicator of levels of poverty in cities. The UN-Habitat's *State of the World Cities 2010/11* (2010b) lists GCs gathered for a number of large and secondary cities in different regions. Much of this data is more than 10 years old, so the figures should be treated with caution. Many countries have seen a significant reduction in GCs in recent years. GCs in Latin American cities are high, ranging from 0.46 for Venezuela to 0.58 for Colombia. African cities, too, are high, ranging between 0.43 for Uganda to 0.75 in South Africa. By comparison, Asian cities lie between 0.3 and 0.4, with Sri Lankan cities having the highest at 0.55. Eastern European and Central Asia GCs range from 0.3-0.4.

GCs data on cities is difficult to obtain or estimate. Selective data from the UN-Habitat *State of the World Cities 2010/11* report suggests that GCs in larger cities are less than in secondary cities overall. This is the case in China, India, Indonesia, Thailand and the Philippines. The GC in 2006 for Bangkok was 0.48, compared to 0.58 for Chiang Mai. In Latin American (except in Brazil) and sub-Saharan Africa, the opposite is the case. GCs in large cities tend to be significantly higher than in secondary cities. Slum-settlement concentrations in these two regions also tend to be high. In other developing regions there is very little data. There is not sufficient data or evidence to draw conclusions about the relationships about GCs rates between secondary and primary cities and more research in this field is needed.

There are significant differences in GCs between secondary cities in some countries. For example, Wuhan, China, has a GC of 0.38, compared to 0.49 in Shenzhen, despite the latter having a GDP per capita 60 per cent more than the former. China recently released GC information for some of its cities. GCs rates in some secondary cities are rising fastest. Some secondary cities in India with high per capita economic growth rates often have high GCs. In these cities, there appear to be strong pull factors linked to employment prospects, whereas in countries such as Nigeria, there are push factors

#### TABLE 3.9

# Mean Air Pollution Levels for Primary and Secondary Cities (PM10 ug/m3)

Country	Annual mean PM10 ug/m <sup>3</sup> primary cities	Annual mean PM10 ug/m³ secondary cities	Number of secondary cities
Australia	13	14	10
Brazil	28	22	10
Chile	121	100	25
India	148	99	28
Iran	96	125	18
Malaysia	49	40	24
Mexico	137	53	14
Pakistan	193	200	5
Thailand	54	42	21
Turkey	59	95	10
USA	22	16	200

Source: WHO Database: Outdoor Air Pollution in Cities (2012)

in play related to land and other social factors driving people into cities, causing GCs to rise. Nelson Mandela Bay (Port Elizabeth), South Africa, is an example of push factors leading to one of the highest GC rates for a secondary city in the country.

# 3.7 Environmental Factors and Climate Change in Secondary Cities

Benchmarking and comparing the environmental quality and conditions of primary and secondary cites is difficult. There is no comprehensive database allowing water and air quality, waste and ecosystem conditions to be compared on standard data between countries. The Global Cities Index (GCI) (Kearney, 2012) and Global City Indicators Facility (GCIF, 2013) have a small sample of cities, but this is insufficient to make comparisons about environmental quality in secondary cities in countries and regions. Some good data is available for Organization for Economic Cooperation and Development (OECD) countries, but for developing countries data is often unreliable and very outdated.

The World Health Organization (WHO) database on Outdoor Air Pollution in Cities (WHO, 2012) lists many cities with recorded annual mean air pollution for PM10 ug/m3 levels. Table 3.9 shows these for primary- and secondary-level cities for a range of countries. Very little data is available for Africa. In most countries, except for countries in south Asia and Turkey, air pollution is much greater in primary cities. Density of development, traffic congestion and levels of industrialization are reasons why primary cities have higher levels of air pollution. Unfortunately, data is not available on other environmental indicators for cities, such as quality of drinking water and sanitation services, environmental health and disease.

Cities can foster sustainability and enhance environmental performance – especially when urban planning integrates environmental considerations. The environmental problems of secondary cities are generally not as severe as those of larger cities, nevertheless some secondary cities in China rank among the most polluted in the world. Resource-processing and energy-producing secondary cities tend to be among the most highly polluted, but so are coastal secondary cities, which tend to be more heavily polluted than inland cities. Climate and geography can also significantly affect pollution levels, especially in extreme climate conditions such as central Asia and the Middle East, where conditions of extreme temperature make heavy use of fossil and other combustible fuels.

The impact of climate change on the development of secondary cities varies in many ways. The only real difference between primary and secondary cities is one of scale, and the relative ability of cities to raise finance to cover the cost of adaptation and mitigation measures to tackle impacts. Most secondary cities are really only focused on adaptation. Some secondary cities have been able to take the lead on climate-change initiatives, with many secondary cities in China, for example Hubei, and other parts of the world focused on the development of green-energy economies. Green-energy solutions, especially solar, offer ways for secondary cities to develop a more localized supply of energy, which reduces risks when cities become dependent on a national grid supply of electrical energy. When this is wiped out through widespread flooding, it can take many weeks to restore energy-supply systems. Secondary cities often have the advantage of developing high levels of social capital, which can enable them to more easily and effectively mobilize at scale to deal with disaster management. Social capital was a significant factor in the resilience of the secondary city of Brisbane, Australia, when floods in January 2011 caused more than US\$3 billion dollars-worth of damage to the city's infrastructure.

# 3.8 Future Drivers of Economic Development in Secondary Cities

Cities are the engines of economic growth and development. Globally, cities account for anywhere between 75-80 per cent of world GDP, with the top 600 cities generating about 60 per cent of world GDP (Dobbs et al., 2011). The composition of these top 600

cities will change dramatically over the next 15 years. According to McKinsey Global Institute (MGI), by 2025, 99 new cities from the developing countries are expected to enter the top 600 list of world cities: 72 of these will be in China (Dobbs, 2012).

In most countries, the GDP per capita of cities is above average national GDP per capita. In some developing economies the GDP per capita of cities can be two to three times higher than national GDP per capita. Developed-country cities have led production, innovation, trade, investment, employment and consumption since the Industrial Revolution and the balance is now shifting rapidly to developing-country cities.

The MGI notes that there is a common misperception that the world's 23 megacities have been driving global growth for the past 15 years, but this is not the case. Most have not grown faster than their host economies and MGI expects this trend to continue. McKinsey predicts that megacity contribution to global growth will fall from around 14 per cent of global GDP now to around 10 per cent by 2025. The implication of this is that the "middle weight" cities, with populations of between 150,000 and 10 million, will be making a greater contribution to global GDP than they have in the past.

It is the emerging-market megacities in developing economies (423 of which will be included in the top 600 cities) that are predicted by McKinsey to contribute more than 45 per cent of global growth by 2025. MGI identifies 407 emerging middle-weight cities that are contributing to nearly 40 per cent of global growth. This is more than the entire developed world, emerging markets and megacities combined (Dobbs et al., 2011:2). Most of these emerging cities will have populations of 1-5 million and are located in Asia. China's top ten cities, for example, contribute to around 20 per cent of the nation's GDP. In contrast, South America's 198 large cities, with populations of 200,000 or more, contribute more than 60 per cent of this region's GDP. The 10 largest cities generate half that output (Cadena et al., 2011). A similar pattern of economic activity is likely to occur in sub-Saharan Africa, where the geographic distribution of cities is dispersed – with the exception of a few countries.

The implications of MGI and other research findings point to secondary cities playing an increasingly important role in the development of nations in years to come. However, there will be very significant regional differences, with Asia, Europe, North America and other development of economies having high concentrations of activities in larger cities, while the Caribbean, Latin America and Africa – especially sub-Saharan Africa – will have a wider dispersion of economic activities in secondary cities. A major problem is that economic growth rates for cities per capita in Asia and other regions will increase substantially, but those for sub-Saharan Africa, the Caribbean, Latin America and the Pacific regions will be much more subdued. These findings suggest that there is significant structural adjustment needed to the economic governance and economies of secondary cities in these regions if they are to catch up with more rapidly developing regions of the world.

# New Urban Economic Geography of Secondary Cities

The global financial crisis has challenged the neo-classical models of economic development that have underpinned the development of nations for more than 60 years. The paradigm that nations can continue to foster economic development using the business-as-usual approach while continuing to ignore environmental and social costs to raise a nation's overall level of development (Kuznets, 1955) is no longer sustainable. Natural resources are becoming more finite and difficult to recover; congestion and pollution are adding to the transaction cost of business and government, and services are increasingly the drivers of economies activities – even in the smallest cities. There is a growing interest in green cities (Lindfield and Steinberg, 2012) as a way of merging the need for cities to be competitive and productive but less wasteful and energy-consumptive.

The demands urbanization places upon the economic, social and physical environments of cities has created a global debate over the sustainable versus competitive city and how to harmonize the two. Can these powerful forces be made to complement, rather than oppose, one another? Is this debate shaping a New Economic Geography (NEG) for cities (World Bank, 2009) If large cities demand that their products and services become more sustainable, how will the NEG shape the policies and production systems of secondary cities and along the rest of the supply chain?

The NEG of cities is concerned with spatial development in efficient urban economics, sustainable resource management and production systems, and creative and innovative societies. It involves having debates about the merits and costs of clustered or agglomerated versus dispersed production systems, reducing externalities and transaction costs to create competitive and liveable cities and economies; fostering urban and industrial ecologies and valuing capture, and developing smart and intelligent cities that use resources, technologies and capital wisely.

The following discusses issues related to NEG and the impact on secondary cities' urban development in the future. No secondary city can afford to disregard these matters, especially in lesser-development regions and countries that have a long way to go to meet the standards of engaging in the NEG of cities.

# 4.1 The New Economic Geography (NEG) of Cities

The challenge for developing economies with the shifting trends in function and production is how can poor secondary cities experiencing rapid urban-development pressures, high levels of informal-sector employment and limited investment prospects, re-engineer their economies and governance systems to engage in the new economic geography of cities? The biggest challenge is winning citizen support for implementing reforms and changes to urban systems, many of which have become expensive, corrupt and inefficient to operate.

For cities to be successful and benefit from emerging trends in NEG, the self-interests of business and government officials and enterprises must give way to a focus on the more common good (Hardin, 1968; World Commission on Environment and Development, 1987). This will require cities to work out ways to engage in mass collaboration (Tapscott and Williams, 2006) between government and business to expand the wealth base of cities by stretching and leveraging common resources (Hamel and Prahalad, 1994; Hamel, 1996) to reduce transaction costs of business and government. Some ways to do this include: the adoption of integrated and transparent urban planning and logistics systems; the development of more transparent and flexible governance systems; the building of common strategic infrastructure, a diversity of human capital and culture, and a focus and support for creative and innovative industries. The focus of secondary-city development must be working towards collaborative, rather than competitive, advantage. Secondary cities must learn how to create and apply collaborative advantage to overcome economies of scope and scale enjoyed by large metropolitan-region cities.

How to foster greater collaboration, competition, increase specialization, shared knowledge and resources, participatory governance and budgeting in support of developing more sustainable economies, remain as some of the foremost challenges facing governments in developing countries. This is at national and local government level, addressing demands and systems that the NEG is imposing on cities. If governments responsible for the management and development of secondary cities do not align and maintain their spatial and economic planning and systems with the emerging NEG of countries and cities, their prospects of ever achieving strong, sustainable and liveable cities are very limited. It is essential that this message is sent to leaders of secondary cities – especially those located in lesser-developed regions.

NEG raises many questions about the way we will plan and develop cities in the future. One of the most challenging issues is to understand the changing nature of the spatial economics of cities. Researchers such as Venables (2005) raise important questions about why economic activities, especially in large cities, are distributed so unevenly across urban areas, with multiple centres of concentrated economic activities surrounded by "peripheral" regional cities of lower density. He raises further questions

about what economic interactions there are between these different geographical areas and how do these shape income levels in urban areas, and how does the spatial organization of economic activities respond to various shocks, such as global recessions, technological change or policy measures? These are important questions that must be addressed in planning and developing cities in the age of NEG. They have resulted in significant differences in viewpoints about the direction the NEG of cities should take (Anas, 2004), especially in the context of lesser-developed economies.

The thinking on NEG is affecting the development of primary and secondary cities in many ways. These differences vary greatly between regions, with African cities struggling to manage urbanization and attract investment to support development, to create jobs and to build essential infrastructure to meet the needs of rapidly growing cities. There is an important debate going on about whether metropolises are the most efficient and effective form of future urban development (Metropolis, 2011). Or should governments seek, in whatever way they can, to encourage a more dispersed human settlement and employment pattern? How can the NEG benefit cities in poorer regions and countries? The NEG is forcing those concerned with the policies, planning and development of cities, in all countries, to develop a better understanding of what drives the development of cities, how city economies are different, what makes a city competitive and how can a city align itself in a new global, and more competitive, system of trade and development?

# 4.2 A New Functional Typology of Secondary Cities

The NEG has led to new approaches and thinking about the planning and development of cities. The economic make-up, physical, social and demographic characteristics and functions of cities vary significantly from country to country and from city to city. Some of these differences can be traced to a city's foundation, its endowed resources, strategic infrastructure and the governance systems. The initial economic, rational and urban development pattern of a city has tended to provide the catalyst and set the pathway for its long-term physical and economic development. Subsequent shifts in a city's competitive advantage, resulting from development and changes to economic systems, then tend to affect the level of specialization and the markets in which a city operates. The increasing specialization of cities is not only being driven by the need to compete globally for trade and investment, but also nationally and within smaller geographic regions.

The composition of a city's labour force, or sector contribution to the economy has been regarded as the best indicator of functional specialization. Cities' functions can be classified by types: industrial, service, transport and government from the analysis of employment profiles, using shift share and location quotient analysis (Stimson et al., 2006). Specialization in specific types of economic activity tends to be identified using location quotient, input-output and industry-cluster analysis, and occurs when sector employment or output levels exceed some critical level of representation. Specialization, however, is less easily identified in developing cities' economies where data is often not available for this type of analysis. However specialization is occurring in the economies of secondary cities in many developing countries (Fafchamps and Shilpi, 2005; Roberts, 2005), often related to tourism, food, education and culture.

The increasing specialization of cities has led to various attempts to classify cities using different typologies, within the context of national and global systems. However, there is no generally agreed process for classification of cities by functionality (see Chapter 2). Most countries classify cities in a hierarchy by population size (Harris, 1943; Britton, 1973; United Nations, 2005). The reasons for this are mainly economic governance, especially in the allocation of national grant and revenue-sharing of funds to subnational governments. Other classification methods are based on political function, culture and socioeconomic development.

The need for reclassification of cities by functionality makes it very difficult to compare cities based on different hierarchy and population size (Hugo et al., 2003). However, functionality will be a critical factor in formulating development policies and programmes for secondary cities in developing economies, particularly if domestic interregional trade becomes the focus of unlocking the internal development potential of cities and regions within countries. It is the failure of national governments to recognize the importance of fostering specialization and competition between cities that is holding back the development of secondary cities in many countries (Begg, 1999; PWC, 2005).

#### 4.2.1 Economic Typology of Cities

#### **Changing Function of Subnational Cities**

The subnational secondary city is the oldest form of secondary city. Some, such as Homs and Aleppo (Syria), are thousands of years old. Others, developed as empires, grew as part of the need for more decentralized local government and administration. During the industrial eras, subnational secondary cities were planned and developed as administrative resources centres, industrial cities, specialized education and tourism cities. Most were planned in the early stage of development, with the remnants of the colonial city centre and infrastructure remaining. In Europe and North America manufacturing, food and material processing led to the expansion of manufacturing secondary cities. By the late twentieth century, many European and North American cities were in decline as companies and whole industries began moving offshore to cheaper labour markets. The same cycle is being repeated in many developing regions but at a rate and scale far greater than anything experienced during the industrial revolution.

With the growing internationalization of trade and development and the expansion

of city-to-city regional and national trade since the 1980s, there has been a growing interest in the functional specialization of cities and towns. Some cities have always been known for their specialization in food, culture, tourism, industrial manufacturing or services functions. However, this was nearly always considered in a local context. In the contemporary world, with expansionary trade under the World Trade Organization (WTO), multi- and bilateral and free-trade agreements, cities within one country with similar types of specialization compete openly for trade, customers and investors. Identifying ways to analyse how secondary cities fit within an emerging global typology of cities, and how it functions, enabling them to become more specialized and compete for trade and investment nationally and internationally, will be the key to unlocking the development potential of many cities in lesser-developed economies of the world. This is particularly important for diversifying the economic base of cities in Africa.

The emphasis on functional classification and competitiveness of cities has now become the basic underlying dimension for assessing urban systems (Pengfei Ni and Kresl, 2010). The classification of cities based on functional specialization may enable the identification of spatial regularities in the distribution and structure of urban functions and the formulation of hypotheses about the resulting patterns (Wikipedia, 2011). It can enable assessments to ascertain whether cities with a more diversified economy grow at a faster rate than those with a more specialized economic base. There is evidence suggesting that cities that foster the development of industry clusters as a means of enhancing their competitiveness perform better than those that are less specialized and are focused on developing a more broad-based, consumption-driven economic activities (Selfin et al., 2010; World Bank, 2011).

Various attempts have been made to classify cities by economic typology of cities (Christaller, 1933; Lynch, 1981). The European Commission State of Cities report (2007:8) presents three typologies for European cities that aim to provide a better insight into urban development based on functionality that serves as a basis for city comparisons. Most of the cities shown on the map (Figure 4.1) are secondary cities that fall into the latter two categories.

**International hubs**, which are the well-known international centres operating at the European and global level; the knowledge hubs in established capitals and re-invented capitals such as Dublin, which are champions of transition and engines of economic activity in the new member states of the European Union.

**Specialized poles**, which play (potentially) an important international role in at least some aspects of the urban economy, related to national service hubs, transformation poles, gateways and new industrial, research and visitor centres.

**Regional poles**, which are pillars in the development of Europe's regional economies. These include industrial and de-industrialized cities, which still have a strong (heavy) industrial base; regional market centres providing personal, business and financial services, leisure and hospitality services; regional public-service centres providing government administration, health and education, and satellite towns containing smaller nodes of economic activity within larger urban agglomerations.

The criteria used for assigning cities into one of these typologies were: size, economic structure, economic performance and drivers of competitiveness. City types are defined using the characteristics of their core, rather than by their wider boundaries. Some may fall into more than one type.

Other researchers have suggested classification or typologies for megacities based on economic functions. Marcotullio (2001) defines the economic functions of megacities in Asia as: entreport, services and industrial and post-industrial cities in terms of their functions. However this classification refers mainly to megacities and large metro regions and is not as easily applied to secondary cities, especially in the context of developing regions. World cities are generally deemed to form an urban system or city network (Taylor, 2001) with three levels of structure: cities as the nodes, the world economy as the supra-nodal network level and advanced producer-service firms forming a critical subnodal level. Taylor (2004) talks about the latter as creating an interlocking network through their global location strategies for placing offices.

Regardless of the method used to classify cities, the ways cities function has changed. While size does matter in the global rankings of cities, it does not mean that a large city is prosperous and efficient. Large cities do generate economies of scale and create many opportunities for employment, investment and development; however, the emergence of a global network of cities that are being driven increasingly by information and services, means that traditional concepts of hierarchy, economic significance and influence are fast disappearing. Cities now compete globally and nationally for markets, trade, investment and development opportunities based on functionality and specialization rather than size and historic laurels.

#### 4.2.2 Spatial Typology of Metropolitan Region Secondary Cities

The spatial patterns of metropolitan region cities have been of interest to planners and development agencies, but what shapes the form and function of the secondary cities that surround them is not well understood. The form and function of all cities is shaped by geography, history, economics, culture, planning ideology, defence, wealth and lifestyles factors. The geography of metropolitan cities is unique, despite there being many similarities in the ways they are planned, the materials used in construction, urban design and function. Their form is being shaped constantly by public and corporate factors and a myriad decisions that collectively give individual cities their character.

The relationship between spatial patterns of urban form and industry and economic agglomeration in metropolitan cities is a research area that has developed significantly in recent years. There have been many attempts to conceptualize the spatial geometry

## FIGURE 4.1





Source: European Commission (2007)


# FIGURE 4.2

Source: Choe & Roberts (2011)

of city forms (Morris, 1979). Historically these forms were based on grids, radial and medieval layout patterns of development. But as cities have become larger, they have begun to take on clustered patterns of secondary or spillover secondary-city development that take different spatial and functional forms.

Figure 4.2 depicts conceptual spatial patterns emerging from the development of clustered secondary cities. The solid dots shown in each concept represent urban-regional centres or satellite towns forming part of the structure of the metropolitan region. These conceptual groupings of spatial urban development have proved useful in modelling future transport, land use and employment patterns for planning in larger clustered cities.

A primate city is generally the leading city in a country, state or region. It is generally proportionately larger than any other city in a population or economic hierarchy. Many of the largest cities in the world, especially capital cities, began as primate cities.

- An expanded primate city consists of one very large city, with many, much smaller, cities and towns that have developed with intermediate-sized urban centres, spreading out from the core city centre. This pattern has developed in many North and South American cities and is becoming more prevalent in Asian cities.
- A polycentric city is one in which there is a hierarchy of similar-sized cities, which compete for business and investment within a metropolitan region. Manila is a good example of a polycentric city.
- A regional networked city is one where there has been a development of a series of expanded or satellite new towns. London, Paris, Guangdong, São Paulo and

Delhi are examples of regional networked cities. The Singapore, Johor Bahru, Batam/Bintan growth triangle is an international example of a multinational networked city.

- A linear city is one constrained by geography, taking the form of corridor cities that follow coastlines or valley systems. Tokyo, Caracas and the cities along the Costa del Sol in Spain are examples of linear cities.
- A polycentric linear city is a city that develops from a core centre and spreads out in a radial pattern along coastal and river systems with the development of new cities. Mumbai, Rio de Janeiro and Sydney are good examples.

Much has been written about the economic, logistic and environmental virtues of these different clustered secondary-city, urban-settlement patterns and what constitutes an ideal urban form. Some researchers (Brotchie et al., 1995; Newton, 2000; Verhoef and Nijkamp, 2002) strongly advocate the benefits of polycentric cities, arguing that they reduce trip distances and exposure to smog, enhancing the efficiency of fuel use. Other researchers (Friedmann and Millar, 1965; Friedmann and Douglass, 1975; Simmonds and Coombe, 2000) suggest that encouraging a compact urban form of traditional suburban design reduces the number of personal trips and travel distances. Researchers such as Bertolini (2005) have introduced the concept of multi-modal (regional network) cities based on clustered regional development and regional cities networked with a primate city.

There is evidence to suggest that compact linear or multi-centred "corridor secondary cities" are more logistically and energy-efficient than other city forms (Laquian et al., 2008), for example the Tokyo-Nagoya-Osaka-Kyoto corridor. Corridor cities reduce the need for large and expensive interconnecting transportation networks between multiple urban centres as evident in polycentric cities. Business, community and public-service activities can be sited at and around transportation nodes, with lateral and spoke transport systems feeding into transport nodes or hubs along the corridor. Curitiba in Brazil is a good example of transport-oriented development (Lloyd-Jones, 1996).

However, linear cities tend to be energy-efficient when they have high-density residential populations; inter-modal transfer facilities; intensive, mixed-use employment and community facilities developed at nodes along the transport system; high-to medium-density residential land use integrated into the node, and good pedestrian and cycle access linking to transport services (Hillman, 1996).

A feature of all metropolitan forms is the existence of spatial patterns or clusters of development and economic activity that are located for good economic, logistical, planning or other reasons, and strong dependencies (trade, knowledge, commercial and social services) exist between these clusters of activities, especially between firms involved in production supply chains. Many of these dependencies now transcend metropolitan and national boundaries and extend to cities around the world.

# 4.2.3 City Cluster Economic Development

The Asian Development Bank (ADB) sought to link the physical typology of cities to their functional economic role through the concept of City Cluster Development (CCD) (Choe and Laquian, 2008). CCD is described as urban-led development approach to enhance the ability of cities to promote economic growth and development in an extended urban region. An extended urban region is defined by spatial spheres of economic influence and not by administrative jurisdictions. Foshan, in central Guangdong province, southern China, is applying the concept in forming a prosperous city cluster with Guangzhou (HKTDC, 2004), which is 16 kilometres away. These two cities are focusing on developing high-quality infrastructure, technology and industrial parks to attract leading manufacturers to the Pearl River delta region.

The approach taken by CCD is to "assess ways to enhance the competitiveness of the cities to increase the value of its enterprises, and enhance its ability to nurture the progress of its local economic dynamism for the prosperity of its residents" (ADB, 2008). The approach is largely supply-driven, with a strong emphasis on good logistics systems, integrated industrial development complexes and high-quality access to services. CCD advocates the benefits of megacities taking advantage of economies of scale, which can lead to the attraction of large-scale investment, which, in turn, leads to an increase in the intensity of economic activities. For China, the approach is aimed at the creation of employment for the millions of migrants attracted to cities in the search of employment and a better life.

The CCD approach identifies four types of city-cluster developments:

- Urban corridors, in which urban settlements and their transport systems take a linear form, often dictated by the physical geography around which the city has developed. Examples of this type of city are Rio de Janeiro, San Francisco and Cairo.
- Megacity-dominated clusters, in which a dominant primate or regional city expands into a dispersed polycentric megacity that engulfs surrounding areas. Examples of this type of city are London, Delhi and Johannesburg.
- Subnational regional clusters, in which no single city in a region dominates development in the city region. There are many examples of regional clusters in Europe, China and India.
- Transborder clusters occur when adjacent cities located in different countries form a contiguous sphere of economic influence. Singapore, Johor Bahru, Batam/Bintan growth triangle and the Vancouver-Seattle urban conurbation are examples of transborder clusters.

The research on city typologies and functions raises important questions about the types of urban form governments should support for the future spatial and economic development of cities. In considering the long-term economic and physical planning

for the development or redevelopment of cities, the application of some of the urban form and economic concepts described above is theoretically possible. However, the physical geography, transport services, governance systems, planning policies and politics will always be significant factors in dictating urban- and economic-development patterns of cities, especially when space is limited. Most large cities will probably take on more polycentric forms as employment becomes more decentralized and de-industrialization occurs in inner-city areas. As they expand, megacities will move towards more regional networks, or clusters, of cities or a linear polycentric city form with new business activities in submetropolitan centres. This pattern is occurring in many cities with populations reaching more than 5 million.

# 4.3 New Economy Impacts on Systems of Secondary Cities

What has emerged in the twentieth century is a global order of cities dictated by function, scale and global dominance of trade and markets. All cities are becoming increasingly specialized and interdependent, and facing growing competition in access to limited resources, investment and human capital needed to develop their economies. Systems of secondary cities perform an important link in a networked economic system of trade and production in goods and services. These are becoming increasingly integrated and less dependent on hierarchical economic, governance and logistics systems. The internet has fundamentally changed the economic geography of cities. Lower-order systems of cities are becoming less dependent on higher-order cities for gaining access to many basic services. Smaller cities are free to purchase and trade goods and services, but are still very reliant on higher-order cities to provide the logistics systems to get these to buyers and markets.

However, despite the growing reliance on e-services, primary-order cities, because of their growing specialization, are becoming increasingly vital for the functioning of secondary and lower-order systems of cities. Primary cities, not necessarily in the same country, provide access to advanced levels of knowledge, technology, services and information to develop and maintain their economies. As primary cities compete for trade, investment and services, secondary cities are not necessarily looking to primary cities within the country to meet the demand. Thus, the ways in which secondary cities develop forward and backward linkages with primary and tertiary cities, plan the delivery of strategic infrastructure, governance systems and gain access to resources and capital, will be important to the long-term development and competitiveness of their economies.

Secondary cities play an important intermediary role in a network of globally linked cities. There are many more tertiary cities and a lower order of urban settlement in the world than larger cities, so the strength of the relationship and network of support systems provided by them are critical to their development. More than 50 per cent of the world's urban population lives in small cities, so their development is totally dependent on having efficient secondary- and primary-city systems. No city can function in isolation and expect to develop a modern economy. All cities are linked and have become dependent upon one another for modern economies to function and grow, no matter what the political and economic model differences there are between countries. Trade will become increasingly important to the development of systems of secondary cities. However, of greater importance to secondary cities in developing countries is how to create jobs and investment to provide a more sustainable basis for local economic development. If the functionality of secondary cities in a country or region fails, then it is almost inevitable that there will be a cumulative failure of lower-order systems of urban settlement within a country or region.

## 4.3.1 Lead, Lag and Laggard Cities

There is a tendency to think that only cities in developing and newly industrializing countries are influenced by the changing economic geography of cities. Even in the least-developed countries the global economy is having a significant influence in shaping the economic development of secondary cities. Unfortunately, globalization has led to three types of secondary cities emerging in developing regions: those with high levels of connectivity to the global and larger national economies; those with relatively moderate levels of connectivity and development, and those with low-level connectivity and low levels of development. These economies are often referred to as "lead," "lag" and "laggard" cities.

These types of secondary cities operate at three speeds. Secondary cities engaged with the new global economy are attracting and generating investment, jobs and are increasing in wealth. Many have endowed resources that are natural or have been built up over a long period. Those, however, that are not as fortunate to have endowed resources sought after by international investors and visitors, and poor connectivity, are left lagging, disconnected and struggling. The features of these three broad patterns of development associated with secondary cities are described below.

#### Lead Cities

Lead cities are made up of two types: resource-endowed and entrepreneurial cities. Both are well connected to global system of trade, investment, influence, creativity and knowledge.

#### Resource-Endowed Secondary Cities

These are cities that have benefited and developed on the back of endowed mineral, energy and natural-resource attractions. These resources are sought by global businesses and tourists. Many of these cities have, by chance, through their own efforts or external investor or government support, successfully engaged in development activities that are fully integrated into the global economy. Many have reformed their local governance and economic systems, developed or had built essential strategic infrastructure and transport networks, and invested in human-capital development and technologies that make them attractive places for global business development and investment.

One of the biggest impacts has been in the global search for minerals and energy, which is having a profound impact on economic geography of secondary cities in Africa, South America and Asia. Mining has led to the expansion of many secondary cities in Latin America, Africa and Asia. Kumasi, in Ghana, is an example of a secondary city that has grown rapidly from the development of the gold-mining industry in the region. Belo Horizonte (Brazil) and Erdenet (Mongolia) are other examples of modern-era mining cities, with economies linked into global-industry supply chains providing resources for factories in many regions. Warri (Nigeria) and Balikpapan (Indonesia) are major global oil-production and refining centres.

#### **Responsive and Innovative Cities**

Responsive cities are innovative, open, dynamic, entrepreneurial cities that respond quickly to change and create new market opportunities for business, trade, tourism, investment and other forms of exchange. They have somehow developed some form of specialization and competitive advantage in manufacturing, cultural, transport or advanced business services, which have given them a competitive advantage in attracting visitors, business and investment, resulting in the creation of jobs and a diversified economic base. Many of these cities had the advantage of being state or provincial capital cities that were targeted for support by national governments under decentralization and regional development policies. However some developed limited resources as the result of strong local-government leadership, civic entrepreneurship, adoption of best practices and urban governance reforms to make them competitive business locations.

There are many examples of responsive secondary cities in developing regions of the world. Tourism has a major impact on secondary cities such as Denpasar (Indonesia), Stone Town (Zanzibar), Cuzco (Peru) and Hue (Vietnam). These cities have developed into global tourism destinations with an internationalized local economy. They have somehow developed a level of responsiveness and specialization in manufacturing, cultural, transport, tourism or advanced business services, which have given them a competitive advantage in attracting visitors, businesses and investment, resulting in the creation of jobs and a diversified economic base. Many of these cities had the advantage of being state or provincial capital cities that were targeted for support by national governments under decentralization and regional development policies, but some with limited resources developed as the result of strong local government leadership, civic entrepreneurship, adoption of best practices and urban governance reforms to make them competitive business locations.

Other secondary cities have begun to develop Information Technology Communication (ITC) and service industries. Bangalore and Hyderabad in India have developed into major ITC service centres, as have Casablanca and Fez in Morocco. The influence of the global economy extends well beyond the administrative boundaries of these secondary cities. Many supply chains supporting industries in these secondary cities are being forced to modernize and introduce quality controls to comply with international standards. This is particularly the case with emerging international tourism industries in secondary cities and towns in Tanzania, Nepal and Thailand.



Abdjan, Nigeria, an example of a lagging secondary city. © Dickson Ajayi (2014)

#### Lagging Cities

These are secondary cities with a well-developed industry base, some export industries, steady economic and population growth in line with, or slightly above, the national economy, average social indicators such as levels of poverty and Gini Coefficients (GC), and relatively stable employment growth in line with the national economy. Many secondary cities in countries such as Brazil, China, India, Japan, Mexico, USA and Germany fall into this category.

## Laggard Cities

Laggard cities fall into two types: those where population is declining and those with rapidly expanding populations. Both have significant socioeconomic problems. Most secondary cities in Europe and Japan fall into the former category. Secondary cities in the latter category are located in Africa, many parts of Asia, the Pacific and Latin American regions. Many are subnational government administration centres or prima-ry-industry trading cities with small, more localized economies and markets. Most have high levels of informal-sector employment and a weak local government tax base. Many are held back by high levels of urban poverty and informal settlement. Their development potential has been curtailed by weak national policies on decentralization, devolution, reform of local governments and civic entrepreneurship. Many rely entirely on central-government grant funds and have been reluctant to engage in governance reforms, build essential strategic infrastructure and competencies to support local economic development.

The export-orientated economic development model is not working for laggard cities. Therefore, a paradigm shift to a new hybrid economic development model is needed if these lagging cities are ever to have any chance of catching up and of bridging the development gap between them and national primate cities.

#### 4.3.2 Remittances Driving Development of Secondary Cities

A significant factor influencing the development of secondary cities in many developing countries, especially in Asia, is remittances. The value of international remittances to developing countries in 2011 exceeded \$400 billion. In some countries, as much as 20 per cent of Gross Domestic Product (GDP) comprises remittances. One study (Orozco, 2008) has examined the intersection between remittances and the local economies in five cities in Latin America and the Caribbean. It explored the extent to which these economies effectively absorb remittances into their productive base and the response of the local governments to these realities.

The study found the absorption of remittances into productive activities depends on the structure of the economy in question, particularly in the way the supply side responds to the demand for services, and the existence of an enabling environment by central and local governments that can stimulate economic activity associated with remittance flows. The effect of remittance flows on the local economy of the cities studied was strongest in five key areas: finance, education, health, housing and insurance. The study revealed where migration is either new or long-standing, local economies are relatively fragile, with high costs of living making it difficult for remittance recipients to save and mobilize those savings. Importantly the research found that the entrepreneurial class caters little to the demands of remittance recipients. It also identified the importance of remittances in the formation of social capital and technology development and absorption.

An observation from the study of Latin America was that in four countries the majority of remittances go to secondary towns and cities. In the San Salvador case study, the differences in remittances sent to the capital (US\$255) and the smaller cities and towns (US\$252) were minimal. The spread and concentration of transfers of remittances to different cities provided important clues about the extent and the benefits of social capital formation in secondary cities. The study found the differences in the level of engagement in trade and development between main cities and smaller cities are not significantly large. This highlights the need for governments to implement policies to try to add value to remittances, to leverage funds, social capital and entrepreneurship to stimulate investment in local enterprises, which creates jobs and generates exports tapping into expatriate and family relationships to help local economies grow.

# 4.3.3 The Global Financial Crisis (GFC) and Failure of the Export Growth-Development Model to Benefit Secondary Cities

For more than half a century, the prevailing paradigm of economic development has been based on the export-orientated economic growth model. It is generally the capital and largest metropolitan cities in the developing countries of Asia, North Africa and some Latin American countries that have benefited greatly from this model. By and large, secondary cities have not benefited as well. Brazil, China and India are exceptions. Few inland secondary cities have not benefited from the exogenous exportgrowth model, with economic enterprise zones and industrial estates attracting very little investment. Inland secondary cities tend to have high transaction costs because of the poor arterial road and rail network systems servicing them; they generally have poorer infrastructure, a lower-skilled and less-diversified workforce and skills base, and weaker urban-governance systems.

The export-orientated economic growth model of development is not sustainable. The Global Financial Crisis (GFC) resulted in the massive contraction in the North American and European economies, which led to the subsequent slowdown and worker layoffs in many firms in developing countries. The crisis has forced many developing countries to re-examine the model and explore ways to boost wealth through national economic consumption-driven growth and development. China, in particular, has introduced many measures to boost its domestic economy through more endogenous approaches to national and regional economic development, and the growth of green economies. For larger-population countries the consumption-driven growth and development model being followed by China could be replicated, but for small and very poor countries the challenge is much greater because levels of domestic saving and personal debt is high.

The failure of the export-orientated economic model to benefit the development of secondary cities in many countries does not imply that governments should not pursue industrialization policies. Few countries progressed to an advanced development level without industrializing. Most countries set a pathway to industrialization based on a self-sufficiency economic model that sought to develop domestic markets and mobilize local resources to expand industry-supply chains with the aim of generating jobs. Socialist-based countries did the same, but used public capital, while other countries sought to attract foreign investment.

Both models created a sound foundation for the growth and transformation of economics; however, neither model has proved sustainable. Fresh approaches are needed to stimulate industrialization and re-industrialization in poor regions, such as sub-Saharan Africa, if secondary-city economies are to grow and be developed. At present, most secondary cities in many parts of Africa and Asia are marginalized and excluded from participating in an economic development model that largely benefits a small number of large cities. Support is required from governments and international development banks and agencies to help secondary cities to become more effectively engaged in supply chains. Several studies have shown how supply chains supporting local economies can be made more efficient and effective, bringing about an increase in the value-added output of secondary-city economies (Berenbeim and Shakya, 2011; WTO, 2012). This may involve measures as simple as making small improvements to the quality and quantity of food-supply chains and production systems, the creation of local credit facilities and the establishment of one-stop-shop business centres.

# 4.4 Global Transformations that will Impact on Secondary Cities Development

Globalization, the internet and the growing international flow of labour and capital are changing the economic geography of secondary cities. Megacities are transforming rapidly to maintain their competitiveness and trade-advantage position. It is likely that megacities will expand their domination in global-traded services, centres of innovation, learning and logistics; however, congestion and labour costs, supply-chain inefficiencies are already resulting in the de-industrialization of the inner core of large megacities, and the progressive relocation of manufacturing to the clustered cities and regional secondary cities. It is in these secondary cities that the new transformation of artisan industries are most likely to develop rapidly. This transformation is already occurring rapidly in the cities of Brazil, China and India, and the trend will continue in other countries in the future. However, not all secondary cities that will benefit from this. It is mostly the coastal region and economic-trade-corridor cities that will benefit most, as these generally have the better infrastructure and services.

A future transformation that will occur in secondary cities is the development of manu-services industries. The development of three-dimensional printing has been described as the "third industrial revolution" (Markillie, 2012). The effect of technology-based manufacturing will greatly reduce economies of scale in many manufacturing industries, especially in pharmaceutical, construction and machinery, and electrical fittings. The growth of manu-services is anticipated to bring about the re-emergence of technology-based artisan enterprises with a huge demand for local high-technology skilled labour. This poses a challenge to secondary cities in the lesser-developed economies that barely have enough capital to build and maintain basic infrastructure. Manu-servicing will create shocks to countries that have relied on export-orientated industries in primary and selected secondary cities to underpin the nation's development. Competing on low wages and technology, operational costs will no longer be an advantage. Many industrializing cities will see multinational firms relocate production closer to markets, where transaction costs will be lower.

Climate change will substantially reshape the economies of all systems cities, regardless of geography, and force the adoption of greener technologies and building design. It will also make increasing demands on public budgets to fund measures to adapt to climate change. Given the scale of development of megacities and their many challenges, secondary cities may have better prospects and flexibility in addressing climate-change issues, especially in the management and development of cities, and in the efficiency of resource usage. Large cities, especially coastal cities, will find it increasingly difficult to balance the demands made upon them to fund climate-change adaption measures and investment in infrastructure and cities to remain competitive and develop.

The final global transformation that will impact on the development of secondary cities will be advanced information and telecommunications and knowledge systems. The internet has transformed the way governments and people conduct business and personal communications. The next generation of information and communication technology will add a new virtual dimension to the development of secondary cities. The development of e-services, e-government, e-business, e-knowledge and e-learning will require fundamental



shifts in governance systems in the development of new forms of soft infrastructure in order for secondary cities to participate in regional global business development and applications of new technologies, which will be used to run local economies. This will be a formidable challenge for many secondary cities in the developing countries of Africa and Asia; in some cases they will need to skip a generation of infrastructure from copper wire to fibre. This is occurring in Rwanda, where the nation is rolling out broadband internet. Part of the reason for this is the recognition that the country must compete within the sub-Saharan region in services rather than manufacturing (UNESCO, 2012). The country has too small a population and is too distant from ports and markets to compete in manufacturing.

# 4.5 New Economic Development Model Needed for Secondary Cities Development

The challenges of NEG raise many questions about how secondary cities should approach their planning and development in the future. For many countries, the growing interconnection of cities along corridors, as is occurring along the south-western African coastline, China and Latin America, offers new opportunities for secondary cities to capitalize on trade-corridor development (Bender, 2001). The emergence of city clusters comprising a spatially dispersed pattern of secondary cities making up large metropolitan economies, and the revolution in telecommunications and production systems will create new opportunities for secondary cities to grow and develop. To create and capture these opportunities calls for new approaches to the planning of national systems of cities. It will be difficult to plan future cities based on the traditional hierarchical order of cities model. What is emerging in NEG is a system of interconnected cities, where economies of scale, time and space are diminishing. As a result, cities can no longer rely on size to remain dominant or competitive.

There are three key policy challenges related to NEG that governments will need to address for secondary cities in developing countries to grow and develop.

Curitiba green city transport system. © Lloyd Wright (from CAF) (2013)



# 4.5.1 Bolstering Endogenous Development in Secondary Cities

Much can be done to boost economic development and add value to business in secondary cities through endogenous growth models – provided some fundamental issues related to market failure and economic governance systems are addressed. Many governments and international finance and development banks and agencies have yet to be convinced of the need to shift national economic policy from an export-orientated model to a more balanced endogenous and exogenous local economic development growth model for secondary cities. The evidence is very clear, however, that the export-driven economic development model does not benefit secondary cities as much as primary cities. Some developing regions and countries have benefited from the exogenous model far more than others. The model is leading to widening subnational, regional and city-level disparities, and in some cases compounding the problems of



Smart City Malaysia. @ Cyberview Sdn Bhd (2014)

metro-region cities. It creates imbalance in social and environmental systems within countries, which can have a profound impact on national development.

Unless secondary cities can expand and diversify their industrial and economic base internally, the prospects of wealth and sustainable job creation occurring in them will remain limited. Secondary cities must learn how to wean themselves and become more self-reliant, reducing their dependence on grants and soft-loan capital from national governments. The focus of local economic and social development must be on identifying ways to encourage more endogenous economic growth and development through the building of local creative entrepreneurial and social capital. With this capacity, it should be possible to mobilize local capital, resources and expertise to develop domestic export jobs and investment opportunities. Without focusing on the development of endogenous growth, most secondary cities will struggle to compete for trade, investment and jobs with larger metropolitan regions. Getting secondary-city governments to understand this is a major challenge as it requires a major paradigm shift in considering how to go about supporting local economic development.

#### 4.5.2 Fostering Dispersal and Agglomeration Economies

Cities comprise a complex network of interconnecting systems of functions and activities that mutually support one another. The same can be said of the systems of cities that are emerging, where factors such as new technologies of production will see economies of scale fast disappear, enabling many secondary cities to compete with larger cities in trade, exchange and investment independent of scale and political borders. The arrival of the "third industrial revolution" (Markillie, 2012) will fundamentally change the economies of scale of cities, so that secondary and no-order systems of cities will have less dependence on primary cities to secure essential goods and services for them to function and develop.

A major question facing urbanization policy and development in light of new technologies is whether countries should continue to support high levels of concentration of economic activities in major cities, or whether to foster decentralization and spread the benefits of development within countries and regions. There are benefits to both sides of the argument, from an economic, environmental and social perspective. Abdel-Rahman et al. (2004) argue that many economic theories of systems of cities have attempted 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. These theories are shaped by four paradigms:

- (a) Conventional urban economics, emphasizing the tension between economies due to the spatial concentration of activity and diseconomies arising from that concentration.
- (b) The theory of industrial organization as it relates to inter-industry linkages and to product differentiation.
- (c) The NEG, which ignores land markets but emphasizes trade among cities, fixed agricultural hinterlands and the endogenous emergence of geography.
- (d) The theory of endogenous economic growth.

Among the many issues Abdel-Rahman raises is the question of "specialization versus diversification of cities in systems of cities. How do city systems contribute to increasing returns in national and the global economies; the factors that determine skill distribution and income disparity between cities; the impacts of income disparity on welfare; whether population growth should cause economic activity to become more or less concentrated in urban areas, and how resources should be allocated efficiently in a system of cities?" Related to this is the question of whether new ways can be found to introduce more sustainable models of secondary city development, whereby they could

become more self-organized and self-reliant in raising capital and resources that would leave them less dependent on importing and national governments. This will require new tools and models to analyze the efficiency of functionalities of secondary cities and the reasons for market failures, and a framework for strategic interventions by government and international development agencies to provide support to address these.

#### 4.5.3 Fostering Collaborative Competition Between Cities

The new order of competiveness in cities is dependent on both functional efficiencies and achieving collaborative advantage (Kanter, 1995; Huxham, 1996; Yves and Hamel, 1998; Considine, 2005). Secondary cities that collaborate, reciprocate in trade, investment and development, and leverage their resources make it possible to overcome the economies of scale possessed by larger cities and out-compete them. Mass collaboration is the new competition and many US and European cities are already doing this to gain competitive advantage (Feiock, 2012). For governments to support the development of secondary cities there is a need for new thinking and approaches to the NEG of cities. This will likely occur through collaborative competition, otherwise poorer cities in developing countries will struggle to compete against the growing dominance of primate or large metropolitan cities.

The challenges for secondary cities in developing countries to engage in inter-city collaboration are enormous. Rivalry and competition for any form of development or investment between secondary cities is high, with few cities able to recognize that collaboration may provide a basis for expanding inter-regional trade and investment. One of the best examples of inter-regional collaboration has been in the Australian and New Zealand wine industries, where wineries in regions forming part of the immediate hinterland of smaller secondary cities actively collaborate in blending wines to produce new products, which have become international market leaders.

Cities in developing regions must learn the art of mass collaboration as a way of carving out some form of competitive advantage. New technologies offer many ways for secondary cities to do this, but first they need to identify areas where they can collaborate in marketing and infrastructure-sharing, resource-leveraging and knowledge development, to reduce transaction costs to both business and government. Secondary cities that follow a pathway of identifying opportunities to collaborate to reduce externality costs will likely be much more successful than those that choose not to.

# Overcoming the Challenges of Secondary Cities Development

Meeting the challenges of secondary city development is a daunting task for governments in all developing countries and regions. Urban systems in secondary cities are failing to provide capacity for them to grow and develop and this calls for new strategies and approaches to be taken by governments and international development agencies and banks to support their development. The following discussion addresses the more significant challenges facing the development of secondary cities and outlines some approaches to overcoming these from global and regional perspectives. The discussion addresses these challenges from a governance, economic, development, social and environmental systems perspective. Examples of best-practice approaches illustrating how some countries and cities have addressed specific challenges of secondary-city development are included in the discussion.

# 5.1 Conceptualizing the Problems and Challenges of Secondary Cities Development

The issues of economic, environmental and social sustainability in secondary cities need to be addressed aggressively if the challenges facing their development are to be overcome. The challenges of secondary cities development occur at very different scales, scope and levels of impact in countries across the world. The biggest challenge, as illustrated in Figure 5.1, is that its causes and effects are multi-dimensional, suggesting that more systems and integrated, rather than traditional, sector approaches to addressing these matters are required.

Figure 5.1 shows a problem-tree analysis, which attempts to depict the challenges of secondary cities development. The analysis also applies to small and large cities, although the National Development Plan for South Africa noted secondary cities because pressures of managing urbanization rarely outperform the national economy and generally perform worse than metropolitan economies (NPA, 2011). The core problem is that the management of secondary cities is failing to deliver sustainable development outcomes for them. There are many reasons for this, but the primary causes are linked to the failure of urban governance, economic and finance, development, social and environmental systems.

The consequences of these failures manifest themselves in many ways in the failure



Source: Land Equity International/Brian Roberts (2014)

and inefficiency of urban systems. The analysis in the Figure (which could be expanded greatly) is indicative of some of the primary causes and effects of the failure in managing urbanization within the five principal urban systems that operate in cities and towns.

# 5.2 Overcoming the Challenges of Secondary Cities Development

There are no simple means of overcoming the challenges facing the development and management of secondary cities in the developing regions. However, the analysis of trends and issues facing secondary cities development in developing-region countries suggests that there are some commonalities between countries. The magnitude and variation of the challenges is significant and each country will need to address these in their own way. The following discusses some of the common challenges of secondary cities development to be overcome under five broad urban-system headings.

#### 5.2.1 Challenges of Urban Governance

Urban governance is defined as "the sum of the many ways individuals and institutions, public and private, plan and manage the common affairs of cities. It is a continuing process through which conflicting or diverse interests may be accommodated and cooperative actions can be taken. It includes formal institutions as well as informal arrangements and the social capital of citizens" (UN-Habitat, 2007). Many of the ideas and approaches to urban governance are shaped by beliefs, paradigms and practices, much of which is enshrined in public-policy documents. These ideologies have a key role in shaping the physical form, management and development of cities. Priority challenges of urban governance that need addressing across the region include:

#### Policy Reforms

There are several important policy-reform agendas that require change if the challenges of secondary cities' development are to be addressed more effectively.

Many national governments, particularly in sub-Saharan Africa and South Asia, have strong anti-urban biases and policies. Urbanization is often viewed by politicians and policy-makers as the cause of the problem that is holding back the development of a nation rather than being the solution. This perspective has been reinforced by the anti-urban rhetoric of many international development agencies. Winning recognition of urbanization as a positive force in development is still a significant policy challenge. However, it requires better information and knowledge to inform politicians, policy-makers and urban managers of the benefits of urbanization in supporting the development of countries, national subregions and cities. Several countries, such as China (China Development Research Foundation, 2013), Vietnam (Coulthart et al., 2006) and Indonesia (AusAID et al., 2011) have adopted urbanization strategies that are having an impact on shaping spatial, financial and economic policies for the development of the country.

In addition, decentralization and devolution are important to the development of strong local government. Many countries have policies to encourage decentralization;

however, a major failure of these is that administrative decentralization has not been followed by financial decentralization and devolution. An important lesson in clarifying arrangements between governments is to ensure that administrative powers are commensurate with levels of responsibility. This was the cause of the initial failure of decentralization in Indonesia. The initial laws in 1999 granted equal powers between the provincial and local governments, which led to significant confusion. The laws were subsequently changed in 2004 to clarify the power-sharing arrangements. In most developed countries, for example Europe and North America, these powers are more clearly defined in constitutions and other policy documents, resulting in far more efficient urban-governance systems operating in secondary towns and cities. Unfortunately there are few good examples of good practice of devolution of government in developing countries – particularly devolution of powers to lower levels of government, for example cities and municipalities.

#### **Corporate Governance Reforms**

Many local governments in developing regions are struggling to carry out their formal responsibilities. Many are dysfunctional and spend most of their budget on administration. Corruption is endemic and the principles of corporate governance are seldom adhered to. In Africa and the Pacific, local-government administration and planning laws have not been amended for more than half a century. Most local-government laws need to be reformed to address the challenges of modern local government. Many local governments are struggling to deal with democratic processes of government and participatory urban governance. At least four key areas where urban governance reforms are needed for secondary cities can be identified:

Firstly, with few exceptions, local-government administrative systems across the region are weak, inefficient and generally inflexible. Many administrative systems are still entrenched in colonial or outdated "central planning" administrative and labour practices. Few secondary city governments know about, or engage in, corporate planning, which clearly defines a vision, public policies and programmes for urban development, organizational and operational arrangements. Even fewer cities engage in participatory budgeting, permitting local communities to have a greater say in how local-government public funds are spent on infrastructure and essential urban services. Reform of corporate governance practice is critical in cities in developing countries and regions to create the enabling environments necessary to make cities competitive and more attractive places for investment and doing business. Ahmadabad, in India, is a good example of one city that has led urban-governance reform practice in south Asia (Mathur, 2006). Naga, in the Philippines, is another where significant corporate governance reforms have greatly improved the ability of this secondary city to deliver more efficiency and higher-quality urban services (Robredo, 2003).

Secondly, few urban-governance processes are transparent and accountable.

Rent-seeking and corruption are significant problems, undermining business and investor confidence, certainty and competitiveness, and the stability of urban finance, land and property markets. These challenges can be overcome by adopting more open and transparent governance and decision-making processes. Essential measures that can be introduced to improve participatory governance include: participatory planning and budgeting; annual publication of city accounts and the introduction of ethical standards and practices of public-sector accounting. Participatory governance fits comfortably with Cities Alliance's country programme activities, supporting national policies on urban development and local government.

Thirdly, transparency and accountability are essential requirements of good practices of urban governance, but they continue to be an impediment to good governance. Nepotism, collusion and corruption are endemic in many national and local governments and are anathema to the practices of transparency and accountability. Changing the institutional culture to make governance systems more open is difficult. It requires a process of truth and trust-building, which can take many years to achieve. Andhra Pradesh Reform of Property Taxation programme, India (NIUA, 2010), and the Sleman (part of Yogyakarta, Indonesia) Performance-Based Budgeting and Urban Management system are two good examples of good urban governance practices that have built trust and transparency. The latter has set a precedent for Indonesia in performance-based budgeting, which has since been adopted elsewhere in the country.

Finally, structural reforms to government processes and practices are met with strong institutional resistance by public officials as they are perceived to be threatening job security, power and exposing unethical work practices. The failure to change the institutional governance systems leaves weaker local governments lagging far behind in competing for trade and investment, resulting in a decline in the quality of urban services and a further loss of confidence and trust in government. New systems, workplace practices and technologies in local governments can help improve their efficiency. However care must be taken in introducing these. Interventions to improve urban governance in secondary cities are best preceded by change-management programmes to build trust, confidence and the willingness by management and employees of institutions: it is an integral part of good governance. Better urban governance necessitating change-management is needed in businesses, public utilities and professional and community-based organizations at a city level.

#### Reforms Planning and Management of Urban Development

Unfortunately, there are few good examples of the effective planning and management of urbanization found in developing countries, especially at the secondary cities level. As an urban-governance management tool, planning has failed to deliver sustainable development outcomes for cities in most developing countries. Many planning laws, especially in Africa and the Pacific, are still based on the 1947 UK Planning Act. A much stronger commitment is necessary by governments to reforming planning systems and introducing more relevant plans to manage urbanization and development, fund the implementation of plans and enforce development-control provisions. Key changes and reforms to planning laws and systems needed include:

Integrated development planning: Much of the urban planning done in secondary cities is still orientated towards the production of master plans. Many secondary cities, especially in Latin America and in some Asian countries, have adopted structure planning. Very few secondary cities in developing countries have advanced towards strategic planning, which is much more responsive to demand-side responses to development and markets. Only in a few countries has integrated development planning been adopted, linking spatial plans to the development of infrastructure, land development and public finance, and long-term financial plans. Cities in New Zealand have been some of the first to do this.

The introduction of integrated spatial development planning and budgeting is an important challenge for urban-governance management in the region if precious resources are not to be wasted and urban systems to become much more efficient. The importance of integrated planning for urban development is good practice and a vital element of managing the development of cities. There are several excellent toolkits produced by the Asian Development Bank (ADB), UN-Habitat and the Cities Alliance (CA) (Cities Alliance, 2005; Cities Alliance, 2006; CDIA, 2009; UN-Habitat, 2010), which provide best-practice guides for conducting integrated strategic and development planning for cities. The UN-Habitat publication *Planning Sustainable Cities: Practices and Perspectives* (2010a) sets out 10 important best-practice planning principles for managing the development of cities.

**Development control and regulation enforcement:** Most large cities in developing regions have local-area development control plans. Many secondary cities lack detailed development plans and even where they have these they have no capacity or willingness to enforce them. The failure to enforce the development-control provisions has led to significant illegal developments occurring on public and vulnerable lands. Public officials are unwilling to act, remove illegal structures and there is fear of public unrest. This leads to undermining confidence in planning processes, which leads to significant inefficiencies in urban property and land markets, and high compensation costs for the acquisition of utility corridors when land is illegally settled. Getting local governments to commit to enforcing the provisions of development-control plans is a major challenge to urban-governance reform.

**Management of peri-urban land:** Urban densities across the region are falling because of the poor management of land in the peri-urban zone. Peri-urban areas include expanded villages and towns that constitute parts of cities and urban metropolises. The



management of the peri-urban planning and growth is critical to reducing the costs of running cities in the future. Failure to manage peri-urban areas in the past has led to a loss of strategic urban utility corridors, high compensation costs associated with land acquisition and resettlement, lack of space for public facilities such as schools and hospitals and high levels of land disputes, which create uncertainty in land markets.

Best practices call for local governments to be engaged in the preparation of interim land

management plans in peri-urban areas to protect utility corridors and community facility sites is a high priority of urban governance in all city regions. A practical approach to making room for future growth of secondary cities in large metropolitan regions is put forward by Shlomo Angel's book *The Planet of Cities* (2012).

Land management and administration. Land disputes, lack of security and poor records management have an impact on land-management systems, land markets, personal well-being and the development of cities. The failure to maintain local land registries in secondary cities is one of the reasons why land markets perform so poorly. **The Land Governance Assessment Framework:** Identifying and monitoring good practice in the land sector (Deininger et al., 2011) provides many good examples of best-practice land management and administration in the context of developing countries. There are other publications that provide good examples of best-practice land-administration management in cities, which emphasize the importance of well-maintained registries of land for the orderly operation of urban land markets (AusAID, 2000; ISS, 2004).

#### Leveraging Official Development Assistance (ODA)

ODA, involving bilateral and multilateral development agencies and the international development banks, plays an important role in supporting the development of developing cities. Non-governmental organizations (NGO) also play an important role in supporting many projects. Without ODA assistance, many cities would be lagging even further behind in their development than they are at present. Most local governments, especially in secondary cities, have limited knowledge and experience of working with international development agencies, particularly in knowing how to leverage public resources with ODA assistance.

The success of ODA leveraging of development assistance is dependent on several factors: continuation of strong local leadership, a commitment to planning and planning implementation, creation of an enabling environment that provides investor confidence, an engaged community and good governance. A common good-practice

Peri-urban development in the periphery of Nouakchott, Mauritania. © Chantal Hovens (2002) factor in ODA-assisted projects is project designs that are flexible and have frameworks for integrating a range of multi-sector activities related to urban development. Agencies tend to steer away from integrated urban projects (Roberts and Cohen, 2000) in favour of sector projects, for example water supply, roads and institution capacity-building, because these are more difficult to manage and have higher risk/returns associated with them. Ironically, such projects, although riskier, tend to generate better outcomes than those that are confined to a narrow range of activities associated with a sector project.

#### 5.2.2 Challenges of Urban Economics and Finance

The capacity to provide urban services and manage the development of secondary cities is dependent on good urban economics, financial planning and management. Most local governments in developing regions rely heavily on grants and subsidies from central government. Many have restrictions imposed on borrowing by central government and/or are prevented from using other initiates to raise revenue or capitalize on underutilized assets. For secondary cities to successfully develop their economies, national governments need to make changes to urban economics and financial planning and management arrangements to strengthen the capacity of cities to finance and provide essential infrastructure and services. The following initiatives are important priorities for strengthening urban economics and finance-planning systems.

#### Mixed Local Economic Development Models

As discussed in Chapter 4, the export-orientated economic-development model benefits only a small number of secondary cities, which are fortunate to have endowed resources and/or have been able to engage successfully in the global economy. Most secondary cities in sub-Saharan Africa, Latin America and the Caribbean (LAC) and most Asian countries lag behind the development of large metro-region cities, with a growing gap emerging in the socioeconomic disparities between them. New local-economic development models are required that focus on developing the potential for exogenous and endogenous growth to boost the expansion of domestic consumer markets. The model of the industrial city driving an export-driven economy, anchoring a modernizing national economy will become a thing of the past, "as a new global circuit of ideas and symbolic capital emerges in which all cities strive toward a single ideal: the city of consumption and spectacular urbanscapes" (Chen and Kanna, 2012:49).

The global financial crisis has forced China and India to begin a transit towards a new, more balanced, economic development growth model, giving greater emphasis to endogenous growth. However, for many developing countries, for example Bangladesh, Vietnam, Pakistan and Egypt this transformation process has not yet begun. With a third revolution in manufacturing already well under way (Markillie, 2012) many developing countries will begin to see traditional labour-based jobs in some

manufacturing industries being lost. This will occur especially in pharmaceuticals, textiles, electronics and machinery, as foreign firms move production back onshore, closer to markets. The use of technology-based manufacturing will change substantially the economies-of-scale advantages enjoyed by many firms engaged in offshore manufacturing. In so doing, it will challenge the growth model that has underpinned the successful development of many countries over more than half a century.

The third industrial revolution, with its focus on manu-services and three-dimensional printing (Economist, 2011; Sissons, 2011), will challenge many countries and cities to develop the strategic infrastructure, technology and production systems to respond to the demands of tomorrow's industries and markets. Most developing cities are struggling with the challenges of providing basic infrastructure, technologies and services for current production systems, let alone for the systems of the future. Many poorer countries are so disadvantaged that export-orientated development is not a viable development model for secondary cities. The challenge for governments in these situations is to develop new hybrid domestic export and endogenous growth models that will create localized employment and investment. Few models of these kinds have been shown to work in cities in developed economies.

It will be particularly difficult for land-locked countries in Central Asia and Africa to develop local export manufacturing-based economies, when even the basic infrastructure linking cities to international transport hubs, logistics centres and supplychains systems is so poor. In countries such as Sudan, Ethiopia and Afghanistan, distance to major ports and access to higher-level knowledge services needed to support manufacturing precludes many secondary cities in these countries from engaging in the global economy or in cross-border trade and development. Many secondary cities in these countries, for example Kano in Nigeria, are continuing to absorb very large numbers of migrants as the result of people being forced from their land because of land shortages, violence and climate change. Skills development and infrastructure to support the endogenous economic growth in local value-adding manufacturing import substitution enterprises, construction, finance, health, education, ITC and business services in these inland cities will be necessary for them to increase their standard of living. There are currently no models to guide these cities in supporting endogenous economic growth and development.

New local economic-development endogenous growth models must be developed in sub-Saharan African, Asian and Pacific region developing countries to create jobs in developing cities. These models must unlock the latent capital tied up in property markets, public assets and other forms of tangible wealth, so that these can be collateralized to raise capital to support local investment in strategic infrastructure, small-scale industry development, localized consumption and retention of capital. Import substitution and limited protectionism are necessary to regenerate local textile, clothing, shoe and construction industries (Manu, 2009) in sub-Saharan Africa.



The development of these types of industry requires capital, which will not be supplied through Foreign Direct Investment (FDI) or international borrowing, which only adds to national debt. Capitalizing on the value of local land and property assets (de Soto, 2000) requires major reforms to national and local land administration and banking systems. This must be a priority for national and local government of secondary cities in all developing countries. Without improved access to capital, there can be no development and very few opportunities for employment creation. How to develop local capital and land markets to support endogenous growth is one of the greatest challenges facing the development of secondary cities in developing regions.

Conditions of basic trading in Addis Ababa, Ethiopia; a land-locked African country. © William Cobbett/CA Secretariat (2012)

## **City Competitiveness**

Cities are increasingly engaged in global competition for resources and investment to create jobs, to absorb the growing number of migrants and to increase trade, and improve city-friendly business status. This was a strong message in the 2009 and 2012 World Development Reports. International investors are seeking investment opportunities in cities with well-documented and enforced regulations and with investor-friendly, enabling environments. Unfortunately, secondary cities tend to lag far behind metro region cities in this area. The role of urban governance is shifting from a total focus on service delivery to strengthening location competitiveness by seeking to



build competitive advantage in strategic infrastructure, human capital, liveability, creativity and innovation.

Another important initiative in fostering the competitiveness of cities is the development of industry clusters, which seek to encourage the development of agglomeration economies, where transaction costs between firms can be reduced by having access to common services, infrastructure and logistics systems. Clusters also stimulate competition, encouraging innovation and creativity, and levels of specialization in different parts of industry supply chains. There are

Job creation in Dar es Salaam, Tanzania. © Jack Makau/Slum Dwellers International (2013) many examples of best-practice industry-cluster development to be found in the region (Choe and Roberts, 2011).

## Jobs and Local Economic Development Planning

One very difficult challenge associated with urbanization in secondary cities is how to create opportunities for investment and jobs. Facilitating local economic development activities requires cities to create enabling environments that are attractive to investment, to create development opportunities and to revitalize decaying or environmentally damaged areas of cities. This is a very difficult challenge for secondary cities in the Asia Pacific region, since they are thousands of kilometres from markets and have very poor transport and communications services.

Job creation was the focus of the World Bank's development report in 2012 (2012c). The report outlines a number of important initiatives cities can take to strengthen and develop their economies. Preparation of local economic development plans provides a framework for guiding public and private-sector investment in cities. However, an important good practice is to link city development strategies with corporate, strategic land use and investment development plans. There are examples of good-practice local-economic development to be found in all regions of the world. The Liaodong Peninsula Revitalization and Nanjing Inner-City Redevelopment projects (Choe and Laquian, 2006) provide good examples of how governments can play a strategic or catalytic role in redevelopment, leading to the revitalization of city economies.

# **Urban Finance**

Urban finance is critical to the development of secondary cities – especially in providing funds for essential strategic infrastructure and capital investment. There are

initiatives governments, business and international development agencies can take to address the challenges of urban finance that would boost the capacity of secondary cities to grow and develop. These initiatives may focus around the following themes:

**Fiscal arrangements between governments:** Many national governments are reluctant to cede taxation powers to local authorities commensurate with their service-delivery functions. Many put restrictive borrowing arrangements for local authorities, forcing them to be reliant on both general and specific-purpose fiscal transfers from the national level. National governments, particularly ministries responsible for local government, have endeavoured to, more or less, maintain overall control. Increasingly ministries of finance and planning are recognizing that there are more efficient ways to align the impacts of local-government expenditures and borrowings with national economic policy and priorities, and that there are big advantages in creating incentives for local governments to develop as more independent, financially viable, institutions. **Central controls** need to be balanced, with some local-level decision-making responsibilities and appropriate resources provided if the benefits of decentralization are to be

achieved. These have all played a role in weak, fragmented governance arrangements of most cities in Asia and the Pacific. The renegotiation of fiscal arrangements is essential as part of policies to introduce decentralization and devolution within countries. This must become a key focus of policy reform for urban governance across the region.

**Capitalizing property and land markets:** Land and property are the only tangible assets many secondary cities have as collateral that can create capital for investment and infrastructure development projects; however, the lack of inventories, registries and the condition of local land administration and financial systems prohibit this. Land and property values in many secondary cities in countries such as India and Nigeria have become comparable to some developed-country cities. Most developing cities, especially secondary cities, are asset-rich but cash-poor. These cities must unlock latent capital if they are to create more localized public and private capital to support their development. This is important for developing secondary cities, which gain little FDI compared to larger cities. In a highly competitive global capital market, greater endogenous capital formation and endogenous local economic development offers the only way forward for many secondary cities to create local enterprises and jobs. How to do this is the biggest challenge facing the development of secondary cities – especially in sub-Saharan Africa.

**Municipalities engaging in capital markets:** Robust domestic financial resource mobilization is a key for sustainable urban development. In most countries there are markets and sufficient domestic resources that local governments can tap into to meet the needs of infrastructure financing. Local governments in secondary cities must be given incentives to improve their revenue collection, capital planning and financial-management capacities. These need to be linked to policy reforms designed to

give them greater powers and responsibilities to engage in capital markets through the issuing of bonds, access to loans and other financial instruments to fund infrastructure and provide essential urban services. Development bank-lending for this purpose can, in some cases, bridge the gap for a while, but cannot substitute for well-established mechanisms to mobilize domestic capital.

Increasing property tax and revenue collection: Very few local governments make sufficient effort to collect property taxes owing to them. Most land and property in secondary cities is not valued or taxed at market value and most local governments do not have a proper record of property- or tax-collection records. The reform of local-government taxation-valuation systems is essential if cities are to become more financially self-sufficient and raise loans to fund the provision of infrastructure and other basic urban services. Several cities in developing regions, for example Ahmadabad in India and municipalities in the Philippines, have established a market-valuation system for land and property and have computerized their revenue-collection system, resulting in a more than doubling of income from local taxes over a two-year period. These cities have shown remarkable improvements in their economic- and social-development indicators.

Improved financial-management systems: Most local governments in developing regions have not adopted good public-sector financial-management practices, such as performance-based budgeting and accrual accounting methods. Consequently cash-flow and financial-mismanagement problems are a common occurrence. Many local government-funded development projects and programmes experience long delays and disjointed cash flow because of poor financial management, which increases the overall costs of government. These problems become compounded by the lack of transparency and accountability in public-sector financial-management systems, which provide opportunities for corruption and rent-seeking practices.

Micro-credit record in Toi market saving group, Nairobi. © Jack Makau/Slum Dwellers International (2008)

**Cost recovery and affordability** remain a significant problem with the provision of infrastructure in most developing cities. The major problem with the financing of



infrastructure, however, is not with costrecovery mechanisms, but with the lack of enabling mechanisms for local governments to gain access to capital to provide essential infrastructure to urban areas. The problem is not only one concerned with pricing structure, but also with the failure of systems for assessing usage, billings and collections. A poor standard of service can also reduce willingness to pay.

There is very strong reluctance on the part of many local authorities to close or

sell underperforming, loss-making public utilities for fear of creating unemployment and reducing already inadequate services. While issues of community affordability have to be addressed, loss-making public utilities erode the capital and financial base of cities, leading to the neglect or underfunding of other public services. In many cases, poor government accounting is caused by a limited understanding of the financial performance of public utilities. A case study that provides a good example of cost-recovery methods, especially in dealing with the urban poor is the Phnom Penh Community Development Project funded by the ADB, which involved a 50-50 infrastructure contribution between local government and the community, demonstrating the willingness of poor communities to invest in improved urban services (Khemero, 2006). Ensuring utility-cost recovery from user fees is a best practice advocated by the World Bank to cover a utility's costs in financing strategies for urban infrastructure projects (Saghir, 2007).

#### Improved Management and Utilization of Public Assets

Many cities have substantial land, fixed assets and infrastructure needed to provide essential urban services. However, poor planning and management of these assets has led to significant underutilization or an inefficient use of them. Most cities do maintain a register of public land and assets, however many local governments have no idea what it costs to maintain assets. There are several areas where secondary-city local governments can improve the management of urban assets.

Many valuable assets, especially publicly owned land, property, buildings and transport systems and corridors are underutilized and/or underperforming. Many assets in secondary cities are poorly maintained, resulting in inefficiencies and loss of revenue to local governments and utility agencies. A significant challenge for secondary cities is to improve the utilization of urban assets and utilities. There is also a need to introduce more market-based systems to curb excess demand and to enhance revenue to improve the performance of infrastructure. The introduction of asset-management systems, management-information systems and maintenance programming are key requirements to achieve improved utilization of urban assets and utilities (Leong, 2004).

Furthermore, efforts to increase the private-sector involvement in the provision of urban infrastructure and services is recognition, in part, of the failure of central and local governments to fund the demand for infrastructure and serviced land. Local governments will need to engage: in Public-Private Partnerships (PPP); Build, Own, Operate and Transfer (BOOT); Build, Own and Operate (BOO) and Build, Operate and Transfer (BOT) projects to be able to meet public-funding shortages for the provision of basic infrastructure and services. The challenge of secondary cities is that many have very limited experience in PPP projects and this is often limited to small projects such as bus stations and markets. PPP offer ways for secondary cities to overcome the problems of capital shortages for key infrastructure investments, together with efficient management practices in operating and maintaining facilities. The expansion of PPP into utilities, community services and asset management offers many opportunities for secondary cities to improve urban management systems and services. The lack of knowledge and weak governance systems is a significant constraint holding back secondary cities from engaging in PPPs.

The inefficient operation of urban land markets has led to a situation where profiteering on property and land has become rampant. Local governments capture little value from these gains and often have to resort to subsidizing infrastructure to new land-development projects. Land developers are reluctant to cover the cost of off-site works and provide a full range of infrastructure to service houses and other buildings constructed in new land-development areas. There is an urgent need for governments to introduce policies and regulations that enable local governments to benefit from value capture from the granting of development rights or through market-increased taxes, where land values rise substantially. Value capture is a mechanism used to recover some or all of the value that public infrastructure generates for private landowners (Levinson and Istrate, 2011). This includes betterment taxes, selling of airspace rights, infrastructure head works and development charges. Reform of property transfer and land taxes is also needed to avoid the double-payment system prevalent throughout Asia. The system involves reporting only a small proportion of the sale of property to land registry offices and private payment of the balance to substantially reduce their obligation to pay taxes. This practice needs to be addressed as part of land administration and property tax reform throughout the region.

Finally, micro finance is vital to the development of small business enterprises and home building in cities. Many small- and medium-scale enterprises have to access capital through the private money market at extortionate rates of interest. The Grameen Bank, founded in Bangladesh, is a very successful model of micro finance developed for rural communities. The bank models now operate in many countries and in urban areas. The Women's Bank in Sri Lanka and the Shakli Foundation in Pakistan also present good examples of best practices in mobilizing community savings and responding to the community members through the wide variety and levels of loans being offered (from consumption goods to housing). The Shakli Foundation is also an example of a best-practice micro-finance model that meets the needs of urban dwellers (Haider, 2006). The foundation-banking network now operates in several cities in the country. Similar micro-financing initiatives can be found in other developing countries of Asia.

#### 5.2.3 Basic Urban Services

Lack of basic urban services, such as feeder and minor access roads, water and sanitation services, electricity and telecommunications are problems common to developing cities everywhere. However, in secondary cities the level and reliability of services tend to be much poorer than large metropolitan regions. The reasons for this are explained by weaker urban-governance systems, the low property tax base and poor revenue collection, a low level of private capital investment and value-adding activities reducing the multiplier effects of employment, capital and reinvestment of profits to expand local enterprises and the absence of systematic maintenance. In areas of conflict, many secondary cities, such as Jaffna in Sri Lanka and Katanga in Zaire, have experienced very severe damage to utilities and the network of distribution services.

In some secondary cities of sub-Saharan Africa, Central Asia and Pacific island states there has been system failure of basic urban services. Systems remain broken or function intermittently for years, often reaching the point where it is cheaper to replace them than to try and keep them running. Ultimately they become dysfunctional, especially in secondary cities located in areas of conflict and severe economic decline. Poor records management, lack of systems to report failures and slow response times often result in damage to the water supply, flood and waste-water systems becoming more severe and expensive to repair. Replacement parts, lack of equipment and vehicles and expertise mean that services operate inefficiently, with high losses in transmission and distribution networks.

Central governments often do not make provision for routine operations and maintenance in block operating grants made to local governments. Many smaller secondary cities do not have a city engineer or a functioning engineering and maintenance department. In many situations maintenance is ad hoc and reliant on local government cash flow. When funds are short, local governments tend to skip maintenance in favour of paying wages and salaries, many of which tend to be much further in arrears in secondary cities.

Most basic services indicators show that secondary cities have lower levels of connections, collections and metering compared to large metropolitan cities (World Bank, 2013a). The cost of providing basic infrastructure services is also high. A World Bank study on infrastructure in Africa (Foster and Briceño-Garmendia, 2010) found that the cost of infrastructure based on persons per square kilometre in secondary cities was more than twice that of large cities (Foster and Briceño-Garmendia, 2010). Unit length and fixed capital costs of infrastructure per capita and across areas to provide and maintain services are higher than for large cities (Kessides, 2005). Small secondary cities face disadvantages of economies of scale, although localized smaller-scale systems may be cheaper than large systems that have significant underutilized capacity.

While large developing cities experience all the above problems, secondary cities are expected to stretch their resources, basic services budget, network and services more than large primate or metropolitan cities. Secondary cities located in regions of economic decline, for example Detroit, Naples, Port Elizabeth (South Africa), Khulna (Bangladesh) and Ibadan (Nigeria) all face significant problems as collapse in revenue led to a cumulative downward spiral of deteriorating conditions, loss of services and business confidence (Paulais, 2012).

#### 5.2.4 Priorities for Overcoming the Infrastructure Backlog

There are several critical areas where interventions are needed to address the infrastructure backlog and develop new infrastructure across the region. A UN-Habitat report on the management of sub-Saharan cities in Africa confirms the overlooking of financial and infrastructure support, stating:

"Secondary cities often rank low in central governments' national priorities and since their ability to compete for resources is much poorer than that of larger cities, the provision and management of urban infrastructure and services is often very poor, and sometime non-existent." (UN-Habitat, 1991)

Critical to the delivery of infrastructure in urban areas across the region is improving the level and access to infrastructure finance. Joint-venture, PPP, private-sector capital and public financial instruments need to be developed to provide funds for infrastructure. In some cases capital markets have to be developed by tapping into insurance and pension funds. Part of the success of the development of Singapore has been the ability of its government to raise capital for infrastructure and housing through contributions from pension funds.

Cost recovery must be an essential requirement in the funding of infrastructure, with provision made for subsidy only where these can be justified. Opportunities for funding infrastructure through Clean Development Mechanism (CDM) and other greenhouse-gas offset mechanisms should also be made available to local governments to ensure that externalized environmental costs are accounted for in all infrastructure projects.

The City Development Initiative for Asia (CDIA) City Infrastructure Investment Programming and Prioritisation Toolkit (2010) has best-practice approaches to infrastructure delivery, including finance, public-private sector partnerships and management. The UNESCAP CITYNET publication *Sustainable Urban Transportation Systems* provides a useful best-practice toolkit for planning for urban transport (2012). The ADB publication *Developing Best Practices for Promoting Private Sector Investment in Infrastructure* also cites many good examples of best-practice approaches to delivery of infrastructure services in cities (2001).

In addition, the location of many urban infrastructure services in secondary cities is unknown because of the failure of the records management system. Most illegal infrastructure is not mapped and its location is unknown. Many old plans and documents related to urban infrastructure are not kept in secure rooms so that vital plans deteriorate because of age, rodent damage and loss or theft. Hundreds of millions of dollars of damage is done to infrastructure annually, as excavators strike or sever services because the precise location of pipes and cables is unknown by contractors and residents. The development of records management systems and GIS mapping for services is a high priority for reducing potential damage to infrastructure and in maintaining these essential services. The cost of providing basic infrastructure and services in many cities across the region is greatly increased by the failure to protect utility corridors and sites from illegal development. More than 50 per cent of project budgets for inner-city roads are often spent on land acquisition, demolition and resettlement costs. Local governments, for political and other reasons, are often reluctant to take action to remove illegal constructions on utility corridors and sites, so that the clearance of these areas can take many years, causing long delays to the delivery of infrastructure. There need to be new models for community policing of illegal activities within designated infrastructure corridors and enforcement of development-control provisions of plans if issues of compensation and relocation of informal settlers are to be avoided.

Many cities have water, waste and road-maintenance authority departments run by local government. The lack of capital and entrenched organizational arrangements in these utilities make it difficult for them to recapitalize or reduce the level of labour used for construction and maintenance. Many utilities end up costing more than the revenues they collect, resulting in significant subsidies from central government to maintain basic levels of service. The need for reform of utilities is essential to improve the efficiency and effectiveness and to recapitalize public utility agencies. Local governments need to identify opportunities to change the ownership and management model of utilities as part of their urban-governance reform agenda to improve infrastructure delivery and quality.

The use of old, often labour-intensive, technologies greatly reduces the performance of urban infrastructure, undermining competitiveness and increasing the cost of services. The need for new technologies to improve the efficiency of urban infrastructure is a high priority in many countries. Electricity and telecommunication services in most cities across the region could be improved substantially by the introduction of new switching gear and replacement cabling. Broadband internet is a high priority for investment in business areas associated with information technology and financial services. Improved technologies can also greatly improve the management of water-supply and waste-treatment systems by reducing energy consumption.

Urban governments usually focus on infrastructure and other construction projects during their term of office in order to get re-elected. Many governments, instead of continuing the previous government's plans and programmes, develop another in opposition and end up cancelling previous plans and projects. This results in the disjointed, expensive and inefficient delivery of infrastructure. Political negotiations at times can also lead to redirection of planned projects towards the desire of the ruling government. There is a need to remove decisions about the provision of infrastructure outside the political cycle as much as possible, but this is easier said than done. However, there are mechanisms (independent regional utility authorities, private-sector franchise management of infrastructure and long-term loan funds agreement conditions) that can help depoliticize infrastructure-investment programmes. One successful way of depoliticizing urban infrastructure is through the introduction of community-based budgeting, where it is left to the community to provide inputs into the formulation of a capital-works programme for cities. This was a very successful innovation in the city of Naga in the Philippines, where taxes were raised on the condition that the community had input into the formulation of the city's infrastructure and capital-works programme.

Almost all developing countries and cities are failing to build sufficient road-network capacity to accommodate the expansion of private vehicle use. Even where cities are managing to keep up with the pace of development, existing networks accommodating private vehicle use are becoming overloaded. Traffic congestion is adding greatly to transaction costs in cities in all regions – especially in Asia and Africa – despite low vehicle ownerships rates. Local governments have no choice but to plan for the provision of increasing the level of patronage of public transport if traffic congestion is to be reduced. In order for them to do so, there is a need for a massive programme of investment in the management and delivery of public transportation services. There is also a need to introduce other meshes such as road-pricing, better land-use planning and penalties to persuade urban communities to use public transport. There is also a need for developing better-integrated public-transport systems between different modes of transport in cities.

Despite the problems of increased traffic congestion, there are many good examples of best-practice traffic management that has been introduced in countries in the region. The importance of integrated transportation systems servicing the local and national economies is illustrated in the approach taken in Singapore, which is a global inter-modal transportation hub. However, the approach taken to plan and develop its transportation system is an example that provides a model for other Asian, but less so Pacific island, cities. While few cities in Asia have the resources to develop a transportation system to the standards of those of Singapore and Hong Kong, the approach taken to protecting corridors and road-pricing for private use of motor vehicles are practices that will need to be introduced in larger cities across the region to reduce traffic congestion, accidents and vehicle pollution.

#### 5.2.5 Land Development Banks

More than 50 square kilometres of mostly rural land is converted to urban use globally every day, almost two thirds occurring in less-developed countries. Much of this development is poorly planned, with urban utilities and services taking many years to be provided. There is also mass speculation on land, so that land prices have become very expensive and accessible to an increasingly wealthy, smaller proportion of the urban populations. This has occurred in both larger and secondary cities. In Bangalore, industrial land prices per square metre exceed many secondary cities in developed countries. (Industrial land is around \$400 per square metre compared to \$303 in Brisbane, Australia.) Some countries have land-development agencies that are involved in land acquisition, subdivision and housing. These mostly operate in larger cities, but in India, Nigeria, Ghana and Bangladesh there are land-development corporations in secondary cities.

Land-development agencies are important for securing land for the public good and in stabilizing land markets. The reality is that many are involved in corrupt land-development practices; they lack transparency and accountability and they distort the operations of efficient land markets by selling land at well below market value, yielding little revenue to governments. Developing, streamlining and ensuring accountability of land-development agencies is essential to the development of strong and stable property markets. Land-development agencies offer opportunities for PPPs, where land and infrastructure is protected and developed for public use. Provision can be made for social housing and profits and taxes are returned to government for providing essential services. There are successful models of PPP, involving the private-sector and public-development agencies that could be established to improve land-delivery systems in secondary cities, but the legal framework for doing this in many countries is absent. As secondary cities develop, they need to consider the role land-development agencies could play in formalizing the land-development process and stabilizing the property market. Several secondary cities in Australia have land-development agencies that hold a substantial portfolio of land, which they tender to the private sector to develop a mix of public and social housing.

The need for secondary-city government to engage in land development and stabilizing land markets is important for ensuring that adequate provision can be made for housing the low-income and disadvantaged, and for the resettlement of squatters living in environmental hazard zones. The establishment of land-development authorities to be engaged in legitimate land-banking activities is an important step in rationalizing the management and use of land – especially in peri-urban areas. However, land-development agencies or authorities require significant injections of capital and a local-planning system that ensures that a fair proportion of all land approved for development is transferred to government for public use and added to the city's land reserves. Unless secondary-city governments in developing regions and countries start building up a reserve by engaging in value capture from the land-development process, there will be very limited prospects of their being able to provide future land for housing, utility and community purposes. The problems of today's metro cities will simply become the problems of tomorrow's secondary cities.

#### 5.2.6 Urban Redevelopment and Revitalization

Many larger cities and some older secondary cities are undergoing revitalization in redevelopment. Revitalization or redevelopment is particularly problematic because of the small plot size and high land values. In most cases strategic interventions and laws are

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Targeted Investments in secondary cities can trigger economic growth as well as foster social inclusion at the same time. © Rene Hohmann/CA Secretariat, Medellín, Comuna 13, LAC, Medellín, Colombia (2014)



needed by government to acquire or assemble parcels of land to enable redevelopment to take place. Urban revitalization is essential to reduce severe environmental problems, especially along waterways and drainage systems. Some of the best examples of revitalization have been undertaken by redevelopment authorities. Urban redevelopment and revitalization offers particular opportunities for value capture by local government.

## Urban Upgrading and Slum Improvement

Slum-improvement programmes are among the most challenging issues facing the management of systems of cities in all regions, including developed regions. Support for slum-upgrading programmes is one of the core business activities of the CA and the focus of such programmes has tended to focus mainly on the larger cities. By comparison, programmes for secondary cities tend to be scaled back proportionally, which is
unfortunate as these tend to be growing faster and have a greater need for investment of trunk infrastructure capacity to provide improved levels of services to these areas. At its most basic level, urban upgrading involves improving the physical environment of slums and declining inner-city areas.

Urban-upgrading programmes usually include activities involving improving and/ or installing basic infrastructure such as water, sanitation, waste collection, access roads and footpaths, storm drainage, lighting and public telephones. Upgrading also deals with regularizing the security of land tenure and housing improvements, as well as improving access to social-support programmes (for example, health and education) and municipal services (for example, water, sanitation, waste-collection, storm drainage, street lighting, paved footpaths and roads for emergency access).

There are many good studies and methodologies for upgrading urban areas and improving slum housing (Cities Alliance, 1999; Anand, 2008). Agencies and governments have tended to be nervous and steer away from projects that involve significant settlement or plot readjustment in poor communities. Where this has been done, it tends to be done poorly because of the failure to understand that these areas have their own micro economy. It is not the resettlement or relocation issue that is the problem, but the keeping together of micro economies and enterprises and transforming them from trading to production.

#### Affordable Housing

Shelter remains one of the greatest challenges to improving the well-being of people living in cities. Housing is a social good, but it should also be a universal human right. Shortages of finance, land, materials and building know-how are a problem occurring in many secondary cities. Lack of tenure security renders many people homeless at very short notice. A priority for all governments should be to improve mechanisms to support the delivery of shelter for the most vulnerable groups in society, and tenancy laws that provide some form of occupancy right and protection from unscrupulous evictions and rent racketeering.

The UN-Habitat publication *Affordable Land and Housing in Asia* (2011) provides a useful framework for best-practice approach to land and housing delivery. Best practices are those where government has a well-developed land policy for the release of land, with housing and infrastructure provided by the private, NGO and Community Based Organization (CBO) sectors (Forbes and Lindfield, 1997). Unfortunately, there are few examples of best-practice approaches to housing delivery in Asia and Africa that demonstrate sustainability and affordability. Secondary cities in Latin America have been more successful at addressing housing issues. Until there are significant improvements to land administration and management systems and the stabilization of land markets through effective planning, affordable housing will remain a very significant challenge.

## 5.2.7 Development of Social Systems

Cities are complex social systems. The level of human and social-capital development in cities has a significant effect on such things as the liveability, safety, friendliness and efficiency of cities. Cities with high levels of human-capital development tend to be the most liveable and most competitive. Cities are places where large labour markets flourish, providing a range of skills and competencies needed by businesses and governments in order to function and compete for trade and investment. With the increasing specialization of cities, they have to focus on developing and increasing the level of skills and competencies of urban workforces. There are several challenges to overcome in developing social systems for cities in the region.

#### Human Capital Development

The most important asset underpinning the development of cities in the region is a pool of well-educated, diverse and competent workforce to run a wide range of urban services and production systems, which provide essential goods and services to urban areas and the wider community. The human-capital base in most cities of the region, especially in the Pacific island nations, is weak. Migration depletes the skills base and competencies of smaller towns and secondary cities, making it increasingly difficult for them to compete for investment and development. Many of the curricula of education institutions are not aligned to the demands and practices of modern firms and institutions that are in competition with other cities for investment and employment. Building a strong, diverse and competent workforce, which is responsive to the changing demands of urban systems is a significant challenge that must be overcome if cities are to develop and grow sustainably.

There are three important areas of human-capital capability building elements for local governments:

Firstly, leadership is a significant factor in the weakness of good governance practice. It can be individual, that is led by a mayor, or it can be collective, such as a local government, or in partnership with community-based organizations. One good example of collective leadership was the issue of infrastructure bonds by the Ahmadabad Municipal Corporation in India (Mathur, 2006). Another is participatory budgeting and land-tax reform at the Naga Metropolitan Development Council in the Philippines. This is an outstanding example of political leadership by the former mayor, the late Jesse Robredo (Robredo, 2010). Without strong political and community leadership it is very difficult to develop trust and effect change, encourage innovation and introduce new ideas into urban communities.

Secondly, local government is the weakest link in the public-service delivery system. Adoption of computer-based information management systems and new technologies have been slow and are often resisted because it increases transparency, reduces opportunities for rent-seeking and often results in job losses. City governments often have weak capacity and competencies in design, finance and implementation of policies and programmes. There are also major capacity problems in special-purpose authorities, such as electricity supply and water-supply utilities. Too many capacity-building initiatives are focused upon reform of departments, rather than improving systems related to finance, delivery of public services, and provision of housing and infrastructure. Programmes to build capacity that are more integrated, holistic and action-orientated in approaches to institutional capacity-building and learning is required to improve the collection and delivery systems of local governments.

Thirdly, innovation and change are important to modernization of urban-management systems. Urban systems are dynamic and are continuously undergoing changes driven by external and internal factors. For cities to maintain their competitiveness, the enabling environment must continue to support innovation, creativity and adaptive processes to urban management, urban design and technology. Much of the contemporary thinking behind innovation comes from the ideas of Richard Florida. These ideas need to be considered carefully in the context of Asian Pacific cities, which do not have the same wealth, infrastructure and strength of governance systems present in developed countries (Florida, 2000; Florida, 2004). The need for innovation in secondary cities has been recognized in China (Biswas and Hartley, 2013), India, South Africa and Brazil, but is generally not a focus for most local governments.

Community engagement networks and partnerships are important to knowledge development, business development and good governance. There are good examples of network development and partnerships to be found in local government across the region. The Iloilo Metropolitan Development Council initiative in the Philippines uses networking and partnerships for an integrated development planning of urban infrastructure projects (Mangahas, 2006). The Jembrana Community Development Project (Sarosa, 2006), Bali, is an example of a best practice in an integrated approach to the improvement of health and education services. The network of over 150 cities in Asia-Pacific region working on citywide upgrading and supported by the Asian Coalition for Community Action Programme (ACCA) or the Asian Coalition for Houing Rights (ACHR) is another good example. Building networks takes time: it is a learning process, involving the development of trust, information-sharing and cooperation between communities, individuals, businesses and public institutions.

The advantage of local governments developing strong learning and information-sharing networks is that they can help to leverage resources, improve the sharing of knowledge, and foster opportunities for collaboration and cost-saving. The Pacific Cities Sustainability Initiative (PCSI) is a good-practice example of a collaborative forum that harnesses the expertise of Pacific Rim cities in sustainable development to facilitate collaboration and sharing of best practices among businesses, governments, academia and the public (Asia Society, 2012). United Cities and Local Governments Asia Pacific (UCLG-ASPAC), the regional section of UCLG, is based in Jakarta, Indonesia. This organization is the key knowledge-management hub on local-government issues in the region. CITYNET is another example of a network with limited funds that has helped to improve knowledge dissemination on managing cities across the region.

Moreover, engagement in urban health and community well-being is important to making cities more liveable and productive places. Several best-practice case studies show how substantial improvements in environmental health and community well-being can be achieved by engaging communities in the design and development of projects for social and health-care services. A project undertaken in 2003 involving the delivery of a programme of health-care services in Chittagong, Bangladesh, demonstrated the importance of engaging communities to win trust in adopting a preventative and integrated approach to health-care management for the urban poor (Islam, 2006:60). The Jembrana Community Development Program, cited above, was successful in reducing the costs and the delivery effectiveness of drugs, leading to improvements in local health-care services. The engagement of communities in audits of the quality and quantity of health care, environmental conditions, infrastructure and housing enables local governments to make a better assessment of deficiencies in the provision and delivery of urban services, infrastructure and housing.

Finally, access to knowledge is essential to enhance the competitiveness of business environments, improve the performance of urban markets and the efficiencies of public-utility agencies and government. Mobile telephone networks have leapfrogged a generation of copper-wire-based technology, greatly improving people's access to information, boosting productivity and trade in cities. The development of secondary cities is impeded by lack of access to internet services and lower reading and computer-technology literacy rates than occur in larger cities. Rwanda is a country that is taking major steps to address this issue with a roll out of broadband internet to key urban centres (UNESCO, 2012). Programmes to enhance knowledge dissemination in cities, particularly through improved literacy and community-education programmes, are important to overcome the widening knowledge gaps occurring between primary and secondary cities. Sub-Saharan Africa and Pacific island-region states will require significant hard and soft infrastructure investment to reduce Information Technology Communication (ITC) and knowledge gaps between systems of cities.

#### **Poverty Alleviation**

Urbanization has affected greatly the reduction of the percentage of people living in poverty in cities in all developing regions. However, absolute numbers of people living in poverty in the cities is continuing to rise and in addition poverty is becoming increasingly urbanized. Gini Coefficients (GC) in many countries, especially in Asia, are higher in primary and secondary cities than in rural areas when cost of living adjustments are factored in (ADB, 2012). The causes of poverty are well known and documented, and the solutions require substantial investment in job-creation activities, a better-educated workforce, a governance system that is supportive of creativity, innovation and micro-enterprise development; and education programmes focused on reducing literacy, discrimination and ignorance.

Shenzhen is one of the world's fastest-growing cities, being a very large secondary city surrounded by a metropolitan region. It is a city that has learned how to capitalize on the gains of urban growth for the benefit of all its residents. The UN-Habitat's *The State of the World's Cities Report 2012/2013: The Prosperity of Cities* (2012:46) states "During the past 30 years, Shenzhen's GDP per capita ranked first among China's major cities – averaging a phenomenal 27 per cent annual growth in urban Gross Domestic Product (GDP). Notably, the gains from Shenzhen's fast pace of industrialization, urbanization and modernization have served to enhance the quality of life of all its residents. Income and living conditions have improved steadily. A new social security and public health insurance system has been successfully implemented. The city's Gini Coefficient has remained around 0.3, far less than that of the other cities on the mainland, denoting the city's efforts to achieve an equitable growth pattern."

## 5.2.8 Challenges of Managing Environmental Systems

The propensity for governments across the region to take no action on urban and economic development that results in the destruction and pollution of the environment, believing these issues can be resolved once a nation has achieved a certain level of development, was identified by Kuznets (1955) more than 50 years ago. The environmental costs of development not only have a significant impact on loss or environmental services but also on public health and well-being, productivity and performance of the labour force and deterioration of infrastructure and buildings resulting from intensive flooding and acid rain (UN-Habitat, 2011). The most significant challenges to be addressed to improve the management of urban-environmental systems and services include:

## Adoption of Measures to Address Climate Change Mitigation and Adaptation

The increasing frequency and intensity of disasters is causing governments to adopt measures to mitigate and adapt to climate-change impacts. Cities, and especially secondary cities, will find it most difficult to address the impacts of climate change. This will require a two-pronged attack in secondary cities on its causes and impacts. Mitigation (reducing the causes) and adaptation (responding to impacts) strategies are needed to address the problem. The larger greenhouse gas (GHG)-producing nations and cities will need to give greater priority to mitigation measures – especially in reducing per capita demand for energy. The poorer, lower-emitting nations will need to concentrate on adaptation. Appropriate mechanisms for developed economies to offset the costs of mitigation and adaptation in developing countries will need to be

The Kremenchug Hydroelectric Power Plant on the Dnieper river, Ukraine. © Victor Zablotskyi/ WB (2011)



implemented urgently in the new framework negotiated to replace the Kyoto protocol on climate change. Within the framework of the CA, United Nations Environment Programme (UNEP), the World Bank and UN-Habitat have a joint working group on cities and climate change that has created a knowledge centre on cities and climate change.

## **Disaster Management**

Climate change linked to storm and inundation disasters will become an increasingly prevalent issue in the future, but other natural disasters tend to have a more devastating effect on secondary cities. Earthquakes, tsunamis, volcanic eruptions and drought associated with famine can have a devastating impact on secondary cities, especially in mountainous areas and in the arid regions of sub-Saharan Africa. Mitigation and adaptation measures are critical to disaster management and planning in these cities. Few secondary cities in these disaster-prone areas have plans in place to deal with these types of disaster, which are usually managed through central government, with poor consultation with local government. Water storage and treatment is a primary concern for secondary cities in zones of high natural disaster risk. Critical infrastructure in the form of an airport runway capable of landing military transport aircraft and sea landing facilities for emergency land craft are essential adaption infrastructure required to support the secondary cities in disaster situations where road and rail transport have been severely disrupted.

# Green-City Development

Many cities are moving towards the introduction of sustainable development policies that focus on the use of cleaner energy, cleaner production, industrial ecology, recycling, increasing the density of cities and city tree-planting schemes. This is a significant challenge for secondary cities in developing economies, which have no funds or capacity to support green-city development. If cities are to become even more sustainable then they must become greener in the way they approach the use of resources, urban design, the amount of energy, water and other non-renewable resources. Urban governments would need to commit to these policy changes and practices and provide private-sector incentives to move away from less-sustainable forms of urban development. Siemens produces a useful green cities index (EIU, 2011), which is a useful guide to green-city performance, with several good examples of best practice.

## Rehabilitation of Urban Ecosystems

Many secondary cities have come to realize the importance of cleaning up the urban ecosystems to make them more liveable places. Studies of best-practice environmental-improvement management projects, such as the Liaodong Peninsula revitalizing rustbelt industries, in north-east China and Curitiba, Brazil, demonstrate the value of environmental restoration works leading to substantial reduction in pollution and improvements to water quality and public health. Integrated decision-making, sharing information between agencies and engaging communities together with strong political commitment to environmental management were key factors in the improvements to the Pra Sae River for the secondary city of Muang Klaeng, Thailand (Chamniern, 2006).

# Provision of Basic Infrastructure and Services to Urban Poor Communities

By far the most vulnerable urban residents to negative environmental impacts, natural disasters and climate change are the urban poor who live in communities without access to clean water, basic sanitation, storm-water drainage and solid-waste management. Many of these communities are on the urban periphery and are more likely to be in areas of higher risk to flooding or landslides. Areas suffering most from negative environmental impacts should be targeted by governments as well as their donor partners for the provision of the most basic infrastructure and services, but sadly this is not the case. While cities across all developing regions are replete with multiple, mostly donor-driven, projects focused on climate change and carbon emissions – many giving lip service to the urban poor being the most vulnerable – almost none actually address the simple remedies to this vulnerability, which is to provide these communities with basic infrastructure and services. This is an opportunity for CA as a priority in its programmes to create cities without slums.

# Policy Responses to Secondary Cities Development

The previous chapters dealt with issues shaping the development of secondary cities from a global perspective. National urbanization and regional development policies, however, have a profound impact on the development of a nation's cities, so this chapter briefly examines factors shaping the development of secondary cities from the national and subnational perspectives. It includes discussion of sociodemographics, urban development, environmental and social drivers of secondary city development and policy responses to this.

There are many policies and initiatives that governments have used to support the physical, governance and fiscal development of secondary cities. Most countries are supportive of decentralization, recognizing that governing large geographic areas and cities that are often distant from each other require spatial devolution of powers and responsibilities. Examples of approaches governments have used to support the development of secondary cities are described briefly below.

# 6.1 Decentralization and Devolution Policies

The political and governance structure of countries has a significant impact on the development of secondary cities. Most countries have at least three levels of administration government, the powers or responsibilities of which are usually set out in the constitution and/or local government laws. Local government in most countries is responsible for basic urban services and utilities; however, some responsibilities of central and provincial governments are devolved to local governments, where this is expedient to do so. Other responsibilities, such as water supply and electricity, are delivered through public corporations or privately.

There are many reasons why countries choose to decentralize government and disperse urban development. Historically, large countries found it expedient to localize decisions concerning development and human settlement distanced from national government, as the ability to control and manage development is best conducted locally. Much of the pattern of urban settlement in developing-region countries is the product of colonial powers setting out to divide and rule; however, there were other factors, which emerged after World War II, that caused governments at various times to introduce policies to intervene spatially to disperse populations in overcrowded

cities and regions to secondary cities and subnational regions within countries. The most significant of these were the new-town developments after World War II and the transmigration policies in Indonesia and Brazil.

Central governments have a strong influence over decentralization policies and initiatives, particularly in the allocation of resources to economic and urban development. In some countries there has been a high level of delegation of these responsibilities to regional government; but for large infrastructure projects needed to support economic or new-towns development, the greatest proportion of funding normally comes from central government. Few state and local governments have the financial capacity to support these types of development initiatives. Some cities have local-development corporations, which play a key role in land- and building-development activities. Land Development Authorities (LDA) often have a large portfolio of properties that they use to manipulate land supply to stabilize property markets and provide land for low-income housing. LDAs exist in most national capital cities and large metropolitan regions, but they are also common in larger secondary cities, for example in Bangladesh and India.

# 6.2 Spatial Planning Policies

A wide range of spatial planning policies has been adopted to support secondary cities. These have been driven by economic, social and political agendas. The most significant physical-planning policies used to foster the development of new and expanded secondary cities include:

## 6.2.1 New Towns

The development of new towns in the early 1950s around London and Paris was part of a social policy aimed at reducing the population of large cities and to contain their physical development through the establishment of green belts. The building of new towns is not a new idea, but has been going on since Roman times – it was the scale of the new-town developments around London that took a different approach. The 1946 New Towns Act introduced a new, unprecedented dimension and scale to the development of satellite secondary city new towns around London and the model has been followed by many countries. The new-town concept leading to the development of a belt of secondary cities around it was driven initially by social, rather than economic, policy. Cities were seen to be becoming overcrowded and the development of new towns was a way of dispersing population and reducing urban density.

In the mid-1970s many countries in Asia and Africa began the development of new cities. These programmes were driven by a range of social and economic development policies. In the case of Africa, many new capital cities (Abuja, Yamoussoukro and

Yanbu al Bahr, Red Sea, Saudi Arabia. © Earth Sciences and Image Analysis, NASA-Johnson Space Center, (2007)



Dodoma) were built as symbols to a post-colonial era or to hope and political unity. Most of these cities were developed away from historic and overcrowded former colonial capitals (Gantsho, 2008). Although many of these new towns are capital cities (for example Islamabad, Lilongwe, Abuja and Brasília), all are secondary cities. Australia, UK, Canada, Brazil, China, Japan and India have all, at different times, implemented policies and programmes to support urban decongestion and decentralization programmes fostering the development of

new or expanded towns as part of national physical development plans to support secondary-city growth poles and satellite towns.

## 6.2.2 Satellite Towns

Most large metropolitan-region cities in Asia, Europe, Latin America, the Middle East and some African countries have adopted the building of new satellite towns as part of a strategy to decentralize employment and industry development. Spatial forms for these types of satellite towns were described in Chapter 4, section 4.2.2. Unlike the development of the early new towns, however, the current generation of satellite towns is more a response to economic and environmental factors than social factors - although the latter is important. The effects of congestion, rising land prices, lack of capacity to augment inner-city utility services is leading to de-industrialization – a process that is driving firms out of large cities and into industrial areas located in new satellite towns on the urban periphery. Development is also spreading along the major transport corridors connected to large regional secondary towns and cities in neighbouring provinces or states, and across international borders. The expansion of large primary cities along transport corridors often induces the development of secondary cities along the route. In some cases, local governments are capitalizing on this demand, granting development approvals for master-planned towns in return for developers constructing high-capacity roads and extending truck infrastructure services to new urban areas.

Hong Kong, China, Delhi, India and Singapore, including Johor Bahru and Batam/ Bintan, are the best examples of developing new-town city clusters in Asia, resulting in a polycentric city structure. Malaysia has developed Cyber Jaya, a new town south of Kuala Lumpur focusing on IT industries; Clark in the Philippines has become a major electronics and logistics centre for assembly manufacturing and logistics, taking advantage of high-quality air and nearby port facilities at Subic Bay; and Bekasi, south-east of Jakarta, is a new town focused on the development of heavy manufacturing industries.

In the Middle East, South America and Asia – especially in India and China – many new towns have been developed as separate entities around large industrial complexes.

A major problem with some of these is that they have been developed around a single, large, integrated industry, such as automobile- or steel-manufacturing. The economic base of such economies does not provide opportunities for creating greater diversity of employment or much in the way of value-adding opportunities along supply chains. As a result, these towns are vulnerable to economic cycles such as the 1997 Asian Financial Crisis (AFC) and the Global Financial Crisis (GFC). New towns that are engaged primarily in export-growth industries are particularly vulnerable to such cycles.



## 6.2.3 Industrial Enterprise Zones and Business Parks

The development of economic enterprise or Export Processing Zones (EPZ) and industrial estates has been a significant pull factor in attracting investors to many Asian and Latin American cities, and especially in countries such as Brazil, China, India, Mexico, Morocco, Saudi Arabia, Thailand, and more recently, Bangladesh, Indonesia, the Philippines and Vietnam. The advantage of EPZs and industrial estates is that they are usually well serviced and included a wide range of manufacturing-related enterprises that fosters industry agglomeration. The generous tax incentives associated with EPZ developments are particularly attractive to Foreign Direct Investment (FDI). EPZs have been less successful in secondary cities than in large metropolitan centres. Distance from markets, suppliers and transport hubs, failure by governments to provide adequate support services, residential accommodation and commercial facilities close to these developments can significantly affect their viability and attractiveness to investors and firms. Many EPZ and industrial estates located in secondary cities in Asia and Latin America have attracted little investment, resulting in governments and developers failing to make any return on investment outlays.

There has been criticism of EPZs, industrial estates and business parks. Many of these have not been well planned; they were built hurriedly and lack important infrastructure and business-support services. In some cases, developers have not adhered to construction standards or complied with environmental requirements or workplace health and safety standards and practices. Traffic congestion and pollution and a lack of affordable housing have added to the numerous development problems associated with industrial development. These issues have been extensively documented (Dennis, 1987; Ramos, 1993) and need to be considered carefully in the design and development of EPZs and industrial-estate developments in secondary cities. There are also significant differences in the performance of enterprise zones in socialist and more open economies (Chen, 1994). Despite these problems, Special Economic Zones (SEZ) have proved to be a successful supply-driven model for fostering economic development in many developing-country cities. Bekasi satellite new town centre, Jakarta metropolitan region. © Brian Roberts (2006)

## 6.2.4 Growth Poles

Growth poles (Perroux, 1955) form part of a range of spatial economic-development policies geared strongly towards spatially focused incentives to direct development to locations in a country where the government wants development to take place. These are favoured development-policy instruments of governments seeking to stimulate development in poorer regions. They are often motivated by politics or a desire by countries to tap into opportunities offered by flow-over benefits that result from being located adjacent to profitable regions, countries or trade routes. The development of growth poles has been used by many countries to develop their steel, chemicals, food and textiles industries (Hanson, 1996).

Common strategies used to promote regional growth poles (Flynn, 1995) include:

- · Developing industrial estates and economic enterprise zones
- Recruiting firms from other regions and countries
- · Supporting new start-up, technology-based firms
- · Revitalizing established businesses
- Supporting import substitution
- Supporting new businesses
- Developing self-reliance.

Many countries continue to use growth poles as part of an industry-attraction policy for foreign investors. Indonesia's 2005 national development policy emphasizes growth poles. Brazil has done this with resource development in Belo Horizonte and India with Information Technology Communication (ITC) in Bangalore and Hyderabad. Yanbu (Saudi Arabia), Hambantota (Sri Lanka) and Gladstone (Australia) are other examples of secondary city growth poles designed to induce population and economic development. One of the most significant growth poles is the Singapore, Johor Bahru Batam/ Bintan Growth Triangle (Heng, 2006). This is a collaboration between three countries (Indonesia, Malaysia, Singapore) to create a large economic hub of activities and trade between them. The development of most growth poles is based on a supply-side premise of building infrastructure to attract investment, followed up with a range of taxation and other incentives. This may require substantial public investment and support to hedge against the initial risks associated with the development of the growth poles.

Renewed interest has been shown in the development of growth poles in support of regional and local economic development. Brazil, China, India and Vietnam have strong growth-pole policies aimed at supporting strategic investments in regions where advantage can be taken of low labour costs and other input costs to production. In the coastal regions of these and several other middle-income developed economies wages are rising sharply, forcing firms to relocate inland to new growth-pole cities. Bach Nin Phuch Yen and Hai Duong are examples of growth poles that have been developed as satellite growth poles around the capital city of Hanoi in Vietnam.



## 6.2.5 Technopoles

The concept of "technopoles" is Japanese (Castells and Hall, 1994). They usually involve the planned concentration of high-tech business activities (usually ICT, engineering and biotechnology) in selected locations, to provide a catalyst to support the growth and development of high-tech industries and foster manufacturing-oriented research and development (R&D). Technopoles have strong associations with research institutions and universities, often spawning the development of science and technology parks and incubator systems in many Organization for Economic Cooperation and Development (OECD) countries. They have become a planning tool used to spur the development of science, technology and innovation in secondary cities. The Cambridge Science Park in the UK, the Brain Park in Rotterdam, Holland and the Research Triangle Institutes in North Carolina in the US are all examples of successful technopole developments.

Technopoles have also been created in many developing countries (often as part of a policy to develop a growth pole) such as Brazil, China, India, Korea, Mexico, Pacific Rim Countries and Taipei (Castells and Hall, 1994; Wang et al., 1998; Biswas, 2004). Malaysia has attempted to develop a multimedia super-corridor economy south of Kuala Lumpur, based on the technopole concept (Ramasamy et al., 2004). The idea is even attracting interest in Rwanda, with the roll-out of broadband infrastructure to secondary towns. The approach to technopoles is focused on developing advanced-technology manufacturing because it is known to generate higher value-added and employment multipliers. Comparatively little effort has been made to develop service-industry technopoles. These can generate high value-added and employment multipliers in local economies. Bangalore and Casablanca are leading secondary-city, advanced-technology, service-processing centres. The growth of technopoles will become important in the development of secondary cities in many Hambantota being planned and developed as a growth pole secondary city in Sri Lanka. © Hemantha Jayasundera (2014)



Urban revitalization in Stone Town, Zanzibar. © Peter Herrle (2006) developing countries as they transition from manufacturing to more advanced servicebased economies in the future.

## 6.2.6 Urban Revitalization

Urban revitalization projects have been used in many countries to rejuvenate and stimulate redevelopment and investment in infrastructure and real-estate projects in secondary cities. Jawaharlal Nehru National Urban Renewal Mission (GOI, 2006) targeted 63 cities in India to improve basic infrastructure services. Many of these were secondary cities. In China, secondary cities such as Nanjing and Shenyang have undertaken very successful inner-city revitalization projects. In South America, Africa and the Middle East governments have invested in programmes of activities to rejuvenate secondary city centres. Many of these programmes were undertaken to support the development of local and international tourism. Urban revitalization can have a significant impact on the development of secondary cities such as Luang Prabang (Mabbitt, 2006) in Lao People's Democratic Republic and Stone Town, Zanzibar, Tanzania. These are good examples of secondary city revitalization projects that have successfully stimulated the development of local economies and created new employment opportunities.

# 6.3 New Urbanism Ideas to Foster Secondary Cities Development

Many new ideas are emerging that have the potential to support the development of secondary cities by making them more attractive and liveable places for people and businesses to invest in and develop. "New urbanism" is an urban-design movement that promotes more pedestrian-orientated neighbourhoods, a mixed range of housing and local employment. It arose in the US in the early 1980s with the ideas of Richard Florida (Florida, 2000), but it has undergone a transformation using real-estate development, urban planning and municipal land-use strategies to produce a more creative class of urban settlements. New urbanism ideas are being applied in Brazil, China and India to develop creative urban centres, usually associated with secondary city satellite towns developed around large metropolitan cities. However, the idea of developing a more creative class in secondary cities in developing countries is also gaining interest in countries such as Rwanda and Egypt (Maksoud, 2003; Wu, 2007).

The concept of "networked" cities is aligned to ideas of encouraging firms, businesses and local government in two or more cities to engage with one another in trade, information and knowledge-networking to address economies-of-scale issues and to leverage resources for competitive advantage. Chinese cities, including secondary ones, have been working with Tourism Australia to develop collaborative marketing and business strategies to package multiple destinations and reduce transaction costs of marketing tourism products to international visitors (Rigg, 2012). Other initiatives are being developed with the support of regional development banks and aid agencies in Asia and Latin America. The aim is to develop urban trade corridors, with the purpose of creating spin-off opportunities for secondary and smaller towns on major transport corridors between countries. This develops value-adding industries to feed supply chains between major cities along the route (Sisovanna, 2012). These concepts to support secondary city development along trade corridors are currently being explored for Asia and Latin America by the ADB and the IADB.

Many secondary cities are recognizing the value of industry clusters as a means of increasing agglomeration and creating new economic and employment opportunities. Clusters result in businesses and cities being able to create competitive advantage through the agglomeration of skills, technology, strategic infrastructure and resources. There is a large volume of knowledge that has been developed in recent years on the competitive advantage of cities fostering industry-cluster development (Porter, 2000; Enright and Ffowcs-Williams, 2001; JICA, 2004; Choe et al., 2011), and its emerging importance to developing economies. Uganda is one country to embrace the focus on industry clusters in cities and regions (UNIDO, 2008:8). Brazil, China and India all have robust policies supporting industry clusters as a means of enhancing the competitiveness of economic development activities in cities.

# Regional Approaches to Secondary Cities Development

G aps in the levels of economic and social development between primary and secondary cities are widening, with undesirable consequences on quality of life, access to basic urban services and income disparities in many countries. Unless national governments are prepared to take action to reduce these imbalances, the prospects for secondary development in many countries does not look promising. Most governments are aware of the problems of regional imbalances in the national system of cities and try to adopted policies and interventions to address these. However, the slowness of governance reforms is hampering the prospects of many secondary cities to strengthen the capacity of enabling environments to enhance their competitiveness and to attract capital investment. Other countries are aware of regional imbalances, for example Angola, Kenya and Nigeria, but this has suited past leadership politically.

The following discussion describes the way different geographic regions and selected countries have approached the development policies and programmes related to urbanization and secondary city development. Various indicators for secondary city development for countries included in the discussion are set out in Annex 4.

# 7.1 Africa

Africa covers an area of over 30.2 million square kilometres. It comprises 60 countries, with a total population of 1.03 billion. The continent is second only to Asia in its rate of urbanization (1 per cent per annum compared to Asia's 1.4 per cent). The percentage of people living in urban areas is 39.5 per cent. Unlike other developing regions, the African urbanization rate is predicted to stay constant over the next few decades. All but two African countries were colonized by European powers, most gaining independence in the 1960s/1970s. The majority of African countries have a well-defined city hierarchy, many with a large, dominant primate/capital city. Most secondary cities in Africa have populations of less than one-fifth of the largest city. Most are poor, with income levels well below the capital city. Coastal secondary cities with a seaport tend to be more developed and prosperous than inland cities. The level of industrialization is low in all but a few countries and many are highly dependent on aid and remittances to support their economies. Many laws and policies relating to central and local governments are based on English, French or Portuguese colonial legal systems.

# 7.1.1 Angola

The Republic of Angola, located in south-western Africa, was a former Portuguese colony. The country gained independence in 1975. The current system of governance has four tiers: national, regional, municipal and commune. The population in 2010 was estimated at 19.6 million, with 59 per cent living in urban areas. There are 10 major urban centres, nine of which are secondary cities. The largest city is Luanda (the capital), with a population of 5.1 million (2011), while the other nine settlements

all have populations of fewer than 500,000 people. The Gross Domestic Product (GDP) is US\$100.9 billion and a GDP per capita of \$5,930 (2011). The economy has developed largely on oil and minerals.

Colonial rule gave prominence to a centralized governance system. The Portuguese concept of locally elected *autarquias* permitted provincial governments to establish local administrative authorities. The concept of *autarquias* was included in the national constitution at the time of independence. Nonetheless, against a background of a 27-year civil war, centralist government persisted. After the war ended in 2002, a new constitution was enacted, devolving central authority functions to the municipalities. Most development undertaken since 2002 has focused on rebuilding regional infrastructure destroyed during the years of conflict. However, there has also been a concentration of investments around Luanda, in Angola's "new towns". Secondary city reconstruction in Huambo, Angola in 2003 (below) and 2014 (bottom). © Development workshop, Angola (2014)





The civil war had a significant impact on bringing about reforms to local-government urban management in Angola. While there was a strong commitment after the civil war by the central military government to decentralization, it has taken decades to be implemented. In the aftermath of the war, reconstruction of national infrastructure took priority over the development of secondary cities. The government has recently introduced new reforms, giving a stronger focus to decentralization by empowering municipalities with local decision-making and service-delivery responsibilities. The United Nations Development Programme (UNDP) is currently helping to strengthen the capacity of the 15 largest municipal administrations, to enable them to have greater control over decision-making and the resource-allocation processes, and direct participation in public-service delivery and local development for poverty reduction. However, urban governance, finance and management capacity remains weak, especially the need for fiscal imbalance reforms between central and local governments. Greater financial autonomy must be given to secondary cities to ensure they become more financially self-reliant, accountable and competitive.

## 7.1.2 Ethiopia

The People's Democratic Republic of Ethiopia is a landlocked country in north-east Africa. It is only one of two African countries that was not colonized, although Italy occupied it from 1936 to 1940. The country is a federal republic with four levels of governance: federal, regional, *woreda* (city/municipal), *kebele* (neighbourhood). There are nine semi-autonomous administrative regions in the country that have the power to raise and spend their own revenue. The GDP is US\$31.7 billion (2011) with a GDP per capita of \$365. The total population in 2010 was 84.7 million, with 17 per cent living in urban areas. Around 30 per cent of the country's exports come from the coffee industry. There are 16 urban centres designated as cities. All except Addis Ababa have populations under 500,000; Addis Ababa has a population of 3.4 million people and is a primate city. The second-largest city is Diré Dawa, with a population of 340,000. The nine regional capitals, located on the country's primary transport routes, are the region's principal secondary cities.

Secondary city development in Ethiopia, until recently, was hindered by primacy policies. Prior to 1991 Addis Ababa developed as the dominant primate city, housing over 23 per cent of the country's urban population and producing 35 per cent of its GDP. In contrast, secondary cities grew little, with most remaining as regional transport and market centres. From 1991 onwards, the new government initiated a range of policies to encourage decentralization. This was partly aimed at taking away some of the pressures of urbanization in the capital and developing the country's regions. Each region established its own constitution and administration responsibilities were handed over to the municipalities. The central government continued to support city development by producing manuals to guide city and local planning. The most notable of these

# DIRÉ DAWA: ETHIOPIA

Diré Dawa is a land-locked city and the administrative centre of Shinile region in eastern Ethiopia. The population was estimated to be 341,834 in 2007, making it the secondmost populous city in Ethiopia. The city is home to a diverse set of ethnic groups, which gives it a cosmopolitan feel. It is a major distribution point for goods and produce being transported from the port of Djibouti – the only seaport open to Ethiopia. Private-sector investment began in Diré Dawa in 1991; however, improvement in the execution of city and municipal services is needed and expected by the Diré Dawa City Administration if investment is to continue.

The urban system in Ethiopia is beset with problems, some of which were created as a result of misguided development policies of earlier times. One that can be considered to be a serious issue of the urban system in the country is the problem of primacy. It is argued that primacy goes counter to the promotion of a balanced urban system and defused development to wider areas that would allow improvement of equity and reduce poverty. By tapping disproportionate material and enterprising human resources from many parts of the country, primacy of Addis Ababa leads to deprivation of the rest of the urban system, especially if the degree of primacy is high, as has been the case in Ethiopia. Counter to this there are also arguments in favour of concentrated pattern of urbanization, however, which best fits the Ethiopian context. This is a question that needs to be addressed via further investigation.

Diré Dawa, like most secondary cities, faces enormous development challenges, not the least of which is lack of access to ports in a land-locked country. Key issues include weak administrative government, failure of decentralization policies despite special administrative status, accessibility, poor infrastructure and communications and a growing informal problem. The challenges and constraints to attracting investments in Diré Dawa include: (i) A weak enabling environment with poor infrastructure to support industrial development. (ii) Lack of a one-stop shop to deal with business approvals. (iii) Lack of a business culture. (iv) Local government's limited capacity to support economic development initiatives. (v) Lack of skills and marketing investment opportunities.

Key strategies that need to be implemented to develop the city are: improved urban and participatory governance; focus on improved revenue enhancement and public financial management; better access to port facilities once the problems in Somalia are resolved; a focus on investment planning; and the development of critical strategic infrastructure – especially municipal services, transport services, rural supply-chain management, logistics and health and education.



A street vendor in front of new cobblestoned paved way in Hawassa, Ethiopia. © Rene Hohmann, Cities Alliance Secretariat (2014) are the Urban Development Package and the Urban Good Governance Package.

The long period of time spent promoting primate policies has created many challenges for secondary city development in Ethiopia. The primacy policy has generally only been successful where points of urban-agricultural goods exchange and transportation could be exploited. The changes brought about by decentralization in 1991 have provided more opportunity for development in areas outside Addis Ababa, however municipal funding challenges continue to slow progress in building infrastructure, institutional and human-capital development. Manufacturing and tourism have begun to develop in some secondary cities, although the development of most cities remains tied to opportunities of market and service administration. Diré Dawa, unlike the other secondary cities, has special administration status that has given it some advantage but resulted in the compounding of inequalities between administration regions.

Secondary city development in Ethiopia has been severely constrained by famine and civil unrest in surrounding countries. This has effectively meant that more than 90 per cent of trade takes place informally across borders without the collection of taxes. As a result, secondary cities in Ethiopia have not been able to benefit from secure trade along transport corridors leading to the coastal port of Djibouti on the Red Sea, connecting to the Indian Ocean. Most urbanization has taken place along trade corridors or in regions where famine has pushed people off the land into urban centres. The lack of a good transport network servicing in the country will continue to have a significant constraint upon regional and urban development. Until there is peace and stability in surrounding countries and transport systems are improved, the development of Ethiopian secondary cities will remain slow and be challenging.

#### 7.1.3 Kenya

The Republic of Kenya, located in east Africa, was a former British colony that became a republic in 1964 following independence in 1963. Under a new constitution in 2010 a two-level system of governance, the national and county (regional) levels, was established. Previously Kenya had had a four-level system of governance – national, provincial, district and local. The country's GDP in 2011 was US\$ 33.62 billion, with a GDP per capita of \$808. The total population in 2012 was 41.6 million people, of which 24 per cent live in urban areas. In total, there are seven urban areas designated as cities. The capital, Nairobi, acts as a primate city, having a population of 3.4 million people. The country's secondary cities were all provincial capitals. The provincial system ceased to be under the new 2012 constitution.

Throughout the country's history, the development of secondary cities in Kenya has always been a struggle. During colonization, urban settlement focused on Nairobi because of its favourable climate and rich agricultural hinterland. The Kenya-Uganda railway was built essentially to service two very rich agricultural regions and colonial capital cities, Nairobi and Kampala. A number of secondary towns established along

the route in agriculturally rich areas developed, but there was no attempt to expand these into industrial settlements.

In the 1970s and 1980s the central government sought to stimulate the development of cities by establishing a hierarchy of cities and policies to support growth poles. At first, top-down approaches were used. Later, under the umbrella of the District Focus for Rural Development, there was a switch to bottom-up approaches. Both approaches failed to achieve policy ambitions and the development of secondary cities continued to wilt under the primacy of Nairobi and, to a lesser extent, Mombasa. In 2010 Kenya adopted a new constitution that established 47 counties and provided municipalities with greater authority and access to development funds. Although these initiatives offered opportunities for development, the new administration system is hampered by the lack of a comprehensive urban-development policy and funds to support infrastructure development. Furthermore, the central government is obstructing meaningful decentralization by delaying payment and support to the newly established counties.

A strong responsive policy base is needed in Kenya if secondary city development is to succeed. The poorly coordinated and implemented top-down policies introduced in the 1970s tried to orchestrate an outcome rather than invest in the areas growing naturally. As such, the opportunity to develop a secondary city base was missed. The adaptation of bottom-up approaches in the 1980s, intended to balance top-down failings, further compounded existing missed opportunities as the policies stepped over secondary cities in favour of smaller villages. The newer, decentralized administration system offers greater opportunities for secondary city development but remains relatively untested, and in the case of local authority fund transfers has drawn accusations of corruption. Therefore the development of secondary cities is still hampered by policy and administration challenges.

#### 7.1.4 Nigeria

The Federal Republic of Nigeria in central west Africa was a former British colony that gained independence in 1960. The system of governance has three levels: national, state/federal capital district and local through its civilian and military governments. The country has a large oil industry and the GDP is the second highest in Africa at US\$235.5 billion (2011) and a GDP per capita of \$1,502. The total population is 162.5 million people, of which 50 per cent live in urbanized areas. In total, there are 68 settlements that can be considered cities, the majority of which contain 500,000 people or less. The former capital, Lagos, is a primate city with a population of more than 10 million people. The provincial capitals form the secondary system of networked cities.

The current spatial pattern of Nigerian cities has been influenced strongly by a long history of organic settlement determined by trade. Settlement of Nigeria dates back to the ninth century. Originally, city empires and kingdoms were organically established in the interior of the country along the trade routes of the wider sub-Saharan region. Each of these cities acted independently of each other and established an urban system of a central metropolitan area supported by smaller subsidiary settlements. During colonization the British took over government of the existing city-states, applying a policy of selective development. The cities that provided colonial government with legitimate trade opportunities prospered, while the rest fell into decline.

The coastal city of Lagos began to develop at this time as a central transport and industrial hub. Post-colonization, official states were established and a second-tier system of provincial capitals was established. Urbanization, particularly of Lagos, has been driven by the mass internal migration, which initially occurred during the 1967-1970 civil war and was followed by the oil boom of the 1980s/1990s. To ease the urbanization pressure placed on Lagos, the government in 1976 opted to move the capital city status to the purpose-built interior city of Abuja, at the geographical centre of Nigeria. The building of Abuja was a symbol of unifying a process following the disastrous civil war and to bring the centre of government closer to the predominantly Muslim-dominated north.

The sustained organic settlement of Nigeria continues to promote a decentralized city network overshadowed by the primate status of Lagos. Successive national governments from the 1980s onwards used oil money to try to stimulate the development of nationalized industries (often with direct foreign government assistance) in a selected state capital secondary city location for steel, cement and fertilizer. The policy was disastrous, deeply influenced by politics and with a very poor understanding of the need to integrate and agglomerate production systems. The continued habitation of the ancient city-kingdoms has provided a diverse settlement network of trading cities throughout Nigeria. However the promotion of certain cities over others has led to an uneven progression of development.

Removing the capital-city status from Lagos has had little impact on curbing the city's rapid urban growth. To this day, Lagos remains one of the world's largest and most rapidly growing cities. Increased demand for infrastructure since the oil boom has strained the newly established post-war governance system with supply often unable to meet demand, thus further compounding existing problems. The major challenge for the country is to develop a diversified and decentralized, more endogenous-based, economy attracting investment to secondary capital cities. This requires substantial reform to urban-governance systems and changes to address national fiscal imbalance issues, especially improving the competitiveness of cities and local-government revenue systems.

## 7.1.5 Senegal

The Republic of Senegal, located on the west coast of Africa, was a former French colony in federation with Mali. It gained independence in 1960, after which the federation collapsed. The current system of government has three tiers: national, regional and

local. The GDP is US\$14.3 billion, with a GDP per capita of \$1,981 (2011). The country has a total population of 12.8 million people, with 43 per cent living in urbanized areas. Senegal has seven urban settlements that can be considered cities, six of which have populations under 500,000. The capital city of Dakar has a population of 2.9 million people and acts as the primate city for the country. The secondary city network consists of the largest city in each regional area.

Prior to independence, the establishment of urban areas in Senegal had been strongly influenced by traditional kingdoms independent of each other and later, from the 1840s, French colonial rule. Under French governance 14 administration regions were established, each encompassing a dominant city with its own mayor. Post-colonization, the regional framework has continued, with the regional capitals exerting more influence over their hinterlands and emerging as a secondary city network. Formal development of the cities has, however, been hampered by a focus on the primate city, Dakar, and a lack of funds following the World Bank and International Monetary Fund (IMF) structural adjustment programme in the 1980s. Some of the major centres do, however, have a *chemin directeur*, or master plan, to guide urban-development projects. National urbanization programmes have focused on slum reduction and urban upgrading, albeit again focused on Dakar. In 1996 a formal decentralization policy was adopted, creating three tiers of governance, although administration continued under a five-tier system.

The structural adjustment programmes of the 1980s reduced government spending in all public-sector activities. The lack of funds acted as a major impediment to the development of secondary cities, with the central government unable to assist. Governance reforms made in the 1990s have been weak in implementation and struggled to make a significant impact. As part of the reforms land-use decisions remain the role of the central government, while municipalities are only able to make land-use decisions under legislated conditions. National urbanization policies on slum reduction and urban upgrading have, by default, focused principally on Dakar, with little impact on secondary cities.

#### 7.1.6 South Africa

The development of urban systems in the Republic of South Africa, located at the southern tip of the African continent, was largely influenced by Dutch and British colonization. In 1961 South Africa became a republic, following a whites-only referendum after over three centuries of colonial rule. In 1991, the apartheid era ended with the first multicultural democratically elected government in 1994. The country has three levels: national, provincial and municipal. The country has the largest GDP in Africa at US\$408.24 billion (2011). The total population is 50.7 million people, of which 62 per cent live in urban areas. There are 68 cities in the country, seven of which have populations of between 1 and 5 million people. At present there is no official national hierarchy of cities in South Africa, but Johannesburg is the largest and is a primate city.

There is a distinct, historically entrenched, gap in the development and prosperity of South African cities. Formal city settlement began with Dutch and British colonization in areas of trade- or resource-richness. The spatial arrangement established by the colonizers was influenced by the discovery of extensive minerals, including gold and diamonds. The policies of apartheid segregated people and governance structures that led to complicated, haphazard and localized urbanization and one of the most complex governance structures in the world. The prosperity of districts within cities diverged, depending on the community's access to power and resources. Democratization in 1994 established new administrative regions and provided a constitution, which defined the roles and responsibilities of all levels of government. This triggered a massive movement of people from rural areas to the cities. Post-apartheid policies, such as the 2006 National Spatial Development Perspective or the 2011 National Development Plan, among a host of new policy interventions, have sought to reconcile the divergent trends established during the apartheid era.

South Africa provides a unique and contrasting account of sub-Saharan urban development. Up to the apartheid era the settlement patterns and urban development of South Africa was following trends similar to other African colonies. The impact of apartheid, however, changed the development trajectory, emphasizing differences between districts of cities as opposed to those between cities themselves. There is still a very significant difference between the levels of development of the country's cities. GDP per capita for Johannesburg in 2010 was around \$30,000, which is more than double the two second-largest cities of Durban and Cape Town. Post-apartheid policies have attempted to improve previously disenfranchised districts. However, as there has been no radical restructuring of South African cities in the post-1994 period, the spatial formation established under apartheid has continued, albeit by default. There is also considerable debate as to what a secondary city in South Africa constitutes, given the lack of a clearly discernible city hierarchy or a primate settlement to guide parameters. As such, secondary city development in South Africa has been given little prominence as an issue in its own right in government-development policies until recently (John, 2012).

The challenge for secondary city development in South Africa is to manage very large numbers of people moving to cities from rural areas. Poverty, especially in secondary cities, is one of the most profound challenges facing the country. This is compounded by the many migrants pouring into cities who have a low level of education and skills and are finding employment very difficult to find. The cities, especially the secondary cities, are struggling to create jobs and to attract investment to support regional industry development. City migration and high natural population growth rates have resulted in the rapid growth of the informal-sector economies in the larger cities and under-employment, further adding to urban poverty and crime.

The South African governments, at all three levels, are struggling to restructure an economy that was once geared to serving a privileged few. It has suffered from a massive flight of fiscal and skilled human capital, which it desperately needs to retain to help develop a more endogenous and diversified industry-based economy. Secondary cities are struggling to attract domestic and foreign investment and to build the skills necessary to develop more competitive and dynamic economies. The continued problem of national fiscal imbalances, especially local revenue collection and taxation is making it difficult for local governments to generate funds to deliver essential services to address infrastructure, poverty and employment issues (Yemek, 2005). Substantial reform of local government is still needed to improve urban governance. Urban finance remains a challenge, especially in secondary cities, in the light of increasing problems of corruption and shortage of funds and resources to implement pro-poor policies. The development of more open and transparent enabling environments at the LGU level is also needed for secondary cities to become more attractive to investors and developers, without which it will become increasingly difficult to stimulate development and create jobs in the country's cities.

## 7.1.7 Key Findings of Sub-Saharan Africa

It is difficult to make comparisons between secondary cities in sub-Saharan Africa. There are significant differences in the size and structure of these cities, as well as extremes in poverty and wealth across the continent. There are, however, some observations that can be drawn from the six country case studies.

These include:

- Colonial administrations have had a significant influence on the location, economic geography and governance of secondary cities, which have changed little since countries became independent.
- Policies to encourage decentralization to support the development of secondary cities in most African states have been unsuccessful. Several African states at independence developed new national capital cities in the inland areas to foster national unity and decentralized development. Most of these have been very slow to develop and have ended up becoming relatively poor secondary cities.
- There are strong anti-urbanization political sentiments prevalent in many sub-Saharan countries, resulting in a lack of support for developing functional networks of systems of cities in countries.
- The level of primacy, that is the ratio between the size of secondary cities and the largest city in the country, is much greater in sub-Saharan Africa than in other regions of the world. Generally, secondary cities are likely to have population primacy levels of less than 30 per cent of the country's largest city.
- Poverty and human-development index indicators for secondary cities are substantially higher than in other regions of the world.

- Per capita GDP, household income and wealth are the lowest of all developing regions in the world.
- Secondary cities economies in sub-Saharan Africa tend to be more trade-based, with low levels of manufacturing and high levels of informal-sector employment.
- Housing conditions in secondary cities tend to be better than in primary cities.
- Secondary cities in inland or landlocked African countries are substantially poorer than cities located on coastlines.
- Road, rail, telecommunication and, increasingly, air links between primate and secondary cities across the continent are the poorest of all regions in the world.

## 7.2 Asian Region

Asia is the most populated and fastest-growing region of the world. With more than 60 countries, it has a diverse mix of political, cultural and governance systems. More than 45 per cent (1.9 million) of the region's 3.6 billion people live in urban areas. Over the next 40 years Asia will experience an unprecedented increase in urban population and economic development. The level of urbanization is projected to increase to 56 per cent by 2025 and to reach 64 per cent (3.2 billion) by 2050.

Despite being less than 50 per cent urbanized, cities account for more than 80 per cent of the GDP of the region. The growth of Asian cities is driven primarily by industrialization and some advanced producer services. While Asia has prospered enormously from an unprecedented period of rapid economic growth and development, lifting millions out of poverty, almost 1.5 billion people live on less than \$2 a day and the region has some of the largest slums on earth.

The region contains some of the most diverse urban systems and some of the largest cities in the world, including 15 megacities. There are 188 cities with more than 5 million population and 274 between 500,000 and 1 million. The largest metropolitan cities and megacities in Asia are expanding rapidly (over 3.5 per cent per annum), with many expanding in the form of huge clusters of interconnecting secondary cities, spreading into peri-urban areas or along major road/transport corridors along river systems, estuaries and coastlines.

It is widely recognized that the secondary cities are becoming the prime generators of employment in Asia and that their economic activities strengthen rural development and productivity. In many secondary cities, however, serious environmental, social and urban-development problems are beginning to emerge. As a result, the development gaps between primary and secondary cities are widening, especially in countries such as Indonesia, the Philippines and Bangladesh. Asia has some of the most polluted secondary cities in the world. Inequality levels and the number of people living in poverty and slum settlements are rising. The following provides a brief profile of urbanization, decentralization and secondary city development in selected Asian countries. Studies were conducted for four countries: India, Indonesia, Korea and Vietnam.

## 7.2.1 India

The Republic of India has a population of 1.22 billion people (2012 estimate), 29 per cent of whom live in urban areas. Six of the world's largest metropolitan cities are in India and one of the reasons for this is the rapidly increasing urban population. India is a country with a very diverse range of cultures, languages, cities and people, with extremes in both poverty and wealth. There are more than 350 million people living in Indian cities, with an estimated 170 million living in slums (UN-Habitat, 2006). There are more than 200 cities in India with populations of over 200,000. There are two primate cities, Mumbai and Delhi, and more than 30 cities that can be described as secondary cities, with populations of over 10 per cent of the nation's largest city. Increasing rural-urban migration is putting enormous pressure on the urban systems, causing serious problems of urban planning, management and governance in these cities.

India has had a well-established provincial government system and a vast network of secondary and lower-order cities. India's urban system dates back many centuries to the Mogul empire, when the south Asia region produced almost 25 per cent of the world's GDP (Ferguson, 2011). The British colonial systems of governments and transport systems adopted the Mogul state governance systems and reinforced much of it through the development of strong provincial and city governments, which have been engaged in inter-city trading. The state government system in India has given local governments much more power and responsibility than other Asian countries. However, at the time of independence, economic policy became highly centralized and there was a strong focus on nationalized industry development, with an emphasis on building self-sufficiency. Much of this development had to do with the philosophies of Mahatma Gandhi, who led the country to independence in 1947. India remained relatively isolated for more than four decades before the government began a series of reforms to open up the country to investment and deregulate many controls over the economy and trade.

Under Gandhi, and until recent times, India had a strong anti-urbanization policy. In the 1990s the country began a reform of opening up so that some states began to realize the benefits of urbanization and have embraced it as part of state economic development policy. The opening up of the economy has introduced an element of competition into business and government, although the latter has been much slower to reform economic governance systems to make it easier to invest. More recently, foreign investment reforms have allowed large international firms to invest in the food and commercial trade sector, which is likely to have a notable impact on improving the efficiency of local industry supply chains. Globalization has brought about significant changes to sectors of the economy in India. Agriculture is becoming less dominant in the national economy, with cities now contributing to 78 per cent of the GDP. All economic sectors in the country are becoming more specialized as a result of competition, more open trade between nations and the changes to production and distribution systems. Membership of the World Trade Organization (WTO) also requires nations to reduce tariffs and to foster greater competition (Sivaramakrishnan et al., 2005).

With the internationalization of economies in the region, greater industry agglomeration and specialization of economic development is occurring, especially in the urban economies. Places such as Hyderabad and Mumbai are becoming important Information Technology Communication (ITC), finance and multi-media centres. National and international firms and multinational corporations are seeking locations for investment and development that offer competitive advantage in access to resources, infrastructure, enabling environments and skills for the goods and services they produce. The agglomeration of businesses and firms in cities is becoming spatial, taking the form of industry clusters.

In 2005 the Indian government introduced one of the most ambitious programmes to improve the infrastructure of cities to support local economic development. The Government of India launched the Jawaharlal Nehru National Urban Renewal Mission (JNNURM) in December 2005, which provides reforms linked to financial assistance for basic infrastructural services in 65 cities of the country. It envisaged a total investment of over \$20 billion over seven years, designed to bring about a phenomenal change in the issues being faced by the urban sector. Due to insufficient basic urban services and lack of access to finance and other resources, states and some cities have taken it upon themselves to engage in public-private partnership options to address problems.

The larger cities, such as Mumbai, Delhi and Chennai, have prepared plans for the development of secondary cities on the periphery of the cities. Many of these are expanded towns. Most are developed by urban-development authorities, which also have responsibilities for the provision of infrastructure, roads, industrial estates and community facilities. There is also an increasing number of large developer projects, which buy up sizeable areas of land and develop them as a new town, according to a master plan. Gurgaon in south-east Delhi is an example. It is one of the fastest-growing and most attractive places for business investment and development in India.

In recent years, cities have started to think of innovative ways to efficiently finance municipal infrastructure and services, and a series of reform measures in different sectors of municipal financial management is now visible in the spheres of local fiscal tools, financial discipline, public-private partnerships and tax administration. One of the options is to finance urban infrastructure by accessing capital market through debt instruments such as municipal bonds. The Ahmadabad Municipal Corporation made the first public issue of municipal bonds in India to raise capital from the market to

part-finance a water-supply project. The Bangalore Municipal Corporation has used a private placement bond issue to finance construction of roads and street lighting. These securities have been raised against the good credit rating and collateral value of assets of the councils.

The lessons gained from India's urbanization policy and secondary city developments are:

- Anti-urbanization and national industry development policies in the post-Gandhi years were a major impediment to the growth of India and its secondary cities.
- Strong decentralization measures have fostered greater competition between cities, which have had a significant influence on increasing the performance and investment attractiveness for development in secondary cities.
- The National Urban Renewal Missions (NURM) has had a significant influence in bringing about reforms and change in local government, to become more efficient and effective, resulting in some secondary cities, such as Ahmadabad and Hyderabad, outperforming the primary cities in some industry sectors.
- Development authorities have had a key role in the provision of infrastructure in secondary cities, however the private sector is becoming increasingly engaged in developing modern secondary cities on the outskirts of cities such as Delhi and Mumbai.
- Some secondary cities have begun to focus on the development of advanced manufacturing and producer services to become world leaders.
- National economic reforms to industries are encouraging greater competition and foreign investment has resulted in a strong focus on the development of advanced-technology firms in secondary cities taking advantage of access to better services and human capital development.

## 7.2.2 Indonesia

The Republic of Indonesia is a country made up of a vast archipelago of almost 18,000 islands. In 2010 it had a population of 237.6 million, 58 per cent of whom live on the island of Java, the most populated island in the world. Approximately 44 per cent of the population lives in cities, a level that is relatively low by South-East Asian standards. There are over 220 cities in Indonesia, 22 of which have populations of over 500,000. Some large metropolitan centres, such as Jakarta, the capital, are made up of several cities. Urbanization rates are currently 2.45 per cent per annum, falling from a peak of 5.5 per cent in the early 1980s. In 2011, Indonesia was one of the fastest-growing economies in South-East Asia, with a GDP of US\$846.83 billion and a growth rate of 5.8 per cent. Strong economic development has continued to foster high levels of urbanization; however, not all parts of Indonesia have benefited from this, with severe disparities emerging between the poor and wealthy parts of the country.

#### 138 Managing Systems of Secondary Cities

Indonesia	
Country population (2011)	242,326
Urban population (2011)	123,586
Urban population (% of total)	51
Urban annual growth rate %	2.5
Population 10 largest cities	28,055
(2011)	
Largest city	9,751
Total number cities	208
Under 500,000	180
500,000 to 1 million	15
1-5 million	12
5-10 million	1
More than 10 million	1

Source: UN Urbanisation Prospects (2011)

Since 1990 urban populations have grown from 56 million to 120 million in 2010. Urban populations are expected to reach 176 million by 2030. Seventeen cities in Indonesia have populations of between 0.5 and 5 million; these are all secondary cities and provincial capitals. Jakarta is the largest city in the country, with a population of over 13 million. Its current growth rate, however, at 1.38 per cent, is just below the median growth rate of the largest cities in Indonesia. Several smaller secondary cities, for example the industrial growth pole of Bantam Island, adjacent to Singapore, have growth rates of over 5 per cent.

The economic geography of the secondary cities in Indonesia was strongly driven during the 1970s and 1980s by central-government intervention and control of economic-development policies and a series of national development plans. The plan is focused largely on sector-industry development to make the country more self-sufficient and stimulate regional development

activities. Industrialization is focused strongly on constructing large industrial areas for heavy industries in selected cities. The five largest cities benefit most from resources allocated to industrialization and the national development plans. The national plan policies tended to favour the development of cities in Java. As a result, during the 1990s significant disparities began to occur in the regional development patterns of the country, which led to social unrest in some poorer but mineral-rich provinces, bringing pressure for greater political autonomy and access to profits of natural-resource industries.

During the 1970s and 1980s, the central government developed a series of national development plans focused on natural-resource-driven industrial development in regional areas. Concerns were also raised about overpopulation on the island of Java and the need for resettlement to more sparsely populated parts of the country. This led to the transmigration programme, resulting in hundreds of thousands of people being trans-shipped to Kalimantan to support agriculture, forestry and mineral-resource development in this part of the country. Cities such as Banjarmasin and Balikpapan in east Kalimantan were targeted as urban-growth centres. The policy was a failure and led to civil unrest and widespread destruction of tropical rainforests plus other environmental damage.

The 1997-1998 Asian Financial Crisis triggered a period of considerable unrest and pressure for decentralization and devolution of government and increased resource-sharing. In 1999, the government introduced decentralization laws, with many central-government functions handed over to the provinces or to local governments. The decentralization programme, which began in 2000, gave greater autonomy to the 33 governments and more than 100 city governments in the country. In 2010, the central government began the preparation of an urbanization strategy, which seeks to

## YOGYAKARTA: INDONESIA

The City Yogyakarta Region in southern Java comprises an area of approximately 32.5 square kilometres, which spreads into several surrounding local governments, including Sleman and Bantul regencies (local governments) with a total metro population in 2010 of 2,389,200 people. It is an ancient city, founded in the eighth century, having a rich cultural heritage and surrounded by fertile volcanic soils and farmland. Communications are good, by road and air, with many other cities in Indonesia.

Yogyakarta is in close proximity to world heritage-listed Borobudur and Prambanan temples and is also home to the unique Javanese court *kraton* culture of Yogyakarta. It is the second-most important tourist destination in Indonesia after Bali.

Like many Indonesian secondary cities the City Yogyakarta Region has experienced many development problems, with shortages of infrastructure and housing, but through good planning and urban-development practices has become one of the best-managed and competitive secondary cities in Indonesia.

Yogyakarta, and especially Sleman, is acknowledged as one of the most progressive local governments in Indonesia.

It has achieved a number of awards and recognition of its focus on achieving excellence in good governance, economic development and financial management. The city has managed to diversify its economy and is the leading centre of education outside Jakarta, housing one of the largest and finest universities in Indonesia – Gadjah Mada University – but it is also the home of no less than 35 other universities, both large and small. It is also a major food-processing and cuisine centre for Indonesia. The city demonstrates the strategic advantage of fostering clusters as an instrument of economic development.

Perhaps one of the most important factors to have contributed to the city's development is the collaborative partnerships between the three major local governments that make up the city. Urban problems such as transportation, waste, drainage and water supply required city-region solutions with the three districts establishing a "joint secretariat". Common problems are discussed, solutions arrived at and resources shared to reduce administrative and costs associated with managing urban development in the rapidly expanding peri-urban areas.



Gajah Mada University in Yogyakarta; one of Indonesia's leading universities. © Gajah Mada University (2014) further support devolution and the development of secondary cities in the country. As a result, municipalities now handle most local-governance issues with their own budget and additional funds from central government. The results of decentralization have fostered limited competition among Indonesian cities, which was a factor influencing the recent economic performance of the country during the Global Financial Crisis. A recent World Bank report noted (2013:102):

"...the lack of coordination greatly affects metropolitan regions that need coordinated land use and spatial planning to foster economic efficiency. With most new urbanization taking place outside central cities – DKI Jakarta, Surabaya, Makassar, Bandung, and others – metropolitan areas cannot effectively plan for future growth or develop budgeting mechanisms to finance needed infrastructure. In some cases, infrastructure investments are not coordinated and road projects stop at district or provincial boundaries. In others, independently developed urban land use plans do not consider the economic transformations in a region, and land use is not structure to foster economic development and boost economic development."

These significant factors are holding back the development of some of the largest secondary cities in the country.

There are still many reforms necessary to the planning of urban and regional economic development systems in Indonesia to address the needs of secondary cities. Indonesia has advanced more than most other Asian countries in implementing decentralization reforms that have benefited the development of secondary cities and there are good examples of best practices that demonstrate how these have contributed to greater competition between cities. There is still need for further devolution of financial, administrative and development responsibilities to secondary cities to make them more competitive and dynamic (Pepinsky and Wihardja, 2011). This will enable them to have greater autonomy to use their initiative and diversify their revenue base so that they can raise capital to build strategic infrastructure that attracts investment and promotes development.

There are still significant problems in attracting investment to cities and provinces outside Java. It will take some time for secondary cities in such provinces to build sufficient capacity and competitiveness to attract investment and development that will address the imbalance in regional economic development in the country. While not perfect, Indonesia offers a model for other countries in the region to address the problems of decentralization and secondary city development through improvements and changes in governance, financial and resource-sharing arrangements among governments, and fostering greater competition among cities to enhance the efficiency and effectiveness of urban management.

## 7.2.3 The Republic of Korea

The Republic of Korea has developed into one of the most dynamic economies in Asia. The country has a population of 48.4 million people and is 83 per cent urbanized. There are 70 urban areas listed as cities. The largest, the capital city Seoul, has a population

of over 10.5 million (2010). Twelve of these cities are secondary cities and have populations of more than 1 million. The Seoul Capital Area has a population of over 25 million and is made up of a large number of satellite secondary cities that are linked by a comprehensive network of rail and road transport.

The Republic of Korea has a three-tier democratic system of government: national, regional and local. The GDP is US\$1,116.2 billion, with a GDP per capita of \$22,400 (2011). Korea has few natural resources and must import much of its energy needs. It has achieved its remarkable economic development through industrialization, although it is undergoing a rapid transformation to a more serviced economy.

Urbanization and decentralization policies have been actively progressed by the Korean central government. Since the 1960s the National Government of Korea has initiated 10-year National Territory Development Plans. These plans have been

ambitious; the results mixed. Their focus is to develop policy and strategies for land-use development to promote national economic development goals. Growth poles have been a significant focus of policy, originating with the first plan. Later, in the 1980s and 1990s, the Korean government sought to limit the growth of the Seoul and Busan metropolitan areas by fostering local regions and establishing new settlements.

The first plan (1960-1964) stimulated development bipolarization of secondary city development along the Gyeongbu Expressway between the two cities of Seoul and Busan. The second and third plans may have curbed, but did not prevent, excessive growth in Seoul and the Busan metro areas and, coupled with insufficient implementation, meant that imbalanced development still remained between the developing hierarchy of settlements. Although transportation infrastructure supporting secondary city systems was, and remains, highly developed, failure by the planning system to meet housing-demand supply resulted in an acute shortage negatively impacting further development.

Korea has embarked upon a range of recent reforms to support a greater decentralization in the country. The following policy reforms have been implemented over the past decade. These are aimed at strengthening district capital government, secondary cities development and competition between cities. Since the start of the Global Financial Crisis (GFC), other reforms have been introduced supporting decentralization and the restructuring of urban economies in promoting endogenous growth.

## The Republic of Korea

Country population (2011)	48,391
Urban population (2011)	40,165
Urban population (% of total)	83
Urban annual growth rate %	0.7
Population 10 largest cities	25,621
Largest city	9,772
Total number cities	70
Under 500,000	48
500,000 to 1 million	12
1-5 million	12
5-10 million	9
More than 10 million	1

Source: UN Urbanization prospects (2011)

The central government has played an active role in supporting the development of secondary cities as part of a deliberate policy to slow down the growth of Seoul (see the table below). The government has used a number of initiatives, such as the development of growth poles, restricting the expansion of higher education and secondary schools in Seoul, zoning regulations and the issue of planning permits, and making finance more favourable to developments occurring outside the capital region. It has also moved to introduce congestion charges on industries, making it more attractive for firms and factories to relocate or expand into secondary cities in other districts. These measures have had the effect of slowing the growth of Seoul and stimulating the growth of many secondary cities in the country.

The government announced in 2004 that it had chosen a site in the Yeongi-Gongju region, 150 kilometres south-east of Seoul, as the new capital administrative centre for the country. The decision to build a new national capital city, which was formally opened in 2012, has been consistent with the policy of building secondary cities away from the national capital as part of a policy of de-concentration and devolution of government, in order to achieve a more balanced economic and urban-system structure of the country.

The Republic of Korea has recognized the need to encourage decentralization and secondary city development to achieve more balanced economic growth and development of the country. Government has actively pursued a range of economic, social and physical planning and development policies, and plans in pursuit of this goal, which have been effective in slowing down the growth of Seoul. This has had a positive

Administration	Major laws & plans	Highlights
Kim Dae-jung (1998-2003)	Law for the Promotion of Transfer of Central Authorities (January 1999)	<ul> <li>Delegation of central affairs to local governments</li> <li>Delegation of the authority of public security (police) and creation of local police</li> <li>Delegation of the authority of public education to local governments (educational autonomy)</li> </ul>
Roh Moo-hyun (2003-2008)	Decentralization roadmaps (2003) Special Law on Decentralization Promotion (2004)	<ul> <li>Abolition of Special Administrative Agencies (SAA - local offices of central ministries)</li> <li>Rationalization of national and local tax system (raising the rate of local allocation tax)</li> <li>Enhancement of the authority of local councils (strengthening the authority of local legislation)</li> </ul>

Source: MOGAHA (2005)

effect in enabling the city to focus on a number of redevelopment projects to revitalize inner-city areas, attract new industries and develop new eco and technology parks in response to structural changes to the capital city's economy.

The development of a series of satellite cities that surround Seoul has enabled the specialization and agglomeration of industry to occur in many of them. At the same time, government, through a range of policies, has promoted and diversified the expansion of secondary cities in other districts. As a result, Korea has one of the most diverse urban systems structure in Asia and has been able to maintain one of the lowest unemployment rates in the region. The focus on policies to diversify urban industry systems and development has enabled Korea to undertake a much more flexible approach to the planning and development of its cities and many other countries in Asia, which has allowed almost all major industry development to occur in the capital-city region.

## 7.2.4 Vietnam

The Republic of Vietnam is one the most dynamic economies in the Asia region. Devastated by years of civil war, in 1986 it embarked upon a pathway of economic reforms, Doi Moi, that has resulted in a period of unprecedented economic growth and development for the country. The population of Vietnam is 91 million (2011), of which 31 per cent (28 million) is urbanized. The country's urban system is dominated by two large cities: Hanoi, the capital, and Ho Chi Minh City (HCMC), the largest commercial and manufacturing centre. There are four cities with populations greater than 10 per cent of HCMC: Can Tho, Da Nang, Haiphong and Biên Hoa are the country's principal secondary cities, with four other smaller provincial cities, with populations of around 300,000, which perform similar functions.

Much of the policy related to economic development and urbanization has been shaped by national socioeconomic development and physical plans. The national, economic development-planning process shapes the nature of spatial investment – especially industry development in Vietnam. The physical planning process, using master plans, defines the urban pattern of development in cities. Much of the planning for urban areas is still controlled by central government, through *parastatals* (government-owned corporations). After Doi Moi, the focus on development was on new export-orientated economic growth and development, with a number of Export-Processing Zones (EPZ) constructed around the larger cities. Low wages, land costs and generous tax incentives were used to attract international companies to Vietnam. Industrial development and trade expansion took place, but this was to benefit only the two primary and four major secondary cities in Vietnam.

The Asian Financial Crisis (AFC) forced Vietnam and most of the Asian countries into a change in thinking about an economic development model based heavily on export-orientated development. The AFC brought about changes in policy – especially the need for more balanced regional growth. Provinces began to argue that they

#### 144 Managing Systems of Secondary Cities

Vietnam	
Country population (2011)	88,792
Urban population (2011)	27,526
Urban population (% of total)	31
Urban annual growth rate %	3
10 largest cities (2011)	8,540
Largest city	6,167
Total number cities	31
Under 500,000	28
500,000-1 million	1
1-5 million	2
5-10 million	1
More than 10 million	0

Source: UN Urbanization prospects (2011)

wanted a fairer share of the benefits of opening up the economy. Significant regional disparities were opening up between the richer southern provinces and towns and in the system of cities. In 1998, the government produced the Vietnamese Urban Development Strategy, which was to be fully implemented by 2020. The strategy outlined a framework for the planning and management of the country's urban development system. The country has divided into 10 planning regions (Nguyen, 2003). Each region was to prepare a socioeconomic development policy based on the specific characteristics and advantages in regard to its natural environment and socioeconomic conditions.

The Vietnamese Urban Development Strategy was the first real attempt to implement policies for decentralization by empowering regional and local governments to provide a wide range of urban and rural services. It was also the first attempt

by government at seeking to exploit regional comparative advantages, based on the China model. Other laws support greater decentralization and devolution of central government. The Construction Law (2003) allowed provinces, districts and communelevel authorities to approve planning projects within their jurisdictions. These policies also encouraged greater private sector, non-government organizations (NGOs) and state-sector agencies' involvement in the decision-making process related to development. However, due to weaknesses in institutional capacity, many authorities have not engaged widely in stakeholder engagement or taken on responsibilities for planning and service delivery. Many continue to rely on central government to plan and deliver essential services.

Over the past decade the Vietnam government began to work closely with the World Bank and Asian Development Bank (ADB) on a range of projects to support urbanization and secondary cities development. Cities Alliance has also assisted several secondary cities to prepare city-development strategies, for example Haiphong and Can Tho. In 2005, the government produced the Vietnam's Socio-Economic Development Plan (SEDP) 2006-2010. This plan emphasized the need for developing urban areas as growth centres; the modernizing of urban infrastructure to attract investment, improved living standards, reduction of urban-rural disparities and sustainable development. One of the first initiatives under the plan was a strategy to develop Buon Ma Thuot (Dak Lak Province), Ha Tinh (Ha Tinh Province) and Tam Ky (Quang Nam Province) as regional economic hubs to foster balanced regional development. The initiative was intended to divert rural-urban migration from large metropolitan cities, and to strengthen ties between the project cities and their rural hinterlands. To date, little progress has been made on these and other Official Development Assistance (ODA) initiatives to support secondary city development.
In 2009 the national government launched the Vietnam Urban Development Orientation and Strategy with a vision for 2050. Its focus is to gradually develop Vietnam's urban system towards an urban network model in line with the World Bank's systems approached in its urban policy (World Bank, 2009); develop and coordinate technical and social infrastructure; create better-quality housing and living environments; develop advanced urban architecture with national identity, and create a high level of competitiveness in socioeconomic development at national, regional and international level. In the context of the global economy, the development of the National Urban System is to be achieved through improved integration of infrastructure and logistics systems and sustainable development. The development focus to 2025 is on industrialization with modernization strategies for a post-industrial period towards 2050, focusing on business services and tourism development.

There are important lessons to be gained from Vietnam's experience to support balanced urban and regional development and its system of cities. While extensive policy work has been undertaken to achieve more balanced growth and development, implementation of policies has proved difficult. The planning system is still heavily centralized and political, with very few cities having the capacity to initiate and implement development plans. The focus of economic development in the secondary system of cities is on industrial development, with government-supported development of industrial areas in most major cities. These have failed to attract developers and investors since very little attention was given to, and funds made available to, develop the strategic infrastructure to support industry development. The weakness in the country's banking systems and capital markets, especially at the local level, makes it very difficult to raise capital for private-sector development. Most urban-development projects are also prone to rent-seeking by poorly paid public officials.

There has been a failure by policy-makers, also, to understand supply-chain systems and the need to develop a critical mass of local labour, technology and business support services to service industrial areas. The supply chain, logistics systems and networks supporting secondary cities are very weak, except in the airline and telecommunication industries, which are open to competition. Government still controls much of the higher-order public utilities and logistics management systems, most of which, at the local level, are performing poorly and adding to business and societal transaction costs. Finally, economic governance reform is slow, political and not demand/market-driven. This has greatly weakened the capacity of governments to work with the business to build enabling environments, resulting in the undermining of the city competitiveness – especially at the secondary city level.

Despite these problems, the country and its urban systems are developing rapidly – but not in a sustainable way. Climate change and natural disaster risks are considered high for the Vietnamese urban system, and very limited attention is being given to this by government. It will need to become a high-priority area for investment in the



Hoi An is an important historic secondary city in Vietnam and a major tourist attraction and clothing cluster. © Brian Roberts (2011) future if the urban assets and economic capacity it is building very rapidly is not to be destroyed in the future.

## 7.2.5 Key Findings of the Asian Region

The pace of urban growth has caught many governments in Asia unprepared. The demand for land, shelter, transport, employment, energy supplies, and social and environmental services, has outstripped supply, which has resulted in upward pressure

on land markets, overloaded utilities and increasing environmental problems. Most national and larger-city governments recognize the problem of inequitable distribution of development occurring between their systems of cities in countries and within large megacity regions. Only a few countries, such as Korea, with deliberate policies to restrain the growth of Seoul, have been successful in slowing down the growth rate of the large cities and redistributing it to secondary cities. It has done this through a transition process from a developing to a developed economy over many years, through strong government and commitment to policies deliberately designed to direct public resources away from Seoul – albeit a significant allocation of these resources going to the development of large secondary satellite cities surrounding it.

Many governments have enacted policies to decentralize and devolve a range of financial and administrative responsibilities to local government. With the exception of north-east Asia and a few other countries such as Indonesia and Malaysia, and more recently India, decentralization has been very slow. Some governments in the region have attempted to force or encourage people to relocate to lesser-developed regions and secondary cities. This is to reduce the population density and overcrowding in large cities and to build satellite towns on the periphery of larger cities in line with the first model new town. Other policies have been introduced, such as the National Urban Renewal Mission (NURM) in India, to stimulate the redevelopment and institutional reform of regional secondary towns and cities. Few of these development strategies appear to be addressing the problem of growing development gaps in systems of cities and regions.

The business environment in many smaller cities is unattractive to all but locally based service industries, undermining their economic sustainability. The result is slow employment growth, particularly in the formal economy, weak city government revenues, growing urban poverty and slum settlements, and diseconomies of agglomeration, with growing traffic congestion, water and air pollution, and watershed mismanagement. Land management – land release and development – in peri-urban areas is a particular problem, with confusion between urban and rural responsibilities and the growth of slums and other informal settlements on the periphery of cities. These problems are compounded by policies in some countries that have decentralized the provision of many public services from central government but have not been accompanied by necessary fiscal equalization arrangements. The end result is cities with large infrastructure and service shortfalls, poor economic growth opportunities and growing urban poverty.

## 7.3 Latin America

Latin America is one of the most urbanized but least densely populated regions of the world. Comprising 45 countries and having a land area of 21,069,501 square kilometres, Latin America takes in South and Central America as well as the Caribbean. The region has a population of around 600 million, half of which live in Mexico and Brazil. More than 480 million people live in urban areas. The level of urbanization is 79.1 per cent and the current urbanization rate is around 1.4 per cent, expected to halve by 2035. Three of the 10 largest cities in the world are found in Latin America and there are over 125 cities with populations of more than 500,000 people.

Until the fifteenth century, Latin America was inhabited solely by indigenous people, some of whom established complex systems of urban settlements and development. However, the colonial powers of Europe, especially Spain and Portugal, shaped the pattern of urban settlement and regional development in the region. Like other regions under colonialism, the enormous demands for materials and resources of a rapidly industrialized Europe in the nineteenth century led to the transformation of landscapes and the development of a system of human settlements whose primary function was to support the industrial demands of Europe. Very large numbers of people migrated to the region, with pressing demands for labour on plantations and mines being met by slaves acquired from Africa or born into slavery.

Latin American nations won independence some 100 years before other regions of the world, with governments across the regions developing national and subnational administrative governments. Centralism and nationalism remained very strong, since many governments in the region embarked upon programmes of industrialization focused closely on creating self-sufficiency and employment for rapidly growing populations. The process of industrialization led to accelerated urbanization, especially in Brazil, Argentina and Mexico. Resource-rich regions began to attract capital and investment, which triggered a process of migration, leading to significant disparities between regions and systems of cities.

For much of the twentieth century, political instability and debt crisis have held back the development of the region. These crises triggered the movement of millions of people from rural communities in search of peace, security and employment. The cities, especially the larger primary and secondary cities, began to amass large populations of urban poor, many of whom live in some of the most precarious hillside locations because of the shortage of land. These cities began to develop dynamic informal-sector local business and employment opportunities, but the instability of local government made it extremely difficult to collect taxes and raise capital to develop basic infrastructure and services to attract foreign and domestic investment necessary to scale up for industrialization. The result was that many Latin American and Caribbean countries languished in their national development for decades, with comparatively little value-added manufacturing taking place in regional and urban economies.

In recent years, many Latin American countries have started programmes to reform and stabilize government, restructure their economies and open up opportunities for foreign investment and trade. Countries such as Brazil and Mexico have been able to reform and integrate their economies more successfully into markets in North America, Asia and Europe, and to compete very successfully for trade and investment in global markets. Smaller countries in the region are beginning to do the same. However, interregional trade between countries, compared to Asia and Europe, remains weak and relatively undeveloped. Regional disparities in development, income and poverty have become wider, as the more competitive cities and regions engage in international trade and development, while poor many secondary- and lower-order cities struggle to reform, develop governance capacity, raise and attract capital for infrastructure development and services improvements. These secondary cities are being left behind in the race for development.

A report (Cadena et al., 2011) on Latin American cities shows that, despite many reforms, they continue to fall well behind in the global competitiveness stakes. However, the report found that the competitiveness of Latin American secondary cities is better than the large metro-region economies, which is not the case in most other regions. This suggests that there are drivers in the development of secondary-city economies in some Latin American countries that are performing better than other regions. The two short case studies on Brazil and Colombia, which follow, seek to identify whether there are policy differences and approaches to the development of secondary cities that provide an explanation of why secondary cities in this region appear to be performing better than in other regions.

#### 7.3.1 Brazil

The Federative Republic of Brazil is the largest country in South America. A former Portuguese colony, it gained independence in 1825. The current system of government has three tiers: national, state and local. The economy has had significant growth in recent years and has a current GDP of US\$2,476.7 billion. The population of the country is 196.7 million (2011), of which 85 per cent is urbanized (116.4). Brazil has 261 urban settlements that can be considered cities, with the largest, São Paulo, being the tenth-largest cities in the world.

Portuguese settlement in Brazil began with a series of scattered coastal settlements between Rio de Janeiro and São Paulo. From the south-east of the country there has been a progressive push for development by governments along the coast, inland and more recently into the Amazonian region. There has been a strong focus on growth poles in Brazil, which continues to the present.

Most of the country's population is concentrated in the south-west. As the population grew, regional disparities between the interior and coastal regions were

## CURITIBA: BRAZIL

Curitiba has been cited many times as a successful example of sustainable city development resulting from good urban planning. Since the former three-times mayor Jaime Lerner started an initiative to revitalize this metropolitan urban region of 3 million people, there has been a progressive leadership that has recognized that a focus on infrastructure is only one of many strategies needed to revitalize and develop secondary cities facing strong pressure from urbanization. An important aspect of Curitiba's success has rested in the city's accomplishments in infrastructure and the provision of services, even as the population in the city tripled.

The key to sustainability of the development of Curitiba has been the attention given to increase and diversify the economic base and good governance. From the outset, architects and urban planners sought separate industrial districts that were integrated fully with the city's mass public transport system. The transportation land-use planning is held up as an example of international best practice. Lerner and his colleagues gave strong emphasis to green-city development well before it became fashionable, establishing an industrial district that was larger, greener and possessing more infrastructure than perhaps any other in the world. The Curitiba Industrial City was located within the city limits and, despite the tax incentives, provided revenue that helped to fund what was accomplished in the city, and alleviated what might otherwise have become a disaster in terms of unemployment.

The success of Curitiba, though sometimes exaggerated, has given the city important leverage with the international aid agencies and banks to continue developing its infrastructure and economy. The economy is diversifying and growing fast. In 2001, Curitiba received recognition as "Pole of Information Technology" by *InfoExame* magazine, which has subsequently led to a rapid expansion of ITC industry services with growing exports to the USA and European countries.

Curitiba's success is due to many things, not the least of which is its dynamic business and civic leadership. However, it has been the ability of government to fund and recover the costs on infrastructure from rates, taxes and user charges, the development of a highly efficient public transport and logistic systems, and the adoption a green-city approach to physical and economic development that has led to sustainable development outcomes for the city.



Curitiba, Brazil, is one of South America's most prosperous secondary cities. © Fabio Domingos Batista (2013) instigated. Since the 1950s successive governments have sought to promote decentralization policies, partly in an attempt to curb the internal migration towards the two largest cities. São Paulo's GDP per capita, while declining relative to its national share over the preceding few decades, was still 67 per cent above the national average in 2005 (Zhang, 2010:5). The establishment of the regional development agency Superintendency for the Development of the Northeast (SUDENE) in 1959 led to the establishment of new manufacturing industries in the interior and the capital was relocated from Rio de Janeiro to Brasília. In 1964, the military government expanded the programmes, further strengthening regional policy by expanding the national planning role and offering agricultural subsidies to regions in order to attract migrant workers. In 1985 planning administration was decentralized to the municipalities and a democratic

#### Brazi

Drazii	
Country population (2011)	196,655
Urban population (2011)	167,157
Urban population (% of total)	85
Urban annual growth rate %	1.2
10 largest cities	33,949
Largest city	11,377
Total number cities	261
Under 500,000	223
500,000-1 million	23
1-5 million	13
5-10 million	1
More than 10 million	1

Source: UN Urbanization prospects (2011)

participatory planning system was established. This provided more opportunity for localized issues to be responded to, however the multiple levels of government and compartmentalizing of public agencies in the larger urban agglomerations have overwhelmed the capacity of local authorities to manage the country's largest cities. This led the federal government, in 2001, to take greater responsibilities for managing the large cities. Inter-government financial and administrative arrangements within the country are still too complex, which is undermining the efficiencies of local governments to manage urban development and deliver services effectively.

While centralist government policies have sought to promote decentralization and invigorate the development of the interior, powerful political groups as well as various economic shocks have made it difficult to redress the imbalances between the provinces and secondary cities.

Many local economic development plans have failed because of the enormous difficulties in securing public and private capital for infrastructure and capital project investment. This level of control is often the fatal weakness in local regional development.

There are important lessons to be learned from the study of decentralization and secondary city development in Brazil. Unlike other regions, Brazil's largest cities appear to be losing competitiveness relative to secondary cities (Zhang, 2010; Cadena et al., 2011). This is explained partly by the failure to invest in key infrastructure to improve urban utilities and logistics systems and weak urban management, with multiple governments trying to manage a large metropolitan area. These two factors have added substantially to congestion and other externality costs, and the increased the cost of doing business. The integration of Brazilian cities, especially secondary cities, into global trade and investment systems has been weak. Successive governments have tended to protect local industries from competition. This has created inefficiencies in

industry supply chains, local markets and economic governance systems. There have been substantial flights of capital out of the country from time to time as the result of financial instability. This has resulted in capital shortages and weak private sector and foreign investment, until recent years.

Secondary cities have benefited from national programmes to decentralize economic development and government. However, they have relied heavily on central-government support, except for some cities, such as Curitiba and Belo Horizonte, which have been able to capitalize on international investment in manufacturing and mining. Other secondary cities have been learning from these cities and have been able to develop international trade and investment. The internationalization of some of the larger secondary cities explains why they have been able to outperform the primate cities; however, it is mainly the secondary cities in the south-west and coastal regions with better infrastructure that have performed better than inland cities. While regional disparities between south-west cities and the rest of the country, especially the northeast, remain high, government policies aimed at diversifying and developing inland cities are beginning to attract more investment towards inland cities.

## 7.3.2 Colombia

The Republic of Colombia was a former Spanish colony, which gained independence in 1819. Colombia has a three-tier system of government derived from the Spanish system of government. With a population of 46.2 million, 75 per cent live in urban areas. There are 46 urban settlements that could be considered cities, the largest being the capital, Bogotá (population 7.4 million [2011]). Medellín (2.75 million), Cali (2.2 million), Barranquilla (1.2 million), Cartagena (911,000) and Cúcuta (600,000) are the main secondary cities. These are all provincial capital cities.

The Colombian system of governance has seen a polycentric, provincially based, hierarchy of cities develop, although the system became far more centralized as the result of civil unrest in the country. In 1991 a new constitution, establishing a decentralized but unified state, was implemented; however, the process until recently has been very slow (Faguet and Sánchez, 2009). Under the system, administration and implementation of strategic planning was given to the provinces. As a result many provincial capitals, supported by smaller provincial settlements, have developed under their own initiatives, usually based on exploiting existing primary industries such as agriculture or shipping.

Due to the relative autonomy of provinces under the planning laws, responses to urbanization have been fragmented, sometimes with negative consequences. Urbanization in Colombia occurred at a rapid rate in the 1990s, creating uniform urbanization issues across provinces. Urbanization rates are still running above 2.3 per cent per annum, compared to 1.47 per cent for South America (United Nations, 2012). Provincial land-use systems, which operated independently of, and contrary to, each other compounded the issues of increased land demand by slowing supply. The subsequent shortages incurred resulted in a high prevalence of land speculation, driving up prices as well as the widespread establishment of illegal settlements. Crucial infrastructure development has prioritized the individualistic needs of provinces, creating access disparities between provinces and undermining the productivity of the wider economy. Recently the more developed capitals, such as Bogotá, Medellín and Cartagena, have sought to diversify their economies by establishing more service/ knowledge-driven industries, while the others continue to struggle under the burdens of urbanization.

The many years of civil unrest in the country have had a significant impact on inter-regional trade and the rapid rate of urbanization in cities. With the peace process, national government is seeking to increase the capacity of intermediate and local levels of government to strengthen the process of decentralization. The same cannot be said of civil society organizations, which lack capacity to develop more participatory processes to engage in the expansion of urban government (Falleti, 2010:125), and a framework for consultations between stakeholders has been a factor in the lack of positive impacts of the decentralization process on the different areas of regional and urban economic development – especially in support of anti-poverty programmes, social and production infrastructure, citizen participation and environmental protection.

The future for Colombia looks positive in enhancing the impact of decentralization as the result of the peace process – provided this holds. Much greater support is required to provide institutional support for local institutions to develop governance capacity and continuity in policies, as well as the strengthening of grassroots organizations and support for local democracy. The principal challenge for decentralization and development of secondary cities is the development of transport infrastructure and a framework to improve subregional trade and investment. Central government also needs to foster greater competition for resources – especially in the grant-funding arrangements for capital to drive efficiencies in local-government urban systems.

## 7.4 Middle East and North Africa (MENA)

MENA is one of the driest, most sparsely populated, regions of the world. North Africa is 52 per cent urbanized, while the Middle East is over 75 per cent urbanized, with a high concentration of people living in the capital city and several large secondary cities, such as Alexandria, in Egypt, and Izmir, in Turkey. The population of the region (2011) is estimated at around 500 million (CIA, 2010). The region has one of the highest population growth rates in the world with a very young population cohort structure throughout the region. Most of the region's population and cities are concentrated in small fertile areas along the Mediterranean and Gulf State coastlines or along the Nile,

Euphrates and Tigris river systems. The region contains more than 65 per cent of the world's known oil and natural gas reserves, which has enabled some of the smaller Gulf states to enjoy some of the world's highest rates of GDP per capita and develop modern cities in desert landscapes.

However, many countries of the region have been rocked by political unrest and civil war, and a significant proportion of the MENA region's population remain poor and/or living in migrant settlements in the larger cities. There are more than 20 million migrant workers in the Middle East, with some countries, such as Qatar and Kuwait, having more migrant workers than nationals. Many migrants live in impoverished conditions, but the remittances they send to their home countries, such as India, Bangladesh and the Philippines, have a very significant impact in supporting rural and smaller urban centres in their home countries. The MENA region lags behind all other regions in the democracy index (Campbell et al., 2012).

The Middle East and North Africa region has one of the most centralized government structures in the world (Tosun and Yilmaz, 2008). Much of this was inherited from the Ottoman Empire system of governance, which focused on a centralized taxation system and had a direct impact on current government structure. With decades of both external and internal threats and conflicts, governments in MENA have veered strongly towards nationalism and centralism related to governance and economic and social development policies. Overall, local-government systems in the region can be characterized as a form of re-concentration rather than one of devolved local self-government (Tosun and Yilmaz, 2008:7). In many countries a large share of public expenditure is dispersed through subnational governments, which act as agents of central government ministries and departments. Local-government elected representatives have little decision-making power over expenditure and planning of development, which remains largely centralized. Since the Arab Spring reforms there is increasing pressure for greater decentralization and strengthening of local government, but it will likely take some time for nations to realize, given the urgent need to reform many centralized institutions and governance systems.

The following presents two brief case studies, which profile policies related to decentralization, urbanization and secondary city development in two MENA region countries: Tunisia and Turkey. The former is undergoing substantial reforms since the uprisings of 2010. The latter laid down the historic governance structures of most of the MENA, but underwent massive social, economic and governance transition, which still continues, following the fall of the Ottoman Empire in 1918.

#### 7.4.1 Tunisia

#### Urbanization in Tunisia

The Tunisian Republic is more than 66 per cent urbanized. Its largest city, Tunis, with a greater metropolitan area population of 2,412,500 (2011) comprises several large

municipalities, the largest of which are Old Tunis (984,000), Ettadhamen (422,000), Aryanah (98,000) and El Mourouj (82,000). There are three secondary cities Kairouan (546,209), Sousse (544,413), Gabès (342,630) and two small cities, Bizerte and Gafsa, which have populations of around 100,000. There are several inland towns with populations of around 50,000. The country's largest cities are all port cities, some with a mixture of export-industry activities including clothing and footwear manufacturing, production of car parts and electronic machinery.

The urban pattern of development in Tunisia is confined mainly to the coastal regions, which are the most fertile parts of the country. The population density of Tunis is around 9,400 persons per square kilometre, with secondary cities and towns having much lower densities and more dispersed development patterns. The economy of the country and cities is diverse, ranging from agriculture, mining, manufacturing and petroleum products to tourism. The GDP per capita in 2011 was \$4,600, ranking 100th out of 195 countries.

#### **Governance Systems**

Tunisia has a two-tier system of local government. Governorates (*conseils régionaux*) are departments representing state administration in a region and there are 24 governorates. Each governorate has a regional assembly headed by the governor, who is appointed by the central government. Governorates and regional assemblies operate under the Ministry of the Interior. Regional assemblies are made up of deputies, comprising the governor, municipal mayors, rural councils' presidents and other appointed members. Regional assemblies are responsible for the management of regional affairs, regional development plans and town plans in non-urbanized areas. Local Councils of Development were established by law in 1994. These consultative bodies are composed of municipalities' and rural councils' presidents, sectors' chiefs, representatives of public institutions and representatives of exterior services of the administration and are responsible for making recommendations to the regional assemblies on economic development matters.

Regions are divided into urbanized (communalize) and non-urbanized (non-communalize) territories (Tosun and Yilmaz, 2008). According to recent estimates, among the so-called urbanized territories there are around 262 municipalities in urban areas and rural centres governed by an elected municipal council that elects its mayor from within its ranks (World Bank, 2008).

The Jasmine Revolution in 2010 (Tran, 2011) was one of the most unexpected revolutions of the twenty-first century. It was the first social revolution of its type, which brought about a change to a democratic government system using the internet and virtual social networks. The previous government was autocratic, with highly centralized decision-making processes. While some reforms were initiated in the 1990s and 2000s, these were never implemented, giving rise to the frustration and unease leading up to the revolution. The new government has introduced major changes to governance systems and practices, including the way public officials are appointed and how local government is run.

The changes in government have brought about pressure for greater accountability in local governance systems, but in so doing have added to uncertainty because of lack of policies, laws and regulations to set out procedures for the improved management of local government. There is still no legislation setting out many of the functional power, administration and financial-sharing arrangements between central and local government. It will take some time for transparent budgeting and planning processes to be introduced to improve the accountability and performance of cities, and to develop local-government development policies and processes attractive to business investment outside the capital city Tunis.

#### Decentralization and Regional Development

Tunisia's democratic transition has been marked with difficulties, particularly at the local level. The legitimacy of Tunisia's 212 "special delegations" related to local councils nominated by civil society after the National Constituent Assembly in October 2011 has created many problems in the smaller towns and cities. Public hygiene has become a problem, with the local governments of several cities, such as Sousse and Gabes, unable to deliver the most basic services. While local governments have the powers to set and administer local taxes on developed real estate, this right is rarely exercised and most have looked to central-government grants to cover administration costs and fund local-development projects. Illegal and unplanned construction has also risen sharply, exacerbated by the fact that municipal revenues are falling due to inefficiencies in the property taxation and the lack of a market-valuation system. Most cities suffer from a debilitating high salary burden and low level of staff competence.

A commission established under the Constituent Assembly concerning the reform of public, local and regional authorities has drafted several policies concerning local-governance principles. However, there is still uncertainty concerning definition and roles and resources of national, regional and local government (SKL International, 2013). Specific legislation that follows the intent of the new constitution is expected to be enacted in 2013. The slowness of enacting decentralization reforms is having a significant impact on the ability of local governments to manage urbanization and local economic development. However, once enacted the decentralization policies should allow for a better allocation of resources. It is hoped that this will lead to more local, as well as foreign, investment, stimulating the growth of governorates and secondary cities in the country.

#### Local Economic Policy and Development

Regional economic development policy and investment in the past have been formulated, driven and implemented through central government. Cities have not been encouraged to develop and lead local economic development. Many have poor infrastructure and services to support local industry development, especially along the coast. Secondary cities there have access to port facilities, but smaller inland cities have poor logistics and transport systems, making it difficult to attract investment and new industry development away from the coast. Transaction costs for secondary cities are high because of poor governance systems, business and education services. The current government is seeking to encourage greater decentralization and regional economic development, but with the enabling environments of secondary cities still very weak – especially in terms of human capital – this will take some time to develop and improve.

In 2012 the government launched a new development strategy for Tunisia. It included a focus on regional economic development and cities. The regional development strategy aims "to achieve balanced development by reducing differences between regions through distributing public investment with objective criteria and taking into account the level of poverty, the unemployment rate and the available utilities and infrastructure in the governorates. So, regional development plans will be set taking into account the specificities of each region in order to strengthen and develop the regional economy through the enhancement of natural resources and development of local production units which will create a local economic dynamic" (GoT, 2011:14). There is need, also, for national government to start fostering competition between cities, adopt measures to stimulate endogenous growth and support their development as economic and logistics hubs if efficiencies and productivity of the country's systems of cities is to improve.

#### **Urbanization Policy**

Tunisia does not have a formal urbanization policy. The national development policy (GoT, 2011) notes "efforts will be intensified to improve the living conditions of citizens particularly in poor areas by generalizing electrification networks, drinking water and sanitation and by breaking their isolation in order to attract citizens and create development kernels". These are likely to take the form of Economic Enterprise and Export Processing Zones (EPZ), which will be located in the secondary cities around Tunis and the port cities that have container facilities. The World Bank has supported the development of an urban-growth management policy, which is expected to focus on developing a strong network of systems of cities with increased regional specialization and the development of essential strategic infrastructure.

#### Key Findings from Tunisia

It is less than four years since the revolution that toppled more than 40 years of autocratic government and centralized planning and development. In this period there has been massive effort to build a more democratic system of government and transform much of the governance process. There are important lessons that can be learned from Tunisia that have relevance to other MENA countries as these undergo pressure for reforms to democratize governance and economic development processes. Four important lessons that can be gained from the Tunisian experience are:

- Decentralization reforms must be accompanied by a constitution or laws that define and delineate clearly the separation of powers and responsibilities between levels of government. This is a lesson gained from Indonesia and many other developing countries that experience a very rapid period of reform following years of autocratic and centralized government rule.
- Decentralization must give local governments more administrative and financial management responsibility, including revenue-collection and budgeting.
- National and regional economic-development policy need to be aligned closely with national urbanization policies that support systems of cities, competition and trade between cities and concentrate on the development of endogenous and exogenous growth, with a focus on the development of industry clusters and export processes.
- Educational institutions need to be reformed and realigned quickly to boost the development of skills and competencies to support governance reforms and competitive local industries and businesses.

## 7.4.2 Turkey

## Urbanization in Turkey

The Republic of Turkey has a current population of approximately 80 million, 70 per cent of whom dwell in urban areas. The majority of urban growth has occurred on Turkey's western coastal region of Marmara (World Bank, 2012b). Turkey has a long history of urbanization and development, and under the Ottoman Empire had one of the most well-managed governance systems in the world, with a dual system of military ("Central Government") and civil administration ("Provincial System"), with a clear separation of powers, with executive functions carried out by the military authorities and judicial and basic administration, and municipal functions carried out by civil authorities. Even after the fall of the Empire there has been a relatively high level of decentralization and devolution to provinces and cities. The country has one of the most evenly distributed systems of cities in the region.

## System of Urban Governance

Turkish governance functions in a two-tiered administrative structure. Each metropolitan area has two levels of government (represented by the two smaller circles in Figure 7.1). The first relates to all levels of metropolitan government, managing the preparation and approval of land use. The second represents local municipalities, or districts, within the metropolitan area, dealing with issues related to local level plans (Personal Communication Sence Turk, 25 October 2012).

The second tier represents the local government systems in Turkey, which are



Source: Land Equity International/Brian Roberts (2012)

divided into Special Provincial Administrations (SPA) including villages, districts, municipalities and metropolitan municipalities. Each SPA is responsible for managing health, education, police, infrastructure, agriculture, rural services, industry and trade, roads, water, sewage, emergency, solid waste, parks and recreations, youth and sport, culture, tourism and municipal boundaries. Turkey is divided into 81 provinces, containing a collective total of 923 districts (Tosun and Yilmaz, 2008).

There are 16 greater/metropolitan municipalities in Turkey. The population of these municipalities varies between 350,000 and 4 million people, with the exception of Istanbul, which is Turkey's largest city, with a population of 10.4 million. Although Istanbul is not the capital, the city is Turkey's cultural, financial and economic hub. Ankara, the capital and administrative hub, has 3.8 million, Izmir 2.7 million, Bursa 1.6 million and Adana 1.4 million, and these are Turkey's largest secondary cities (CIA, 2009). Table 7.1 shows the number of cities by size and urban population and the percentage of population living in urban areas. According to the 2010 census, more than 50 per cent of the urban population lives in the 16 metropolitan municipalities and their hinterlands, the importance of "metropolitan" scale for the 2010s can be easily understood.

## Disparities in Regional Economic Geography

Despite the increase in employment opportunities in urban areas, there were significant repercussions from lack of planning in Turkey in the 1920s. Already in debt from the Ottoman period, Turkey was constrained by limited economic sources, unreliable government and lack of skilled labour, resulting in urbanization, unplanned development, land speculation and unemployment in regional areas (Öztürk and Çiraci, 2010). Disparities in provincial economic development are shown in Table 7.1.

## TABLE 7.1

Provincial and Municipal Demographic and Economic Data, Turkey

Metropolitan municipalities	Province population (Turkstat, 2010)	Metropolitan municipality population (2010)	Metropolitan municipality area/ province area (%)	Share of industry- sector employees in total population (%) (province) (2000)*
Adana	2,085,225	1,591,518	20.01%	14.4%
Ankara	4,771,716	4,431,719	30.86%	13.4%
Antalya	1,978,333	1,001,318	6.01%	5.5%
Bursa	2,605,495	1,905,570	25.91%	28.5%
Diyarbakir	1,528,958	843,460	18.50%	3.8%
Erzurum	769,085	367,250	5.38%	3.7%
Eskisehir	764,584	629,609	9.02%	18.9%
Gaziantep	1,700,763	1,341,054	18.24%	21.3%
Istanbul	13,255,685	13,255,685	100%	32.2%
Izmir	3,948,848	3,354,934	65.38%	20.6%
Kayseri	1,234,651	950,017	7.32%	16.4%
Kocaeli	1,560,138	1,560,138	100%	20.3%
Konya	2,013,845	1,036,027	3.06%	9.1%
Mersin	1,647,899	843,429	8.04%	7.9%
Sakarya	872,872	560,876	25.75%	12.9%
Samsun	1,252,693	531,997	13.43%	6.9%
Total	41,990,790	34,204,601		
Turkey	73,722,988			

## Urbanization and Policies Related to Secondary City Development

Secondary city development in Turkey mainly constitutes the allocation of land resources, infrastructure, housing, education and health. Esbah et al. (2005) state "the Turkish constitution mentions 'planning' for the use of resources to promote economic and social development" thus aiming to correlate development with employment opportunities. The "liveable cities" concept is also a significant factor in secondary city development (Esbah et al., 2005).

Turkey's recent local governance and public-management reforms have been underpinned by structural transformation initiated by governments and external factors, including the European Union (EU), Organization for Economic Co-operation and Development (OECD). In the 1980s, the Turkish government began a series of reforms to modernize local government, but there has been strong resistance to change and the national and provincial governments have been reluctant to draw on external

## TABLE 7.1 continued

Metropolitan municipalities	Share of service sector employees in total population (%) (province) (2000)*	Share of agriculture sector employees in total population (%) (province) (2000)*	GDP per person (US\$) (2010, Turkstat) (province)	The contribution of province as GDP to Turkey (2010, Turkstat) (%)
Adana	28.8%	43.4%	15,521	2.9%
Ankara	70.4%	16.2%	18,009	7.7%
Antalya	45.3%	49.2%	15,231	2.7%
Bursa	37.9%	33.6%	17,990	4.2%
Diyarbakir	32.3%	63.9%	8,029	1.1%
Erzurum	34%	62.3%	7,255	0.5%
Eskisehir	45.8%	35.3%	20,435	1.4%
Gaziantep	39.6%	39.1%	9,843	1.5%
Istanbul	59.7%	8.1%	18,101	21.5%
Izmir	50.9%	28.5%	21,479	7.6%
Kayseri	36.6%	47.0%	10,847	1.2%
Kocaeli	11.3%	39.0%	33,620	4.7%
Konya	28.5%	62.4%	11,637	2.1%
Mersin	34.5%	57.6%	18,285	2.7%
Sakarya	23.2%	51.9%	14,064	1.1%
Samsun	29.7%	63.4%	13,363	1.5%
Total			Average 16,827	64.4%
Turkey			15,137	100%

## Provincial and Municipal Demographic and Economic Data, Turkey

Source: UN Urban Prospectus (2011)

advice and assistance for the reform of administrative systems. Decentralization to local government has been a particularly sensitive because of the strong tradition of unitary and centralized governance system that has been in place since Ottoman times, but some dramatic changes have taken place in recent years.

Many of these structural reforms were introduced under pressure as part of the accelerated process of EU accession. The current Turkish government recognizes the need for reform and the benefits of partnering with external agencies to modernize Turkey's state structures, to comply with the requirements of the EU. Most EU assistance programmes channel financial assistance through regional and local administrations. This has had a significant influence in bringing about change and reforms in more progressive local government, seeking to attract capital to develop infrastructure and industry development, leading to greater competition between secondary cities, especially in the south-east of the country in cities such as Izmir and Adana.

## Problems and Issues Affecting Secondary City Development

Rapid urbanization and the inability to predict accurately and manage urban-growth patterns mean that many Turkish secondary cities are now facing significant devel-opment problems. *Gecekondu* (illegal or squatter settlement), some of which involves significant areas of high-rise development, is continuing to occur in all major secondary cities, with little attempt by local governments to manage it. As a result, large parts of these cities have poor road access and minimal basic services, leading to high levels of urban density and environmental problems of urban services such as water, sewage, solid-waste management and disease in these areas. There are still significant problems and differences in the level and patterns of physical and economic development in secondary cities. In the eastern part of the country, poor transportation, inadequate access to markets and low levels of human-capital development are making it difficult for secondary cities there to compete, attract investment and create employment. The growing difference in the rates of development between eastern and western Turkey is a major challenge for the country in trying to achieve a more balanced pattern of urban and economic development within its system of secondary cities.

## Key Findings from Turkey

Since 1950 Turkey has seen the rapid urbanization of secondary cities such as Ankara, Izmir, Bursa and Adana. With industrialization, growth of these cities has witnessed a wave of migrants searching for employment but unable to find adequate, affordable housing. As a result of poor planning policies, economic reform and changes in democracy, Turkish secondary cities are struggling to manage development. Despite these issues, which are being slowly addressed, there are lessons from Turkey's experience in urbanization and secondary city development that are relevant to other parts of west Asia and the Middle East region. These are summed up in a paper by Kumar (2012) and include:

- Effective, broad-based governance in Turkey has continued to increase the cities' contributions to national economic and social development.
- Since the highest rates of urban growth are in small cities, these need to be empowered to manage their own development.
- Well-formulated, well-executed city-cluster development can bring a host of benefits, including employment and integrated infrastructure and services.
- Mega-urban regions need new urban planning and governance structures.
- If urban governance is to be effective and sustainable, it needs to be coupled with devolution of authority and financial and human capacity.
- Local-government associations should promote city-to-city cooperation to bolster intra-regional learning on sustainable urban development.

## 7.5 Australia

The Commonwealth of Australia is the world's largest island continent, with a population of 22.8 million. It has a population density of 2.9 persons per square kilometre, but large parts of the country are uninhabited. The country is 87 per cent urbanized. It is also one of the most decentralized countries in the world, something that has been forced on it by its size and the vast distances between some of its cities. Urbanization rates have risen in recent years to 1.8 per cent per annum, resulting from record levels of migration driven by an increased demand for labour to support its rapidly growing economy. Australia has a diverse economy, which has enjoyed 21 years of growth. Its GDP in 2012 was US\$1,542.1 billion, with 82 per cent of this generated by the services sector. The GDP per capita is US\$67,938 per capita, which is one of the highest in the world.

The isolation and specialized economic focus of Australian secondary cities underpin many of their development challenges. Distances between settlements in Australia are often vast, meaning that it is not possible to commute for employment or service provision. Given the specialization of most secondary city employment markets, it is therefore difficult to retain workers outside the primary industry sector. The challenge of retaining a diverse workforce is further compounded by the poor communication infrastructure and services characteristic of remote areas. This adds greatly to business transaction costs, undermining the ability for cities to compete for new business.

Inland secondary cities are struggling to retain populations and many smaller towns are falling into decline, except where mining has occurred. Mining towns are experiencing significant problems, with shortages of housing and difficulty in attracting non-mining service-sector workers to remote locations. On the coast, secondary cities have been expanding more rapidly than the larger cities, with growth driven by retirement and lifestyle-changers. Coastal areas are struggling to keep up with the demands for infrastructure and community services.

Historically, states have had policy responsibilities for the development of towns and regional areas. The development of early towns, which subsequently expanded into regional cities, were funded through state-government grants and loans to local governments, which had responsibility for the provision of infrastructure and other community services. Health, education and emergency services are a state responsibility.

Federal governments have played a major role in urbanization policy, but in a less-direct way and in cooperation with the states. Successive federal governments promoted national industrial development-centre programmes for the steel and automobile industries in several secondary cities in the 1920 and post-World War II. The national capital, Canberra, which was founded in 1913 but not fully established until 1958, was the first planned new town after federation, although all the former colonial state capitals had city plans.

By the mid-1970s, state and federal governments became concerned about the size and rate of development of Australia's two largest cities and initiated programmes

## CANBERRA, Australia

Canberra is the national capital of Australia. It was established in 1913 and currently has a population of just over 360,000. It is the eighth-largest city in Australia and the wealthiest in the country, with a GDP per capita of around US\$75,000 (PPP) - 30 per cent above the national average. Canberra is one of many new capital cities developed in the twentieth century, such as Abuja, Islamabad and Brasília, as a symbol of national unity, built well away from the historic capital city. Located 300 kilometres south-west of Sydney, its location was intended to support decentralization and subnational region local development. The city began to develop very slowly and almost stopped at the beginning of the Great Depression until 1958, when the then government decided to move all federal offices and departments to the city. It took almost 30 years for the relocation to be completed.

The national capital had its own administrative territory until 1988 and was developed and managed by the National Capital Development Authority. This was replaced by selfgovernment in 1998, with many state-level functions such as health, education and policing. Several administrative functions are still shared with the federal government, such as city planning. The city was planned as a garden city as a series of new towns with populations of 50,000-85,000 and it is Australia's only fully planned city. Each new town has its own town centre and strategically located government offices designed to provide local employment opportunities. It has a highway network and public transport system linking the new towns together. All land in the territory is leasehold for 99 years, a policy which was designed to provide for orderly redevelopment of the city as leases expired. While this is beginning to occur, there are problems emerging (in one of the best planned cities) that provide important lessons for the development of secondary cities in other regions. Canberra has an urban area of 814.2 square kilometres, nearly as large as Berlin, but with a density of 428.6 persons per square kilometre compared to 3,800 persons per square kilometre. The sprawling nature of the city has resulted in Canberra becoming one of the most expensive cities to maintain and operate in the country. Its employment base is heavily reliant on government, comprising almost 40 per cent of the workforce.

There are important lessons that Canberra's planning and development can teach governments, especially in developing countries, which may be proposing to build or relocate national capitals and new towns to support decentralization or create symbols of national or subnational unity. First, it is important to establish well-run development authority; second, that low-density development, while looking attractive, increases transport and long-term operation costs for cities; third, it is essential to have economic development policies that encourage diversity of the economy to avoid becoming one-industry towns. Finally, good transport and communications links to primary and other larger secondary cities are critical to developing trade and investment opportunities.



The parliamentary axis, which defines the formal space and structure of Canberra, Australia. © Brian Roberts (2014) for regional growth centres. Two of these were supported, but the programme was later abandoned after a change of government. In the 1990s the federal government supported a Aus\$800-million programme to support inner-city redevelopment and expansion and improvement programmes for secondary towns through the Building Better Cities programme. This programme was to be very beneficial in stimulating investment in the centres of cities, through a partnership arrangement with state and local government and the private sector. More recently, the development of secondary cities has been aided by national initiatives such as the National Broadband Network.

Many of Australia's older, more rural-based, secondary cities are under great pressure, resulting from population decline, yet other cities, based on mining, manufacturing, tourism, education, retirement and defence are growing. There are valuable lessons to be gained from the way some Australian secondary cities have been able to develop and transform their local economies, manage urbanization pressures and develop competitive new industries to compete with larger national cities and internationally for development, trade and investment.

Australia is a relatively young, wealthy, highly urbanized and fast-growing country. It is unique in the sense that most of its cities are located on the coast. It also has a range of secondary cities that are all undergoing significant transformations as a result of the Australian economy becoming more integrated into the global economy. Lessons gained from Australia's experience in the management and development of secondary cities that could be transferred and applied in developing countries are:

- Clear separation of powers, fiscal and devolution arrangements between the three levels of government.
- Well-developed partnerships between levels of government and the private sectors in support of local development, economic diversification and leveraging capital for essential strategic infrastructure projects.
- Strong commitment to urban strategic planning and good governance practices.

## 7.6 Learning Outcomes and Observations from Regional Case Studies

This study of the regions shows that there are significant differences and some similarities in the way countries approach the development of secondary cities. The following important lessons and observations are drawn from the analysis of cases.

## 7.6.1 Governance and Decentralization

Most countries have adopted policies to support decentralization, as well as national and regional economic development and urbanization plans. However, the success in implementing decentralization and urbanization policies is mixed. In federated states (such as Australia, USA and, to a lesser extent, Brazil), where there is a high level of decentralization and devolution of government functions for property, development, taxation, economic development, community and social services, secondary cities tend to be more dynamic and competitive economies with low socioeconomic disparities between systems of cities. In countries where there is a high level of central control and the responsibilities of local government are limited (such as Bangladesh, Tanzania and Venezuela) the development disparity between secondary cities is much greater. The lesson from this report suggests that the greater the levels of decentralization, devolution and autonomy secondary cities have, the more competitive, dynamic and self-sufficient they are likely to be. Disparities in the level of development between systems of cities are also significantly less.

## 7.6.2 National Policies on Urbanization

Some developing countries have had strong anti-urbanization bias or policies and actively try to prevent people migrating to cities. Most of these countries have very low levels of urbanization. There is a strong positive correlation between the level of urbanization and economic development. Many countries recognize this and have developed national urban-development plans to support greater diversification and a broad mix of city sizes in the make-up of their urban systems. National physical development plans show the desired pattern of urbanization and development; however, they are often prepared in isolation to national social-economic plans. As a result there is very poor linkage of the dependencies between them. There is a tendency for a much larger proportion of public resources per capita to end up supporting the development of the nation's largest cities, leaving the system of cities under-resourced and lagging well behind in the provision of infrastructure and essential services. There is a poor understanding by governments of what resources are needed to support the development of a national system of cities, and how public resources should be allocated to support the development of entire urban systems. The lessons gained from this report in countries that implement urbanization policies to improve the overall efficiencies and development of the national system of cities are clear. They are much more successful in managing urbanization, city development and ensuring equity between cities than countries that allocate a disproportionate amount of their public resources to the development of one or two large cities.

## 7.6.3 Competitiveness of Secondary Cities Development

The important lesson gained from the case study above is that secondary cities must learn to become more competitive with each other. This does not mean that all secondary cities need to be internationally competitive, but they must become more nationally competitive (Brotchie et al., 1995; Begg, 2002; Harris, 2007). Some cities, by virtue of the link they have with the global system of cities and trade, will always have to focus on being internationally competitive. Others will only need to compete within a national league of cities. What is imperative is that laggard cities must focus on enhancing their governance efficiency and business competitiveness.

Countries that seek to measure and encourage greater competition between cities, such as Switzerland, and, more recently, India and China, are forcing local governments to take measures to enhance city competitiveness and liveability to attract jobs and investment. Some cities, such as Pusan (Korea), Curitiba (Brazil) and Seattle (US), have been very successful in focusing the machinery of government to increase the competitiveness of cities. Many secondary cities in developing countries have no understanding of how to become more competitive and national governments do little to encourage them to do so. Countries that actively foster competition and trade between cities have the most competitive secondary cities.

What must be avoided in enhancing the competitiveness of cities is subsidies and discounts to buy in industries. These may have worked when national economies were protected and gave some cities and regions a comparative advantage. Tax incentives, low labour and infrastructure costs and environmental standards will not win the hearts and minds of more selective and environmentally conscious consumers – especially in developed-economy export markets. Cities, especially secondary cities, must focus on ways to create competitive advantage for local firms through improved efficiency of government services and business practice.

One way of helping secondary cities to enhance competitive advantage is through collaborative competition. Ben Hecht, President and CEO of Living Cities, states that "collaboration is the new competition" (2013). Cities won't be able to solve their problems without collaborating. Two good examples of this are Glasgow and Edinburgh (Noone, 2007), which are seeking to collaborate in the sharing of knowledge, infrastructure and services to overcome some of the weaknesses they have in these areas. Another good example is the cross-country collaboration between Singapore and the secondary cities of Johor Bahru (Malaysia) and Batam/Bintan (Indonesia) (Heng, 2006). These cities collaborate on the manufacturing and export of products. Each city has specialized roles in the production of a wide range of manufactured products, with integrated supply chains between the three. The collaboration has given the three cities a global competitive advantage in the production of chemicals and the manufacture of technology-based equipment.

### 7.6.4 Tapping Into and Developing Latent Capital

Unlocking and capitalizing on latent capital is a high priority for South Asia, sub-Saharan Africa and Central Latin American countries, where attracting investment to create sustainable employment is a major challenge for secondary cities. This cannot be achieved without significant policy reforms at central-government level, which give secondary cities the opportunities and powers to capitalize and leverage assets to make local urban land, property and financial markets function more efficiently and effectively.

Growth-pole policies are often criticized by economists as government picking winners and pushing supply-side economic growth strategies. Development models that have failed in the past. Many developing countries have demonstrated that the development of growth poles can provide the catalyst for transforming and developing secondary cities. The focus, however, must be on demand-side expansion, by unlocking the latent underperforming capital tied up in assets, land, human capital, governance and tax-revenue collection potential, to expand opportunities for formal-sector employment and regional investment in land and housing development, transport and trade-based construction industries, health, financial and ITC, and education services.

With reform to domestic capital markets and banking systems there is great potential to collateralize under-utilized public and private assets in secondary cities. This model underpinned Korea's and Chinese Taipei's development. Initiatives to unlock and develop local-capital markets and improve economic governance systems are needed if developing countries are to ensure a more balanced and sustainable pattern of urban growth and development – especially in secondary cities.

#### 7.6.5 Rectifying the Imbalances in Systems of Cities

The overconcentration of economic output in one (or sometimes two) very large cities also increases the vulnerability of national economies to catastrophic events and shocks, as occurred with the Bangkok floods of 2011. Countries where urban systems appear to be more balanced and efficient are those where there is a wide geographic spread and hierarchy of cities and there are high levels of connectivity, competition and trade between them. Rectifying imbalances between systems of cities requires strong national policies in directing a higher level of per-capita resources to secondary cities and regions where government wants development to occur. These policies have been successful in countries such as Korea and Australia, and to a lesser extent Brazil, India and China. It is also important for governments to encourage competition between secondary cities and the leveraging of resources, so that secondary cities and regions mobilize latent capital to match national government funds for major infrastructure projects in cities, as was initiated by the National Urban Renewal Mission (JNNURM, 2005) in India and the Building Better Cities Program in Australia (Auditor General, 1996).

## 7.6.6 Getting Urban Systems Integrated and Flowing

Flow systems are perhaps the most important factor in supporting the development of secondary cities in getting urban systems integrated and flowing and keeping them going. Urban systems in most secondary cities are poorly integrated, badly designed and therefore weak. Secondary cities need flow systems (material, information, finance, governance and utilities) capable of supporting supply chains that keep government, business and communities operating. Urban systems tend to become damaged, rundown or neglected, which impedes their operation. No matter how weak these systems are, many are remarkably adaptable and can be patched up to provide a system that operates. Studies have shown that minimal expenditure on fixing and maintaining basic urban infrastructure can add 2 per cent to the GDP of economies (Kessides, 1993), while improving information, logistics and governance systems can add significantly to improving the productivity and livelihoods of people living in cities. However, the efficiency of urban systems is reliant on quantity, quality, level of use, availability of resources and the governance systems used to plan, develop, operate and maintain them. Investment in human-capital development is the most essential to improve the integration and flows in urban systems in secondary cities.

## International Development Assistance Support for Secondary Cities Development

The growing disparity between the development of primate/large metropolitan regions and secondary cities has led to renewed interest by international development agencies (UN-Habitat, 1991; Boeck et al., 2009; Lynelle, 2012; OECD, 2012) in ways that will achieve more balanced urban systems in countries. This section of the book provides an overview of approaches being taken by international Official Development Assistance (ODA) and International Finance Institutions (IFI) to support the urban-sector development since the 1980s up to the present, and initiates to support the development of secondary cities. It includes a brief discussion about aid effectiveness, which has relevance to the urban sector and secondary cities.

# 8.1 Brief History of Official Development Assistance (ODA) to Secondary Cities

The United Nations Development Programme (UNDP), with the IFIs such as the International Bank for Reconstruction and Development (IBRD or World Bank) and the International Monetary Fund (IMF), began to focus on large-scale investments of capital and technical expertise into the urban sector in the 1960s, as part of a strategy to induce Western-style industrial development in developing countries. Korea and Japan were the first nations to benefit, followed soon after by South-East Asian and Latin American countries. Sub-Saharan Africa is one region where IFI programmes have not given sufficient support to industry development. While the approach by the UN and IFIs was successful in assisting with the development of many countries, for some countries in Asia, Latin America, North Africa and, to a lesser extent, Asia Minor, industrialization has been far less successful, with many countries unable to pay debts or having to restructure them.

During the 1970-1990s, UNDP and International Development Financial Institutions (IDFIs) began to broaden their interest in urban-sector development and began to engage in an extensive range of urban projects designed to support the planning, upgrading and development of systems of cities. The broader areas of urbanization and its impacts related to land, housing, environmental and community development were not a significant agenda issue for the United Nations until the 1976 Habitat I conference in Vancouver. UN-Habitat was established in 1978 to focus on the UN's agenda for urban-sector activities. One of the most significant programmes of urban-capacity building under the UN agenda was the UNDP, UN-Habitat, World Bank Urban Management Programme (UMP). UMP provided a framework for the integrated approach to the planning, management and development of cities.

By the late 1990s UMP and other initiatives, such as the Healthy Cities, began to come to an end. The UN went through a period of uncertainty, with a series of funding crises making it difficult for the organization to focus on agendas that would have a significant impact on solving the problems of developing countries. The failure of many internationally assisted development programmes to address adequately problems of poverty, slums, sustainability and environmental issues brought governments together in 2000 to sign the millennium development goals and to form an international action plan to increase the amount of aid by 2015 to 0.7 per cent of Gross National Income (GNI) and to target poverty reduction in eight areas. The signing of the Paris Declaration in 2005 resulted in 91 countries making a joint agreement on aid effectiveness, focusing on the principles of recipient-ownership, alignment, harmonization, managing for results and mutual accountability. More recently, several international development-assistance agencies have conducted their own reviews of aid effectiveness in order to better target international development assistance (DFID, 2011; JICA, 2004; AusAID, 2012). Several of these (for example DFID, JICA and AusAID) have highlighted the need to focus on urban issues.

For more than a decade there has been little effort made by United Nations or IFIs to target support for the development needs of secondary cities. Many UN, ODA and International Statistical Institut (ISI) programmes for regional development indirectly support the development of small city/town improvements and Local Government Unit (LGU) capacity-building. Most of the large urban-sector programmes have tended to focus on large-sector projects to improve roads, water and sanitation in cities with populations of more than 1 million. As a result, support for secondary cities has fallen into a funding gap between large and small urban settlements (World Commission on Environment and Development, 1987; Kessides, 2005). The UN and IFIs have supported secondary city development initiatives in the 1980-1990s, but in comparison with the funds allocated to large and small cities these have been relatively small. Given the role and importance secondary cities have as intermediaries in national systems of cities, much greater attention by the UN, ODAs, IFIs and NGOs is needed to assist the development of secondary cities.

## 8.2 Policy and Programme Initiatives by International Development Agencies

The involvement of Official Development Agencies (ODA) in the urban sector has been cyclical. For the bilateral agencies, national foreign political policies tend to have had a strong influence on shaping aid programmes. Some bilateral programmes have a notable aid-trade link; others are more aligned to supporting the UN Millennium Development Goals (MDGs). The following summarizes key programmes and initiatives of IFIs, multilaterals and bilateral agencies in the urban sector. Some activities associated with the organizations have links to the Cities Alliance.

## 8.2.1 United Nations

## United Nations Development Programme (UNDP)

UNDP has had a long involvement in urban activities. In 1986, the Development Assistance Committee of the Organization for Economic Cooperation and Development (OECD) held the first-ever meeting focused on urban development with background papers prepared jointly by UNDP, the World Bank and United Nations Centre for Human Settlements (UN-Habitat). That same year the three agencies working with a number of bilateral partners (including the Netherlands, Sweden, Switzerland, the UK and Germany) launched the Urban Management Programme (UMP) (UN-Habitat, 2000). UMP was designed "to improve the contribution which cities and towns make to sustainable development in the fields of participatory governance, alleviation of urban poverty and urban environmental management". This was the first major commitment by UNDP to an urban-sector programme. In addition to supporting regional- and country-based urban-management initiatives, the UMP published a series of excellent guidelines and working papers, many of which remain useful for local authorities and their development partners to this day.

UNDP's engagement in urban programmes peaked in the mid-1990s. At its peak UNDP financed over 90 per cent of UN-Habitat's technical cooperation activities and, in effect, the agency served as UNDP's technical cooperation arm for housing and urban development. Since then UNDP has not really had a strong interest in urbanization for more than a decade. More recently, however, UNDP made the decision to investigate re-engaging in urban-sector activities in Asia and the Pacific. The draft strategy under consideration by UNDP has a focus on national urban-policy development and secondary cities targeting urban governance: land management, poverty alleviation, and job and business creation. Given the organization's limited resources, a strong emphasis will be given to partnering with multilaterals and international development banks to implement a targeted programme of activities.

## United Nations Human Settlements Programme (UN-Habitat)

From its establishment in 1978, UN-Habitat has struggled almost alone among multilateral organizations to provide the focus on problems stemming from urbanization and the growth of cities in the developing world. UN-Habitat has been guided by the Habitat Agenda and the Millennium Declaration. In the 1990s, UN-Habitat commissioned a series of studies on secondary city development; however, not all of these led to ODA and IFI assistance. It was also a very successful partner in the UMP, as discussed above. A number of UMP activities had a focus on secondary city development.

The organization's strategic goal is to support governments and their development partners to achieve more sustainable urbanization. The organization aims to promote policy and institutional reform in order to have impacts at the appropriate scale. The key cross-cutting issues as set out in the agencies' strategic plan are gender, youth and response to human settlements in crisis, all of which feature prominently in the first five focus areas of the plan. These include:

- Effective advocacy, monitoring in partnership
- Participatory planning, management and governance
- Access to land and housing for all
- Environmentally sound and basic infrastructure
- Strengthening human settlements in finance systems
- Excellence in management.

UN-Habitat's country activities are extensively focused in Africa, with smaller programmes in Latin America, Asia and the Pacific. Country-programme activities are focused mainly on supporting governments in the formulation of policies and strategies to create and strengthen self-reliant urban planning and management capacity at both national and local levels and to promote sustainable urbanization. UN-Habitat's normative and analytical contributions towards achieving the objectives of its targeted programme-area activities are reflected in its latest *State of the World's Cities 2012/2013* report (2012), which introduced a new City Prosperity Index (CPI) to guide integrated policy interventions. The interventions include five dimensions aimed at improving the quality and sustainability of urban economic growth: productivity, infrastructure development, quality of life, equity and social inclusion, and environmental sustainability.

## Other UN Agencies

Other UN agencies have become involved in urban-sector projects, some at a secondary-city level. The Healthy Cities Programme (HCP) was initiated by the World Health Organization (WHO) in 1986 and focused on creating healthy-supportive environments, good quality of life, basic sanitation and hygiene needs, and health-care services with the provisions of schools, hospital facilities and clinics in many regions. Most of the programmes are aimed at ensuring that secondary cities have better health facilities. The Sustainable Cities Programme (SCP) was a joint UN-Habitat/United Nations Environment Programme (UNEP) facility established in the early 1990s to build capacities in urban environmental planning and management. The programme targets urban local authorities and their partners and had a key role in localizing Agenda 21 programmes in municipalities and secondary cities. Other UN agencies, including International Labour Organization (ILO), United Nations Industrial Development Organization (UNIDO), United Nations Department of Technical Cooperation for Development (UNDTUD) and Food and Agriculture Organization (FAO) are involved in urban-sector activities, mainly providing knowledge services and project technical support.

## 8.2.2 World Bank Group and Regional Development Banks World Bank

The World Bank has had a long engagement in urban activities in all regions. The Bank's interest in urban-sector activities began in 1969 with the creation of the Special Projects Department (SPD), which was responsible for inter-sector, multi-purpose and very large projects. The Urbanization and Regional Projects Department (SPPRB) was one of the three departments under the SPD. Since it first engaged in urban development, the World Bank has undergone a number of changes in the organizational arrangements and programme emphasis on urban-development activities. Its initial urban focus was on supporting large infrastructure programmes and later sites and services upgrading - especially in Africa and Asia. Many infrastructure projects were completed for large secondary cities. Later the bank expanded its urban range of programmes under the UMP and other programmes to include housing, land development, environmental improvements and capacity-building support to local governments. These programmes are documented on the bank's website (World Bank, 2012a). Many of the Bank's initial urban-project activities have strong sector emphasis, but in recent years there has been a more integrated approach to the design and implementation of urban-sector projects, which have included an increasing number of social and environmental safeguards.

The World Bank is the largest provider of urban-development finance in developing-region countries. Its broad-based programmes over the years, while mostly sector-orientated, cover virtually all types of urban investments. Over the last decade there has been a growing focus on secondary cities and institutional reforms – especially in sub-Saharan Africa. The previous strategy (World Bank, 2000) focused on urban and local-government assistance with seven strategic areas of focus:

- (i) Cities and economic growth
- (ii) City management and governance
- (iii) Urban poverty and slum upgrading
- (iv) Urban planning
- (v) Land and housing

(vi) Intergovernmental fiscal relations and municipal finance

(vii)Urban environment and climate change.

The Bank's most recent strategy (World Bank, 2009) focuses on helping civic leaders and national authorities to think through and implement policies and programmes of benefit to their cities. The strategy will, it is hoped, result in more equitable, efficient, sustainable and environmentally friendly cities. The strategy recognizes that density, agglomeration and proximity are fundamental to human advancement, economic productivity and social equity in cities. This needs to be well managed in making cities more sustainable. It adopts a systems approach to the development and management of cities, focusing on improving the core elements of city systems and a range of cross-cutting issues. There are five business focal areas considered critical for cities and local governments:

- (i) Focusing on the core elements of the city system: city management, finance and governance
- (ii) Making pro-poor policies a city priority: reducing urban poverty and upgrading slums
- (iii) Supporting city economies: cities and economic growth
- (iv) Encouraging progressive urban land and housing markets: urban land, housing and planning
- (v) Promoting safe and sustainable urban environments: urban environment, climate change and disaster management.

## The Asian Development Bank (ADB)

The ADB 2012 Urban Operational Plan (UOP) (ADB, 2013) sets out future directions and approaches for ADB urban-sector operations, which proactively responds to current and anticipated future needs by addressing the investment opportunities and programmatic issues hindering the efficient, sustainable and equitable development of urban-sector projects and the ensuing financially sustainable investments on which these depend. The UOP is developed around a 3E framework, which sets out an integrated approach to the challenge of urban development by addressing the environmental (green), equity (inclusiveness) and economic (competitiveness) issues for projects funded by the ADB in Developing Member Countries. The 3E approach provides a more flexible way for the ADB to work with its member countries in the preparation of Country Partnership Strategies (CPS) and annual programming.

The new ADB urban strategy has two focus areas:

- (i) Planning and investing in infrastructure and services, which is informed by:
  - (a) National urban-assessment studies.
  - (b) Integrated urban-planning approaches to project designs incorporating competitiveness, environmental and inclusiveness to project activities.

- (ii) Building effective governance and financing systems with activities to support:
  - (a) Urban governance.
  - (b) Innovative financing.
  - (c) Knowledge and capacity development.

Currently, the ADB is rolling out a series of rapid urban-assessment studies for selected countries in the region. These will help to identify a portfolio of investment activities to be included in country-sector urban programmes. Some of the initial activities involve the preparation of integrated development plans, which have a strong focus on the development of industry clusters in primary and secondary cities and strategic infrastructure needed to support their development. The integrated development plans provide a programme of investment activities including infrastructure, capacity building and technical support for project implementation. ADB's annual total urban lending in 2010/2011 was \$2.96 billion.

The ADB has been engaged in studies of secondary city development and infrastructure projects in Indonesia, Thailand and Vietnam. More recently it commenced several initiatives targeting the development of secondary cities using a holistic approach. Integrated secondary city development studies and technical assistance are planned for Armenia (ADB, 2013), Vietnam (ADB, 2014) and Sri Lanka. Under its city-cluster economic development framework (Choe and Roberts, 2011), other secondary city integrated-development planning initiatives are proposed for Bangladesh, India and China. The ADB is also conducting studies on trade-corridor development with a focus on developing secondary cities as a series of hubs that are engaged in value-adding activities that feed into supply-chain systems supporting firms and markets in megacities that lie within, or at the ends of, corridors. These include the Ho Chi Minh City-to-Bangkok, Singapore-to-Hanoi and trans-Asia-to-Europe corridors.

## African Development Bank (AfDB)

In 2011, the AfDB launched a new urban strategy (AfDB, 2011) to enhance the effectiveness of its urban-programme activities in Regional Member Countries (RMC). This strategy has a strong focus on boosting the viability and competitiveness of African cities to ensure they perform better in stimulating the economic growth and social development. The Urban Development Strategy (UDS) has three pillars aligned with the Bank group's strategic orientations. These are:

- (i) Infrastructure delivery: In line with its operational priorities, emphasize the delivery and expansion of basic infrastructure services; building capacity for maintenance of public infrastructure assets.
- (ii) Governance: To strengthen the corporate governance and the managerial capacity of municipal authorities to promote a culture of transparency;

strengthen anti-corruption safeguards; build the capacity for urban planning. A key element of the governance focus is to support reforms for fiscal decentralization by assisting municipalities to improve financial and administrative management systems.

(iii) Private-sector development: To support private enterprises across the full business spectrum, from small enterprises to mega enterprises, focusing on creating conducive environments for private-sector investment, including the promotion and strengthening of local financial markets.

Other priority areas include promoting viable Public Private Partnerships (PPP); developing legal and regulatory frameworks aimed at reducing transaction costs for business development and providing long-term financing to governments, municipal authorities and private investors in support of investment programmes for cities.

The activities supported under each pillar will be implemented within the broader national development agenda of RMC, the need for sustainability and alignment with Country Strategy Papers (CSP), and other key Bank group policies and strategies. The strategy also covers cross-cutting themes including knowledge-generation, regional integration, environmental protection and adaptation, resilience to climate change, gender equality and the empowerment of vulnerable segments of the population, as well as the strengthening of the urban-rural linkages. The AfDB has been engaged with United States Aid for International Development (USAID) in secondary city development projects in West Africa (Yacoob and Kelly, 1999) and support for growth pole development in Mozambique (Gantsho, 2008).

## Inter-American Development Bank (IADB)

The IADB urban development policy (IADB, 2011) is multi-sector and includes economically productive and social aspects of urban development, as well as those relating to institutional organization and the provision of basic urban services. The policy is complemented, but not necessarily integrated with, other bank operational policies on industrial development, transport and social infrastructure. The objectives of the urban policy are:

- Support of projects that generate income and opportunities for productive employment, especially for the low-income sectors, including the increase in productivity of small economic units that operate at low levels of capital intensity per employee.
- Creation of new units of this size.
- Focus on present shortcomings in urban infrastructure and planning for future needs for expansion in this area; improve the quantity and quality of basic services for the population in the cities, especially for low-income sectors.
- Reduction of the adverse effects of urban growth on the environment.

The three fields of activity covered by the urban policy eligible for loans and technical cooperation from the Bank on sector or multisector arrangements, in the following fields of activity or combinations thereof include:

- (i) Provision of infrastructure and services.
- (ii) Generation of income and productive employment.
- (iii) Strengthening of urban-development institutions and instruments.

To strengthen the national urban systems and improve the internal functioning of the cities, the IADB policy and programmes will give priority attention to:

- The needs of small and medium-sized cities.
- Expansion of the economic base of cities and promotion of interrelationships between the population clusters and their surrounding rural areas.
- The concentration of lending and technical assistance to efforts, in the case of large cities, on the physical and economic integration of marginal settlement areas with the rest of the city.
- Increasing the effectiveness of the institutions responsible for the formulation and administration of urban-development policies and programmes, by means of supporting countries to:
  - (a) Increase the national, regional and local capacity to define priorities and strategies, formulate, implement and evaluate plans and projects, and channel resources to cities, of towns and specific social groups.
  - (b) Generate and transfer methods and techniques for the improvement of the administration of metropolitan areas and small and medium-sized cities.
  - (c) Strengthen the financial solvency and the initiative and managerial capacity of local governments.

The IADB is the only international development bank to specifically target secondary and smaller cities as a priority for its lending and technical assistance programmes. The Bank policy specifically supports efforts made by the countries in the following ways:

- To avoid overconcentration of population, services and economic activity supporting the development and consolidation of subsystems of small and medium-sized cities.
- To encourage countries to direct investments to places where development opportunities present themselves, making possible greater utilization of the nation's economic potential.

## The Cities Alliance

Cities Alliance is a global partnership for urban poverty reduction and the promotion of the role of cities in sustainable development. Cities Alliance's vision "sustainable cities without slums" supports three focus areas of activities under its charter:

## FIGURE 8.2

#### Implementation Framework for Cities Alliance Programmes **Outputs and Activities of Cities Alliance Country Programmes** National policy frame-Local inclusive strategies Capacity of cities to Mechanisms to engage works developed and/ and plans developed and provide improved citizens in urban or enhanced to address implemented services to urban poor governance developed urban-development needs strengthened • Develop national urban • Develop methodology for • Enhance city management Establish national, city and policies CDS and slum upgrading capacity settlement-level forums Build capacity to train urban • Develop CDS and slum Establish city upgrading Support organizations of the upgrading plans in selected planners funds urban poor • Strengthen city associations cities • Consolidate linkages • Build regional and national • Profile and map settlements networks of the urban poor between planning and investment NATIONAL UZEAN PO

Source: Cities Alliance Secretariat (2014)

- (i) Citywide and nationwide slum upgrading programme
- (ii) City-development strategies
- (iii)National policies on urban development and local government.

A good example of an activity supported by Cities Alliance is its programmatic approach through the Cities Alliance country programmes in Uganda, Mozambique, Burkina Faso, Ghana and Vietnam. Country programmes are longer-term, programmatic approaches, led by a group of Cities Alliance members, to enhance cooperation among national and local governments, urban-poor communities, investors and other partners. Country programmes focus on achieving four main outputs deriving from the Cities Alliance results framework: national policy frameworks, local inclusive strategies, building capacity of cities and mechanisms to engage citizens (see Figure 8.2).

The Cities Alliance Country Programme in Uganda, for example, has leveraged US\$150 million in finance from the World Bank to improve urban infrastructure and service delivery in 14 Ugandan municipalities. Launched in 2010, the Transforming the Settlements of the Urban Poor in Uganda (TSUPU) programme is fast becoming recognized within the global community as an example of best practice. It has

established the importance of alignment at the national, municipal and civil society levels, and demonstrated how such alignment brings greater coherence of effort both within government and from its support partners.

Initially focused on the five secondary cities (Arua, Mbale, Mbarara, Jinja and Kabale) TSUPU mobilized nearly 14,000 slum dwellers into 303 savings groups, which were federated into committees at the settlement and city-development level. These organizations of the urban poor worked in partnership with municipalities to identify and prioritize projects and then oversaw their implementation. The projects were financed by small grants from a fund located within the municipal government. The practical experience gained through this process provided the upfront institutional framework to support the World Bank's US\$150 million Uganda Support to Municipal Infrastructure Development (USMID) project, expanding TSUPU from 5 to 14 secondary cities.

The nine new TSUPU towns are: Gulu, Lira (northern Uganda), Soroti, Moroto, Tororo, Entebbe, Masaka, Fort Portal and Hoima.

In all of these cities, the TSUPU initiative will help to ensure that the urban poor are actively engaged in planning as citizens with rights and responsibilities. It will also help to ensure effective oversight of government budgeting and expenditure.

#### City Development Initiative for Asia (CDIA)

CDIA was established in 2007 as a regional support facility to cities established by the ADB and the government of Germany, with additional core funding support of the governments of Sweden, Austria, Spain and the Shanghai Municipal Government. The initiative provides assistance to medium-sized Asian cities to bridge the gap between their development plans and the implementation of their infrastructure investments. CDIA adopts a demand-driven approach to support the identification and development of urban investment in mainly infrastructure projects in the framework of existing city-development plans that emphasize environmental sustainability, pro-poor development, good governance and climate change. The operational objectives of CDIA are to improve urban infrastructure and services management through:

- Providing technical assistance to governments in structuring priority infrastructure projects to a stage where they are able to be financed and helping cities to structure their projects in such a way as to attract market-based international private investment.
- Strengthening local institutional prerequisites for the development of capital investment infrastructure projects and urban services.
- Promoting regional dialogue and cooperation on urban management in the Asian region in order to enhance cross-learning from good local practices.
#### 8.2.3 International Development Assistance (Bilateral) Agencies

There are many international development-assistance agencies engaged in supporting urban development and institutional capacity-building projects and programmes. The following briefly discusses the focus of the largest international development-assistance agencies.

#### UK Department for International Development (DFID)

In 2001, the UK DFID released an urban-sector strategy (DFID, 2001) with a focus on the following:

- Participatory government.
- Pro-poor regional growth.
- Support for national governments to strengthen legislative and regulatory frameworks within which city-based development takes place.
- Strengthen efforts by the international community to support the urbanization process, which involves the participation of poor people.
- Improve DFID's capacity to address the urban challenge through information support, knowledge and research development.

In 2009 DFID began a strong focus on city development and in recognizing the needs of secondary cities (Allen, et al., 2012). More recently, the UK government announced a change of focus in its aid programme (DFID, 2012), which sets out its priorities for the focus on urbanization. The key features of the policy include a focus on:

- Developing future-proofed urban strategies: to address, in an integrated way, environmental, social and economic objectives. Building on sound diagnostic work, more cities should be supported and encouraged to develop integrated strategies and programmes of investment that are future-proofed.
- Unlocking and aligning finance including climate finance for future-proofing: by scaling up finance to cities, including small and medium-sized cities, encompassing efforts to overcome the market and governance failures that often deter investment in future-proofing through the use of financial and non-financial instruments such as feed-in tariffs to encourage investment into renewable energy generation.
- Undertaking urban-risk diagnostics, including an assessment of vulnerability to risks, capacity to act, as well as an analysis of scale, projected pace of change and physical geography.
- Strengthening the capacity of urban governance, planning and delivery systems to improve the ability of cities to respond to risks and make systemic institutional changes to mobilize and engage with local communities in decision-making and solutions to urban-development problems.
- Improving the data and evidence underpinning city decision-making needed to

support accurate assessments of environmental risks.

- Additional research and guidance to data and evidence, to improve global knowledge of the range of environmental risks relevant to cities in developing countries and what can be done about them.
- Identifying risks to existing and planned investment portfolios: focusing on owners and managers of assets in cities to pay greater attention to the risks to investment portfolios and operations.

#### United States Agency for International Development (USAID)

USAID has had a long history of engagement in urban-sector activities. In 1984, the organization developed its first urban-sector policy (USAID, 1984), which focused on the following:

- Support for country economic-development policies for the private sector and job creation
- Housing policies and programmes for the urban poor
- Development of human resources
- Urban institutional development
- Support for hazard-resistant codes and enforcement.

Over the years, the USAID concentration on urbanization has changed, with many of its urban-related activities incorporated into the primary programme areas with a focus on:

- Agriculture and food security
- Democracy
- Human rights and governments
- Economic growth and trade
- Education
- Environment and global climate change
- Frontiers and development
- Global health
- Science, technology and innovation
- Water and sanitation
- Working in crisis.

Urban-programme activities run by USAID are largely determined on a regional and country basis. USAID, until recently, has had its urban activities encompassed in operational areas under economic development and trade; environment and climate change, and water and sanitation. In September USAID announced than an initiative to target secondary cities for development beginning with a Cities Development Initiative (CDI) (USAID, 2012) in the Philippines. The initiative focuses strategically in selected cities to promote inclusive economic growth. It is not clear whether this initiative will form part of a broader roll-out for city-development initiatives in other developing countries.

# German Federal Ministry for Economic Cooperation and Development (BMZ)

BMZ has been engaged in urban activities in many developing countries and cities for more than four decades. According to the BMZ's Sector Strategy Paper on Sustainable Urban Development lasting improvements (BMZ, 2014), in particular, are to be made to the living and working conditions of the poor urban population. The goal is to tap into the potentials in urban centres to benefit each country's economic development and at the same time to preserve the natural resources available in cities and their surrounding areas. The ministry has a specific urban-sector policy and it has been a strong supporter of UN-Habitat, Cities Alliance and City Development Initiative for Asia. More than 210 urban-development projects (BMZ, 2014), with a total volume of some 2.1 billion euros (Technical and Financial Cooperation), are currently being carried out in over 50 countries, mostly through its technical implementing agency, the Deutsche Gesellschaft Für Internationale Zusammenarbeit (GIZ) GmbH, as well as the financial bank, the Kredit Anstalt fuer Wiederaufbau.

Through GIZ, BMZ's urban-development activities focus on five key themes:

- Poverty-reduction and social integration in cities: including support to city councils in partner countries in establishing and expanding the economic and social infrastructure as well as the poor's access to basic services.
- (ii) Sustainable urban development for climate protection and resourceefficiency: including support for the setting up of integrated urban environmental management plans and systems, which enable cities to plan local development in an environmentally sound and socially responsible way, including for climate-change adaptation measures.
- (iii) Decentralization: good governance and local action, including a focus on the provision of technical assistance and services to put the use of public resources on a more transparent, efficient and needs-based footing, and to strengthen political participation in local government.
- (iv) Needs-based, efficient urban management involving assistance to local authorities to build and strengthen capacities, so they can manage all local concerns under their own responsibility including levying taxes, charges and fees, environmental management and exercising local planning autonomy.
- (v) Regional development, spatial planning and inter-municipal cooperation involving a focus on sustainable regional development, which takes account of, and promotes, the productive exchange between municipalities as well as cities and the countryside. Projects in the fields include: regional-integration

programmes for urban development, rural development, sustainable economic development, the environment and food security.

#### Japanese International Corporation Agency (JICA)

JICA is engaged in an extensive range of international aid and development activities. Traditionally, JICA has had a major involvement in infrastructure projects and technical assistance to support their implementation. The agency has some 20 operational focus areas in more than 100 countries.

One emerging programme area for JICA is in sustainable urban and regional development. JICA has traditionally provided support for urban master planning and comprehensive regional planning with technical assistance and cooperation for the execution of these plans.

JICA has five priority strategies to advance its agenda:

- (i) Analyze urban and regional problems
- (ii) Create medium- to long-term visions
- (iii) Formulate development policies
- (iv) Draft plans by sector
- (v) Propose action plans for implementation.

More recently, its urban-sector programmes included enhancement of regional administrative systems in line with the country's state development policies; local economic development that prevents the negative effects of urbanization and programmes to correct disparities between regions by promoting balanced regional development that recognizes the perspectives of its residents.

#### 8.2.4 International NGOs and Professional Volunteer Organizations

There are many international NGOs and professional associations engaged in urban-sector activities in developing-region countries. These often play a valuable role in filling a gap as intermediaries between international development-assistance agencies and the targeted communities, which may benefit from an urban-activities programme. Organizations such as Habitat for Humanity International (HFHI) focus on housing for the poor, Oxfam focuses on poverty-alleviation and disaster-management recovery, as does the International Red Cross, Red Crescent and Habitat International Coalition (HIC), which has been working in housing and human settlements for more than 30 years. In developing countries there are hundreds of smaller NGO and Community-Based Organizations (CBO), which are involved in mainly localized urban issues and causes. These organizations often play a key role in winning community support for change and mobilizing local residents to provide resources and labour for urban improvement and housing projects.

Professional organizations offer opportunities for professional and skilled trades

people to provide volunteer support to urban programmes. Engineers Without Borders (EWB, 2013), which grew out of support for the recovery of East Timor, has expanded into a global network to provide volunteer support for urban projects in different countries. The Australian Planning Institute (PIA, 2005) support for building planning capacity in regional towns and cities, in association with the former AusAID, is an example of a partnership with a professional organization that has strengthened the capacity of planners in towns and cities outside metropolitan Colombo, Sri Lanka.

#### 8.2.5 United Cities and Local Governments (UCLG)

UCLG represents and defends the interests of local and regional governments and their associations on the world stage through cooperation between local governments, and within the wider international community, regardless of the size of the communities they serve. Through its decentralized cooperation programme UCLG enables and encourages sharing and learning, particularly to promote planning instruments and methods, as well as inter-municipal cooperation on local, regional, national and international levels. UCLG is working more specifically within the Cities Alliance partnership to promote and support Urban Strategic Planning and City Development Strategies (CDS). In recent activities, the increasing importance of intermediary cities has been highlighted and identified as a priority for further engagement.

## 8.3 Summary of Official Development Assistance of Urban-Sector Activities

The extent to which multilateral and bilateral agencies have engaged in urban-sector projects and programmes has varied significantly over time and between regions and countries. Some agencies are beginning to focus their aid and development-assistance programmes geographically, in response to national policy agendas and priorities set by governments that are recipients of assistance. It is difficult to obtain accurate information on the value of aid and development assistance to the urban sector, since many projects are often included in regional-development programmes, which benefit both rural and urban areas. Figure 8.2 shows how the general focus of multilateral and bilateral assistance to urban-sector activities under the broad heading of infrastructure, economic and social development, and environmental management, urban-governance support and engaging with the private sector.

### FIGURE 8.3

## Urban Focal Areas of Multilateral and Bilateral Aid and Development Assistance

				Inf	rast	ruci	ture	;				Ec de	ono evel envi	mic opn roni	, so nent mer	cial t & nt			(	Gov	ern	anc	e		ob	Priva secto pera	ate- tor tior	าร
Sector	Rail	WASH	Roads	Ports & airports	Irrigation	Electricity	Energy	Telecom	Industry enterprise zones	Housing & urban	Economic development	Health	Education & training	Community development	Humanitarian	Gender & development	Environment	LGU % decentralization	Legislative & regulation	Institutional capacity	Economic policy reform	Land planning & development	Trade & investment	Security emergency services	SME & micro enterprise	Manufacturing	Tourism	Business & financial services
Multilateral																												
WB	•	•	•	•	•	•	•	•				•			•			•	•			•	•	•	•	•	•	
ADB			•	•	•	•	•	•		•		•		•	•	•	•		•	•	•	•			•			
AfDB	•		•		•	•	٠	•		•		•	٠	•		•	•	•		•	•	•			•			
IADB	•	•	•	•	•	•	•	•		•		•		•	•	•	•					•			•			
IFC		•					•																•			•		
EU											•		•				•											•
UNDP																			•					•				
ILO											•						•	•										•
UNICEF											•			•														
UN-Habitat		•	•															•										
UNHRC										•						•												
Bilateral																												
AusAID																٠			•									
China	•		•				٠			•		•	•															
DFID					•				•				٠	٠	٠		٠			٠					٠	•		•
CDIA											٠			•	٠	•	•			•					•			•
France															٠													
GIZ			•								•					•	•											
India	•												٠														•	
Japan		•	•	•						•					•		•								•	•	٠	
Korea		•	•									•				•		•			•			•				
Kuwait															•													
Malaysia												•	•															•
Russia																												
Saudi Arabia															•													
USAID					•				•				٠	٠	٠		٠			٠					٠	•		•
	•	Hig	gh ir	vest	mer	nt foo	cus			•	Mc	der	ate i	nves	stme	nt fo	ocus											

Source: Land Equity International (2012).

## 8.4 Effectiveness of Official Development Assistance (ODA) Support for Urban-Sector Activities

The experience and effectiveness of development assistance to the urban sector in developing countries varies significantly. There has been a cyclical process of engagement by international development agencies and IFIs in urban-sector activities since the 1970s. The effectiveness of aid assistance has been addressed in several bilateral agency studies and in other reports (Ranis, 2006; Garnett et al., 2009; DFID, 2011; AusAID, 2012). Key issues that have been raised about the effectiveness of aid that have relevance to urban-sector activities include:

- The need for more holistic engagement
- Greater emphasis on innovations in financing
- Municipal management
- Mobilization of local resources
- Development and maintenance of social, physical and economic infrastructure
- The need to address cross-cutting issues, particularly environment and climatechange adaptation.

The Paris Declaration and the earlier Accra Agenda for Action (OECD, 2005 and 2008) set out a number of issues related to improving the governance of aid. The Paris Declaration sets out five core principles across the development community for changing aid practice for better aid effectiveness. These include:

- (i) Nations setting out development strategies with their parliaments and electorates (ownership)
- (ii) For donors to support these strategies (alignment)
- (iii) For donors to work to streamline their efforts in-country (harmonization)
- (iv) For development policies to be directed to achieving clear goals and for progress towards these goals to be monitored (results)
- (v) For donors and recipients alike to be jointly responsible for achieving these goals (mutual accountability).

#### 8.4.1 Effectiveness of Urban Aid

While there has been extensive evaluation of aid effectiveness at agency level, there are few studies that have looked at aid-effectiveness to the urban sector (Garnett et al., 2009). A study by Atkinson (1998) on the Indonesia Integrated Urban Infrastructure Development Programme (IUIDP) identified weaknesses of integration of project management between agencies, with not enough institutional capacity and knowledge developed for the implementation of decentralization policies impacting on smaller cities, and the underestimation of time required to implement programme activities under bank loans. Wegelin (1995) documents the weaknesses of integrating systems

and several other IUIDP programmes conducted in Brazil, India, Mexico and Nigeria.

The African Development Bank Urban Strategy (AfDB, 2011) provides one of the most useful summaries of key issues relating to the implementation of urban programmes. It highlights a number of key aid governance issues, multilaterals and bilateral agencies need to address engaging in urban programmes. These include: Institutional arrangements: Many international agencies engaged in urban activities are reluctant to collaborate and share information, and often bring their own agenda to the design and implementation of projects. To enhance coordination and collaboration on urban-sector activities - especially in secondary cities - it is important to rethink the institutional approach to urban interventions. Institutional arrangements for most urban-sector projects are not very accommodating of integrated and multisector approaches to project design and implementation. Generally, there is a propensity for development agencies and IFI to design projects as single-sector (water, roads and housing) projects and to implement them with limited inter-agency consultation. Some international development agencies are reluctant to collaborate with IFIs, as collaborating can lead to bilateral agencies losing recognition and/or presence. This often happens where one of the international or regional development banks is designated as the lead agency, while a bilateral or government agency does not get equal credit or recognition for the contribution it makes to the partnership.

Long-term planning: Countries that have been most successful in urban development are those with a track record of effective planning and implementation. Urbandevelopment projects need to be incorporated in national urban and regional-development plans, Poverty-Reduction Strategies (PRS), Country Strategy Papers (CSP) and Regional Integration Strategy Papers (RISP). Long-term urban-development planning must also be linked to long-term urban-financial planning in order to identify and secure sufficient funds to provide infrastructure, develop land and housing – especially for lower-income groups.

Leveraging private-sector involvement: There is much potential for private-sector-led and public-private partnership in urban development. However, PPPs are generally only attractive to investors interested in large infrastructure projects related to transport or water sanitation in metropolitan cities. Lacking are vehicles for leveraging private-sector engagement for PPPs in secondary cities. The international development banks and development agencies could take the additional role of transmitting experiences among countries on urban-sector policy and institutional reforms, encouraging PPPs at the local level and the development of small and medium-sized enterprises (SME). There are, however, gaps in bridging finance needed to take the risk in investing in projects in secondary cities, which could be filled by some finance provided by international development agencies.

**Knowledge development:** Urban development requires a multisector approach, touching on a variety of interlocking, technical, economic, social and environmental issues.

A good understanding of the impact of bank interventions on these dimensions will require dedicated analytical work. It will, therefore, be important to undertake studies to inform bank interventions as well as those of other partners.

**Strengthening urban governance:** This requires cities to adapt their development strategies; improve their finances, attract private investors, strengthen their enabling environments, and develop and implement programmes to take care of the poor. The World Bank, regional development banks, UN agencies and CA, in particular, have designed business lines in new urban and local development strategies that build on past failures to address these issues. Strengthening urban governance by adopting more holistic approaches to planning, administration and finance is the most critical factor to improving the implementation of urban-development strategies.

**Urban finance:** The failure of many urban projects can be traced to the lack of capacity to continue financing activities once international development assistance or government grants end. There is a need for all international development agencies and banks to ensure that urban-project activities can become self-sufficient and self-financing once an initial support programme provided finishes. One area of urban finance that has been significantly neglected by international development agencies and banks is enhancing the revenue-collection capacity of local governments through improved tax collection and user-charges, which would be able to fund ongoing community development and environmental services programmes. The failure to link urban-development budget with recurrent expenditure budgets in central and local government agencies is a significant gap in the design of many projects.

**Increasing productivity:** Many urban projects promote equity and social integration, but there is also a need to develop and implement urban-development strategies aiming at increasing urban productivity in the formal and informal sectors, in the private and public sectors, in the entire urban economy. Job creation and investment are absolutely essential to addressing problems of poverty-alleviation, reducing crime and improving the liveability of cities. Many international development-agency projects give lip service to evaluating not just in an economic sense but in identifying ways to develop human and social capital to enhance productivity and performance.

Addressing cross-sector issues: Many urban projects identified the need to incorporate cross-sector issues such as supporting the empowerment of women, addressing the needs of the disabled and marginalized groups. Other cross-sectional issues include climate change and risk-mitigation management. Few urban projects supported by international aid and development-assistance agencies address these issues well. Many projects fail to appreciate that these issues extend well beyond the lifetime of individual projects and must be seen as programmatic activities, the results of which will take many years to be realized. Many cross-sectional issues call for cultural and behavioural changes, which take time and need to be handled sensitively.

Social media engagement: In contemporary societies, with social media and

participatory engagement, these systems are becoming increasingly connected to citizen information systems (distinguished from management information systems) and to mixed, adaptive, conditional models for urban planning and decision-making. The latter permit flexible and continuing responses to dynamically changing urban conditions, including citizen attitudes and reactions, as well as to changing economics and technologies (Cooper et al., 1971). Even in the least-developed countries and cities, the role of social media is having a significant impact on local government decision-making processes. Building social media into local decision-making will become increasingly important in project design, development and implementation for ODA-assisted projects.

#### 8.5 International Development Interest in Secondary Cities Development

International agencies such as United Nations Development Programme (UNDP) and UN-Habitat played an important role in the 1970s in raising awareness of the important part secondary cities have in the development of national urban systems and regional economic development. Secondary cities, however, have tended to take second place in the urban-development programmes involving ODA, with preference going to larger cities. The last period when secondary cities became a focal area of support for ODA and IFI assistance was a series of urban upgrading programmes in the 1980s and 1990s. ODA for secondary cities has fallen into a gap in the competition for funds between rural and urban development in the UN system. The Food and Agriculture Organization (FAO) regular budget for 2012-2013 was US\$1 billion, compared to \$175m for UN-Habitat. With the renewed interest shown by bilateral agencies and governments in secondary cities between secondary and large metropolitan-region cities in developing countries are to be reduced.

Several international-aid and development agencies have identified secondary cities as a focus of ODA support, although there are no specific agencies with fully developed secondary cities programmes. USAID has started a secondary cities programme in the Philippines and two other countries (Sri Lanka and Bangladesh) and ADB has several integrated secondary city development initiatives in progress across Asia. UNDP has identified support for urban governance, land management, poverty alleviation, and jobs and employment creation as areas of programme interest in Asia and the Pacific. Japan International Cooperation Agency (JICA) and Deutsche Gesellschaft für International Zusammenarbeit (GIZ) interest in the development of secondary cities is increasing, but the scope and scale of programme activities by these agencies are still being defined.



What is apparent from the review of key agency policies and programmes related to urbanization is that there is renewed interest in secondary cities, particularly in programmatic activities that focus on urban integrated governance, land management, poverty alleviation, climate-change adaptation, urban finance and tax-revenue collection and local economic development – especially job creation, competitiveness and local investment issues. This renewed interest by multi- and bi-lateral agencies in secondary cities opens up new opportunities for organizations such as Cities Alliance to engage in an expanded programme of activities for secondary cities with its ODA partners.

Cityscape of Putrajaya, the federal administrative centre of Malaysia. © Trinn Suwannapha/ World Bank (2012)

# Key Messages and Concluding Reflections

#### 9.1 Observations and Messages

In this final chapter we seek to give some key messages and recollections on what could be done to make the development of secondary cities more prosperous and sustainable. We also outline the beginnings of a framework to support a process of encouraging governments and development agencies to support programmes of activities to strengthen the capacity of secondary cities and boost their role in the system of cities. If this can be achieved, not only will large cities benefit, but also, it is hoped, the 75 per cent of the world's population that live in rural areas or urban settlements of less than 500,000 people. Secondary cities play a vital link in enabling many of these people to make a living through providing a wide range of support services.

Secondary cities thus play a very important role in the economic, social and physical development of the system of cities in all nations. While there are definitional issues in what constitutes a secondary city, a key feature is the important role such cities play as intermediaries in the system of cities. Secondary cities act as conduits and exchanges in supporting the operations of markets, supply chain systems, multimodal transfer centres and a focal point for subnational/regional governance administration and economic development. They are also important centres for creativity, learning, culture and business development in national and global development.

This book has been involved in making extensive investigations into the phenomenon of secondary cities. The meaning of the term "secondary city" has changed from a narrow definition based on a hierarchy of urban centres calculated on population size to a combination of size, function and the role a secondary city plays in the context of the new planet of cities. The book outlines and analyses trends in the development of secondary cities, globally and nationally, along with the policies and strategies that governments have used to foster their development in different regions and investigate the role played by international development and finance agencies in supporting the development of secondary cities.

The research for this book identifies, and is reinforced by, other recent studies. Governments and development agencies must give a much stronger focus to the planning, management and development of secondary cities if national systems of cities are to develop and grow more sustainably. There are many very competitive and successful secondary cities around the world, but there many others, mostly in developing countries and regions, which are laggards. There are growing disparities in the national and global system of cities between large metropolitan cities and secondary cities in incomes, Gross Domestic Product (GDP) per capita, capital accumulation, wealth, skills and quality of the environment. Despite governments pouring billions of dollars into regional infrastructure and economic development projects and education to reduce the gap, disparities are widening in most countries. Something is wrong with the way we are approaching the development of secondary cities.

New ways of responding to the needs of secondary cities must be found if polarities between the rich and powerful cities and weak and isolated cities are not to grow stronger. If the gaps in development indicators for systems of cities continue to widen, then it is very likely that large cities will face growing problems of congestion, de-industrialization and inner-city decline, higher transaction and development costs, which will erode any competitive advantage from the economies of scale they currently enjoy. There is evidence suggesting that very large megacities in developing economies have reached a point where dis-economies of scale are occurring and large corporations have realized that well-managed secondary cities offer significant competitive advantage over megacities (Kotkin, 2010).

There is no universal model that can be applied to develop efficient systems of secondary cities. Political, physical, socioeconomic geography, natural resources, planning, climate, mix, size and function, which shape the development of secondary cities, are different for each city. How, then, can we address the growing problems associated with the development of secondary cities?

The key findings of the book show that where the system of secondary cities in the country is dominated by one or more metropolitan centres, large disparities tend to occur in the level of socioeconomic development of national systems of cities. In countries where there is a wide geographic spread and diversification in the size and functions of cities, these disparities are much less. In countries where the system of cities is more closely aligned with the Christaller model (for example USA, Brazil, India, Germany and Australia) and policies strongly support decentralization and devolution, there is greater competition for trade and investment and a greater variety and specialization of industries and economic activities in national systems of cities.

However, countries that have a spatial system of cities closely following the pattern of the Christaller model tend to have more competitive cities and fewer development disparities occurring between cities. In countries where the system of cities is dominated by one very large urban conurbation, the socioeconomic development disparities between systems of cities tend to be large. In these countries, the imbalances, inefficiencies and distortions in wealth, poverty, employment and infrastructure between cities make it extremely difficult to foster the development of markets, trade, investment and competition.

The disparity that occurs between inland and landlocked secondary cities is

significant. These cities tend to have very poor communications and transport support services and systems. They are often located in areas with less-favourable climate, a weaker human capital base and weaker local governments. Land-locked secondary cities are even more disadvantaged than inland cities within short distances of ports. All imports and exports must pass through borders, which are notoriously prone to corruption. Distance from ports adds to transaction costs, making it difficult for these countries to establish manufacturing industries to create jobs like many of the successful Asian and Latin American countries that have good port facilities. Finally, many necessities have to be imported, often using valuable foreign exchange reserves, which are desperately needed to improve strategic infrastructure.

The increasing specialization and openness of countries to trade and investment has introduced competition into subnational secondary cities, which many are struggling to address. Specialization, the demand for more efficient delivery of services, quality and timeliness of contracts and products in response to global market demands, and international standards, requires drastic changes in local businesses and government practices and culture. Many secondary city local businesses are not able to adjust quickly enough or attract capital to retool and refit infrastructure and machinery for production rapidly enough. Some secondary cities and local firms have been very prompt to respond and adapt to the changing dynamics of the national and global economies. Those that are not are falling behind in the development race.

#### 9.2 New Horizons

The three emerging spatial patterns of secondary city development are: subnational region, city clusters and economic corridor cities. Each of these requires a different approach to planning governance and development practice.

In subnational administrative secondary cities, or those with an economy based on resource extraction, tourism or heavy industry, the governance and planning challenges are different to urban-region city clusters. These cities are vital hubs and markets in industry supply chains and networks. Many of these systems have become so dilapidated through lack of maintenance and new investment in strategic infrastructure that they can no longer support national development – especially export development. There are significant disconnects between infrastructure, governance, social capital, finance and business dynamics, and environment capital responsibilities, which greatly undermine secondary city development potential. However, governance arrangements under decentralization, devolution and semi-autonomous regions' policies are not working and new, more competitive and collaborative governance arrangements will be needed in the future.

City-cluster development surrounding major urban regions has created a band

of satellite or dormitory residential and industrial cities. There is still a high level of dependency on the old city for services to support the development of these clustered cities. Congestion, high land prices and rents and inadequate services, and lack of space for expansion have resulted in de-industrialization taking place in some megacities, with firms and whole industries moving to the cluster of expanding secondary cities. This move is often induced by governments seeking to encourage the development of economic enterprise or export-processing zones in these areas.

Unfortunately with weak metropolitan planning, local government are unable to provide for social housing, facilities, transport and infrastructure to areas where people are choosing to live close to work, leaving many residents living in very poor-quality housing conditions with no access to basic services. These are becoming the slums of the future. The near-total failure of metropolitan planning in some of the clustered cities will require new forms of metropolitan governance, management and systems if problems are to be resolved.

Economic-trade development-corridor secondary cities are only just beginning to emerge as road and rail corridors between countries improve. These cities have high potential for some countries to foster new growth centres within the corridors that become transportation and logistics hubs, to provide opportunities for the development of new value-adding industries. These are of importance to the diversification of regional development and employment. The governance arrangements for these types of secondary cities are complicated and require trans-government agreements on free trade and free movement of goods and services along the corridors. China, India and several Latin American countries are well advanced in these developments.

The new global economy presents a new set of challenges that will completely reshape the development and management of many secondary cities. The growth of manu-services is considered to be the third industrial revolution and will fundamentally change manufacturing processes and factory locations. Manu-services involve three-dimensional printing, using new materials and technologies. These new types of industries will greatly reduce economies of scale in pharmaceutical, parts replacement, technology equipment, building fittings and construction sectors, and some manufacturing industries, making large-scale factories redundant. This will stimulate opportunities for endogenous growth in secondary cities.

Secondary cities that once enjoyed a competitive advantage through economies of scale and low labour costs will not be able to compete against what will become closer to markets, consumer design, lower-cost, technology-based designed and locally manufactured production. This will create opportunities to support endogenous growth, along with technology-based exports or manufacturing and services. Few secondary cities are aware of the manu-services revolution, new materials' production, and knowledge and logistics systems technologies associated with it that have the potential to create more diversified and sustainable economies and jobs for secondary cities.

#### 9.3 Moving Forward

To address these problems, we need a fresh approach to urban policy and action to support the development of secondary cities. There are several key areas of change required, but each will need to be tailored to the spatial and functional roles played by secondary cities.

Global dimension to national urban policy: All countries have national urban policies and a hierarchical system of cities based on population size. This classification system provides the basis for a more or less equitable allocation of resources for public administration and other national functions. However, this does not direct resources into cities that could make a stronger contribution to the national economy or stimulate competition for capital between cities based on their competitive advantage. It is important for national governments to recognize that some secondary cities play a significant regional or global role, which requires a different set of policies and programme activities for supporting local economic development and the provision of strategic infrastructure. National urban policies must focus on secondary cities becoming more specialized, competitive, and nationally and globally orientated in their development focus. This is a significant issue for national urban policy in sub-Saharan Africa, where national urban policy in all but South Africa has proved ineffective. Without a more targeted approach to national urban policy, only the most competitive are likely to attract investment, create good jobs and raise the capital needed to fund the huge backlog of infrastructure and urban services they currently need. The rest will become lagging and laggard cities.

**Greater support to disadvantage secondary cities:** National economic development policies must recognize regional differences in needs between inland and coastal secondary cities. Policies for inland secondary cities must incorporate special needs for resource deficiencies, potential climate-change impact and logistical needs. In some cases, economic policies to introduce differential taxation company and personal tax will be needed to attract investors and skills development into secondary cities in disadvantaged regions. Many of these are struggling to manage high levels of migration and urbanization.

**Policy for greater competition between cities:** There is growing interest being shown by governments and businesses in surveys that attempt to measure the competitiveness of cities. Enhancing the competitiveness of secondary cities is considered important to bring about greater efficiencies in local government, encourage them to work closely with the private sector, bring about greater transparency and streamlining of regulatory processes, and stability to local land and property markets. Many governments are reluctant to introduce policies to make cities more competitive, because of the impact this may have on local politics, employment loss and corruption. But policies to encourage greater competition between secondary cities are needed if new markets are to be opened up to trade and investment and greater efficiency and transparency is to occur in governance systems.

A new policy framework for decentralization: For various reasons decentralization policies have not worked in many countries. The primary reason for failure is the level of financial autonomy granted to local governments and the propensity to increase the number of local governments in response to political pressure. If local governments are not given greater incentives to take care of local economic development and determine how public funds, especially block grants, are used, then they will make little effort to take greater responsibility for the development and maintenance of infrastructure and provision of services. This is made more difficult in countries such as Indonesia and the Philippines, where there has been a propensity to increase the number of local governments rather than amalgamate many of them into more efficient units. There is a need for a progressive movement towards local governments, within limits, to have access to subsovereign lending, raising local infrastructure bonds, and other financial instruments to raise capital in order to build strategic infrastructure and support the diversity of local economies.

**Metropolitan regional development planning and governance:** The emergence of city cluster development around large metropolitan areas has led to uncontrolled and poorly managed urban development occurring at the peri-urban fringe and hinterlands of large cities. All the megacities in developing countries have failed to manage the development of the metro regions. Many of these cities have become very large and have very limited resources to fund necessary infrastructure and services. In addition, there may be large migrant populations living in expanding peri-urban secondary cities seeking employment in newly established industrial estates, which lack many of the amenities of the central city area. Many such cities have poor public transport and infrastructure services, except in planned industrial estates and business parks. Flooding is a common problem, caused by poor catchment management, as witnessed in the secondary cities surrounding Bangkok in 2012. New institutional governance arrangements are necessary to address metropolitan management problems in peri-urban zones where city cluster development is occurring.

Systems approach to planning the development of secondary cities: The World Bank Urban Strategy on Systems of Cities Integrating National and Local Policies Connecting Institutions and Infrastructure (World Bank, 2009) placed a strong emphasis on a systems approach to the management and development of cities. This requires cities and businesses to change towards a more collaborative model of governance with resource-sharing arrangements that reduce costs, ensure better-managed services, recover some development cost of services from developers and landowners. Developer contribution to cover the costs of infrastructure headworks is essential in the provision of urban services and amenities. A focus on endogenous growth: Many secondary cities in developing countries are net importers of goods and services. Too many governments export development strategies based on industrialization when faced with enormous disadvantages caused by lack of skills, poor communications, weak local governments and capital markets. There is a need for all governments to give much stronger emphasis to endogenous growth (stimulating diversity and growth of the local economy) to create more localized employment opportunities. In many cases, this requires co-investment of capital by central government, international development agencies and business in partnerships to stimulate local employment and business development opportunities in small and medium-scale enterprises that are linked into a national network of trading cities.

More inclusive approach to secondary city development: Most people living in the secondary cities of developing countries are excluded from decision-making in the way their cities are developed. In many of these cities, more than 60 per cent work in the informal sector and face a future of increasing uncertainty. The potential of cities to develop their economies lies with tapping into all the skills and resources it has to come up with smart ways of doing things and to produce goods and services that people want and can afford. This cannot be achieved by excluding the vast majority of the population from having a say and failing to educate them about how to develop a new economy for their city. Nor can it be achieved by local governments ignoring the need of investors and businesses or colluding with the rich and powerful for personal gain. Measures to ensure that communities and investors adopt a more consultative and collaborative approach to decision-making concerning local economic development need to be put in place. These must be innovative, using trusted intermediaries, open platforms for engagement and community learning.

**Green-cities agenda:** Pollution, congestion, poor public health and poor-quality living environments reduce the productivity of the workforce of cities. Green cities involve having a focus on using resources more efficiently and effectively and changing technologies and systems to do this. Green-city agendas should be programmes implemented by all secondary cities. Import costs for secondary cities are much higher than that for large cities. To overcome this, green energy, waste recovery, cogeneration, and clean water and land must become part of the environmental investment that reduces the transaction and externality costs of doing business. It is vitally important that secondary cities embrace the green-city agenda as a pathway to a sustainable future.

# 9.4 Framework for International Development Assistance to Supporting Secondary Cities

Overcoming the problems and issues facing the development of secondary cities is a challenge. It will require a range of strategies and initiatives at a regional, national and secondary cities level to be developed and implemented by governments with the support of communities and business, with possible support from the international development sector. Secondary cities, globally, have generally weaker governance, economics, connectivity, markets, strategic infrastructure and human-capital development systems and structures than primary cities. They are not able to enjoy the economies of scale prevalent in very large cities and megacities. However, the success of secondary cities should not be evaluated purely on economic criteria; of equal importance is liveability and sustainability, which outscore those of large cities.

These differences in development between systems of cities are most marked in sub-Saharan Africa and parts of Asia and Latin America. If nations want their systems of cities in these countries to become more efficient and competitive, it is essential they focus on achieving a more balanced system of cities and recognizing that secondary cities will play a very important role in this. The achievement of this goal will require major changes in national and local urban development, and for poorer countries differing levels of international development assistance.

#### 9.4.1 More Strategic Focus Needed on Secondary Cities

The complexity of the issues and the scale of the challenges facing the development of secondary cities will need a policy framework at a scope and scale that is focused on themed areas of support and intervention at a regional and local scale. Different governance arrangements will be necessary to deal with support for economic-trade corridor-type secondary city development compared to subnational and city-cluster development.

Table 9.1 shows a possible framework for levels and streams of activities that could be applied by scope and scale to support the development and improved competitiveness and management of secondary cities. The scale of activities is listed under the headings of policy and strategy: programmes, projects, capacity-building networking and knowledge management. Brief details on these are described below. The scale of activities is grouped into regional, country, citywide, local and multilateral areas of focus. Possible scope and scale activities for international development agencies and organizations to engage in are shown in the Table.

#### Scope of Activities for Support to Secondary Cities

**Governance policy and strategy:** This would involve support for activities designed to improve regional and national governance, urban development and other policies and reforms to support the development of secondary cities.

**Investment and resource management:** These would include mainly programmatic activities to support the preparation of local city financing, land-development plans, infrastructure, area-improvement programmes and environmental-management plans especially for peri-urban areas. Programmatic activities would be defined through

#### TABLE 9.1

#### Framework for Scope and Scale of Activities Supporting Secondary Cities

Scope scale	Governance policy & strategy	Investment & resource management	Strategic infrastructure	Capacity development	Systems management
Regional level	• Regional strategy to support secondary city development	<ul> <li>Regional partnership programmes with ODAs</li> </ul>		<ul> <li>Regional forums</li> <li>Regional training</li> </ul>	<ul> <li>Knowledge networks</li> <li>City partnerships</li> </ul>
Country level	<ul> <li>Country programme</li> <li>Secondary cities urban policies</li> <li>Urban economic development</li> <li>Urban manage- ment programme</li> </ul>	<ul> <li>Targeted/ programmatic plans &amp; strategies for secondary cities</li> <li>Catalytic programmes</li> </ul>	National demonstration projects • Sheltered housing • Energy efficiency	<ul> <li>Urban management education &amp; CPD programme</li> <li>National urban research centres</li> </ul>	<ul> <li>National urban forums</li> <li>National knowledge hub</li> </ul>
Secondary city level • Subnational cities • Metro-region city clusters • Economic trade corridor		City strategies for: • Development • Slums • Poverty alleviation • Management of peri-urban areas • Urban finance	<ul> <li>Programmatic projects</li> <li>Single-themed projects</li> </ul>	<ul> <li>Institutional capacity</li> <li>Professional development</li> <li>Local economic development</li> <li>Revenue collection</li> </ul>	<ul> <li>Urban research institute</li> <li>Local economic development office</li> </ul>
Local-area level			Thematic projects		• Community education & awareness
Multilateral		• Partnership for secondary cities development		• Tool-kits	• Database for best practices

Source: Brian Roberts (2014)

the country programme strategy agreed with the government. At city level, this could involve developing a bundled package of assistance to encourage secondary cities to collaborate and support integrated approaches to project planning, design, implementation, funding, operations and maintenance.

**Strategic infrastructure:** This would be single or bundled project-type activities, targeted at specific areas or needs of government, business, community services and people living in poverty. It may be possible to support programmatic prototype projects for the poor, involving standard housing or infrastructure for multiple sites in

secondary cities. A single country-wide project could be developed as an exhibition to demonstrate low-cost solutions or approaches to shelter; to improve household energy or demonstrate localized construction techniques.

**Capacity-building:** This may involve programmes of assistance to develop institutions, professional organizations, tradesmen and communities in developing knowledge and expertise, in order to develop and manage secondary cities in a more efficient and effective manner.

**Systems management:** This would focus on activities to improve transport and logistics systems for rural-urban linkages, supply chains, freight logistics, integration and distribution of data, knowledge and management informations systems, knowledge management, ecosystems, human resource and administrative systems. Systems management is likely to form an integral part of all programme activities.

#### Scale of Activities

**Regional level:** Development Partners could develop frameworks for subregional programmes that would enable resources to be more effectively coupled and targeted to meet the needs of secondary cities. In developing strategies, policies and activities to support secondary city development, there will be a need to focus at a regional level on initiatives that build linkages (physical, economic, political and knowledge networks) at both scope and scale that focus on reducing transaction costs and building competitive advantage in support of trade and other forms of exchange between cities.

**Country level:** Country-level programmes could support a stream of activities at national, major city and systems of secondary cities scale. At the national level, strategies should focus on targeting the development and linkages in national systems of cities, by improving their economic connectivity, competitiveness, encouraging local innovations and knowledge-sharing to support adaptation and replication.

**Secondary city level:** At the secondary city level, three strategies are needed to support subnational, city clusters and corridor secondary cities. Such strategies need to focus on:

- City-wide impacts to expand trade and endogenous economic development
- Efficient functioning of the local land, housing and financial markets
- Pro-poor and slum-improvement projects
- Improving the local government's capacity to raise taxes and revenues
- Partnerships with the private sector to stimulate job creation
- City-wide inclusion strategies that target a city's most vulnerable communities.

Programmatic and catalytic projects might be developed to support themed activities for large secondary cities. There could be opportunities for bundling multidisciplinary projects in order to enhance the overall performance of systems. Figures 9.2 to 9.4 show high-level strategies that could be developed to support the development and performance of subnational, cluster and corridor secondary cities.

#### FIGURE 9.2

#### Framework for Key Investment Strategies in Sub-national Secondary Cities



#### FIGURE 9.3

#### Framework for Key Investment Strategies in Clustered Secondary Cities

#### Key investment strategies for clustered city development

- Integrated urban region governance, finance and planning.
- Integrated transport, information and logistics systems.
- Focus on industry clusters and specialization.
- Managed peri-urban and inner-city redevelopment.
- Secondary city employment, investment and innovation growth poles.
- Mixed density, income, affordable and sustainable housing.
- Revenue-based underpinning development and services delivery.
- Maintenance and rehabilitation of environmental services.



#### FIGURE 9.4

Framework for Key Investment Strategies in Economic Trade Corridor Secondary Cities

#### Key investment strategies for corridor secondary city development

- Integrated regional trade corridor governance and planning.
- Integrated open transport, information and logistics systems.
- Focus on urban growth nodes,
- Managed peri-urban corridor development.
- Secondary city employment, education and investment.
- Affordable and sustainable housing.
- City revenue base underpinning development and services delivery.
- Maintenance and rehabilitation of corridor environmental services.

Source: Brian Roberts (2014)

Local area level: These activities may involve targeted capacity-building activities within secondary cities to develop strategically important infrastructure, logistics capacity, industry-cluster development, knowledge development and learning, such as on-the-job training and skills-building activities for local construction, improved management of local government, continuing professional education and leadership. Multi-lateral: This might involve support for multilevel networking and knowledge building of local associations, development of information systems at regional, national and citywide level, and community education and awareness programmes through social media and local radio. Multilateral programmes of activities could be targeted at developing learning and educating communities to engage more in open and global systems or collaboration and cooperation between cities to develop trade and investment opportunities, knowledge-sharing and a wide range of exchanges. The focus on building collaborative advantage between government and firms in cities will be critical to overcoming economies of scale, competitiveness deficiencies and barriers or entry

### 9.4.2 Targeting Support Using Urban Systems that Strengthen the Capacity of Secondary Cities

into national and global markets for secondary cities.

Secondary cities are a subset of a system of cities. It is possible to systematically categorise, analyse and model the metabolism of cities and to understand how they function by using a systems approach. For simplicity, urban systems that shape the metabolism



of the cities can be classified broadly as: governance, social, economic, environmental, built assets and flow (logistics) systems. By studying urban systems in secondary cities, it is possible to identify and diagnose critical problems in the composition (make-up of infrastructure, organization and structure of cities) and linkage systems (relationships to connectivity, flow and capacity) of cities and to identify possible solutions to fix these. The weaknesses in the linkages between components of urban systems is something that frustrates the development and flows of capital, knowledge, energy, resources, people, goods and services in secondary cities. It stops them from realizing their full development potential. The inability to free up and develop urban systems places many secondary cities at a significant disadvantage to primary cities in formulating strategies and plans that will enable them to grow and develop.

The six functional categories of urban systems can be defined generally as:

**Governance systems,** which can be defined as the sum of the many ways individuals and institutions, public and private, plan, organize and manage the common affairs of the city. It includes formal institutions, as well as informal arrangements and the social capital of citizens, as well as the legal, regulatory, operational and management arrangements to administer and manage cities.

**Societal systems** are the structures and mechanisms used in the social organization of sociality to deliver a wide range of personal and social needs. They include the organization structures used to provide and deliver basic services such as health, education, culture and welfare, emergency, security and law and order, and well-being. Social systems also include knowledge, information, communications, media and personal services, which contribute to the formation of social and cultural capital, formal and tacit knowledge.

**Economic systems** broadly comprise activities related to capital, land and property markets, employment, investments, valuation and local government finance.

**Environmental systems resources and other products and services produced by nature.** These account for the exchanges of material and influence between cities and surrounding landscapes focusing on the nature and quality of the physical environment, including urban climate, hydrology, vegetation, landforms coastlines, water, air quality and soil.

**Built systems** are the inventory of infrastructure, utilities, structures, buildings and other tangible assets used by societies for a wide range of daily purposes. They also include equipment, machinery and technologies used in the production of a wide range of goods and services needed by communities.

Flow (logistics) systems are the networks and technologies associated with built systems that enable the flow of goods, materials, people and livestock, water, energy, waste, data, knowledge and information between geographic locations and people across space and time.

#### TABLE 9.2

# Six Functional Urban Subsystem Elements Supporting the Development of Secondary Cities

Governance	Social	Economic	Environmental	Built	Flow (logistics)
Administrative government	Employment & poverty alleviation	Economic development policies	Land & resources management	Land planning & development	Food
Public policy	Public health & well-being	Urban finance & revenue collection	Climate change	Infrastructure delivery	Materials & resources
Legal systems & regulation	Education & learning	Value-added business	Pollution & congestion	Regulation of structures	Transport & logistics
Corporate planning & management	Community services	Productivity & competitiveness	Environmental health & safety	Housing & shelter	Communications & information
Accountability & transparency	Peace & security	Technology & innovation	Cleaner production & industrial ecology	Development control	Energy
Participatory governance	Human resource development	Industry & trade development	Green design	Asset management & maintenance	Waste
Partnerships for development	Equity & discrimination	Poverty	Risk & hazard management	Urban resilience & revitalization	Supply chains & dynamics
International development assistance	Age & gender	Affordability	Urban landscape	Plant & equipment	Information networks

Source: Brian Roberts (2011)

Table 9.2 shows some of the components of the six urban systems. In cities that are well managed, the many components of the six urban systems (only a few are shown in the Table) operate and interact dynamically to support the delivery of a wide variety of needs and services to individuals, governments, businesses and communities in cities. A significant problem with the development of many secondary cities – especially in sub-Saharan Africa – is that the dynamics between urban services components are weak. Thus linkages between urban systems need to be made stronger and more functional, to enable secondary cities are overloaded, neglected or have become dysfunctional. In many situations, it would not take much to improve the linkages to get them to provide a basic level of service to respond to the functional needs of cities, albeit with limitations. Fixing the linkages within and between urban systems is essential to restoring basic functional needs, to kick-start the development and competitiveness of local economies.

## 9.4.3 Prioritizing Areas of International Development Assistance Support to Secondary Cities

For international development agencies and NGOs to play an effective role in supporting the development of secondary cities at the city-scale level (either cluster or single cities), it is essential to identify and prioritise areas where its support – especially in the short-term – would be most effective. This will require the international development sector to target their programmes of activities to secondary cities effectively. This calls for greater collaboration and alignment of development assistance agency, banks and NGO country development plans and strategies with national governments in targeting and supporting secondary city development by all partners.

In developing an integrated programme of support to help develop secondary cities, international development assistance should align closely with the activity streams to support urban systems shown in Table 9.3. All six urban systems categories shown

#### **TABLE 9.3**

## Priority Areas of Support for Urban Systems in Secondary Cities

STREAMS			URBAN	SYSTEMS		
	Governance	Social	Economic	Environmental	Built assets	Flow systems
Political	<ul> <li>International development assistance</li> </ul>	• Poverty	• Partnerships for devel- opment			
Policy	Administrative government	• Employment & poverty alleviation	<ul> <li>Economic development policies</li> <li>Industry trade development</li> </ul>	<ul> <li>Climate change</li> <li>Land &amp; resources management</li> </ul>	<ul> <li>Land-planning development</li> <li>Infrastructure delivery</li> </ul>	Communications     & information
Planning & strategy	<ul> <li>Corporate planning &amp; management</li> <li>Legal systems and regulation</li> </ul>	• Education & learning	<ul> <li>Value-added business</li> <li>Productivity competitive- ness</li> </ul>	<ul> <li>Green design</li> <li>Risk and hazard management</li> </ul>	<ul> <li>Housing &amp; shelter</li> <li>Urban resilience &amp; revitalization</li> <li>Asset management maintenance</li> </ul>	• Transport & logistics
Capacity- building	<ul> <li>Corporate planning &amp; management</li> <li>Accountability transparency</li> </ul>	• Community services	<ul> <li>Technology &amp; innovation</li> <li>Urban finance &amp; revenue collection</li> </ul>		Development control	<ul> <li>Supply chains &amp; dynamics</li> </ul>
Management	• Participatory governance	• Human resource development				<ul> <li>Information networks</li> </ul>

Source: Brian Roberts (2013)

are essential for cities to function and develop, but three (governance, economic and logistics) appear more critical to the development of secondary cities in developing countries. Priority must be given to support activities that fix the existing machinery of these three systems; however, this does not infer that city's neglect to fix broken or inefficient parts of other systems. In many cases, specific components of built urban systems may be critical to improve the city's logistics systems. The targeting of governance, economic and logistics systems would significantly improve operations and development to secondary cities.

In seeking to address the problems and issues facing secondary cities, we know that many of these can function with poor infrastructure, weak human capital and limited resources, but if the flow of goods and services is severely impeded, local markets and governance systems are weak and dysfunctional, the prospects of economic growth and development taking place will be limited. Targeting selected urban systems to streamline processes that build capacity to generate wealth, employment, enhance competitiveness, trade, investment, improved urban governance and finance are vital to building the capital stock and resources needed to support the provision of strategic infrastructure, knowledge and human capital in cities. Without developing the capacity to create wealth, the prospects of reducing poverty and providing better shelter in secondary cities are remote. Without a stronger focus on developing linkage in urban systems to build wealth and improve linkages and networks, secondary cities in some regions will struggle to grow and develop.

The shaded columns of governance, economic and flow systems shown in Table 9.3 are considered priority areas for international development assistance to support the development of secondary cities. Fixing the software and some hardware components of these urban systems will have the greatest impact in developing secondary cities. The components listed in the Table are essential building blocks needed to stimulate endogenous growth in secondary city economies. While the building of infrastructure is absolutely necessary, without developing the machinery of local governance, economic and logistics systems underpinning a focus on endogenous growth, there will always be reliance on central government and/or international development agencies to provide the capital needed to fund essential infrastructure and services to help the economy along. Reliance on external support to continue supporting the development of secondary cities is not a sustainable model for secondary city development in most regions, especially those with limited prospects to support exogenous growth. This includes most of the secondary cities of sub-Saharan Africa and many in other regions.

#### 9.5 Concluding Comment

Many secondary cities in developing countries and regions are struggling to cope with problems of rapid urbanization and poverty, and how to overcome these. A significant percentage of them will have to be re-engineered to become more efficient and to build the capacity to support economic growth and development, production and wealth creation to create jobs. This is not a simple task, given that most have weak urban-governance systems and limited endowed resources and knowledge of how to go about this. However, without the re-engineering urban-governance systems and local economies in lagging secondary cities their prospects of overcoming the challenges that confront them are limited.

In seeking to address the problems and issues facing secondary cities, we know that many are intractable and extremely difficult to solve. Most secondary cities, unless they are national capital cities, tend to be much weaker than primary cities in terms of systems and structures of governance, connectivity, markets, strategic infrastructure and human-capital development. This puts most secondary cities, especially in sub-Saharan Africa and many parts of Asia and Latin America, in the position of disadvantage and playing catch-up in the race for development. If nations want secondary cities to become more efficient, it is essential that they focus on policies and programmes to support a balanced development of their system of cities. The achievement of this goal is difficult and for many developing countries international development assistance is absolutely essential. Supporting the development of secondary cities is within the mandate of all development banks, international development agencies and some UN agencies and NGOs. To do so may require some changes to the scope and scale of core business activities and additional resources from partners.

Secondary cities are re-emerging in the urban-policy debate in many countries. As the disparity between large metropolitan regions and secondary cities widens in many countries, governments must find and develop new and innovative approaches to stimulate and manage the development of secondary cities. For those lagging secondary cities in both developing and developed economies, such as Spain and Italy, this will be very challenging and require a close partnership with business and national government. This book has sought to raise the level of awareness of the changing dimensions, functions and challenges facing the development of secondary cities. It has sought to provide insights and examples of secondary cities that have taken up the challenge and need for a change in attitude towards city competitiveness, urban governance and management. Secondary cities are a vital link in the chain of the system of cities, which is becoming more global and efficient. It is the need to improve the functions and linkage in the system of cities at the secondary system level that must become a focus for national governments, international development agencies and banks and NGOs.

## Annexes

The annexes set out in the following pages contain useful and illustrative data on secondary cities at a global, regional and country level. The data in Annexes 1, 2 and 3 shows the evolution of cities by size worldwide, referring, in particular, to the discussion outlined in Chapter 3 on Secondary City Urbanization Trends and Patterns. Annex 4 should be looked at in the context of the fifteen case studies, which are summarized in Chapter 7, providing a selected number of urban indicators for each country case.

## Population of Cities by Size, Proportion and Growth by Region

Major area, region, country or area	Size class of urban settlement	1990	2000	2010	2020	2025	2010	2025	2010- 2025
				Populatio	n			Per cent	
World	10 million or more	145,005	242,814	352,465	560,211	630,005	9.9%	13.6%	3.95%
World	5-10 million	141,999	187,768	266,078	323,877	401,961	7.5%	8.7%	2.79%
World	1-5 million	455,502	597,943	759,919	999,814	1,127,589	21.4%	24.3%	2.67%
World	500,000-1 million	205,417	269,117	353,802	450,436	515,720	9.9%	11.1%	2.54%
World	< 500,000	1,333,482	1,560,991	1,826,313	1,955,479	1,967,307	51.3%	42.4%	0.50%
More-developed regions	10 million or more	70,534	85,279	103,678	123,096	136,379	2.9%	2.9%	1.84%
More-developed regions	5-10 million	33,344	36,472	52,800	86,820	81,382	1.5%	1.8%	2.93%
More-developed regions	1-5 million	178,514	195,572	207,153	208,075	228,895	5.8%	4.9%	0.67%
More-developed regions	500,000-1 million	76,008	78,807	85,356	100,046	111,166	2.4%	2.4%	1.78%
More-developed regions	< 500,000	468,697	485,215	508,264	500,327	485,245	14.3%	10.5%	-0.31%
Less-developed regions	10 million or more	74,471	157,535	248,787	437,115	493,626	7.0%	10.6%	4.67%
Less-developed regions	5-10 million	108,655	151,296	213,279	237,057	320,579	6.0%	6.9%	2.75%
Less-developed regions	1-5 million	276,988	402,372	552,767	791,740	898,694	15.5%	19.4%	3.29%
Less-developed regions	500,000-1 million	129,408	190,310	268,445	350,390	404,554	7.5%	8./%	2.77%
Less-developed regions	< 500,000	864,785	1,075,776	1,318,049	1,455,151	1,482,062	37.0%	31.9%	0.78%
Sub-Saharan Africa	10 million or more	_	-	10,/88	28,148	33,392	0.3%	0.7%	7.82%
Sub-Saharan Africa	5-10 million		12,695	8,415	19,128	45,129	0.2%	1.0%	11.85%
Sub-Saharan Africa	1-5 million	33,308	48,911	85,592	135,105	153,957	2.4%	3.3%	3.77%
	500,000-1 million	19,055	21,070	30,783	30,078	47,142	0.9%	1.0%	2.00%
	< 500,000	87,051	123,040	102,023	200,042	40 122	4.0%	4.7/0	5.42%
	5 10 million or more	0.041	12 405	21,820	41,40Z	40,132	0.0%	1.0%	13 70%
Africa	1.5 million	9,001	42 751	10/ 350	1/18 201	30,400 172 681	2.0%	3.7%	3 /1%
Africa	500 000 1 million	22 471	26 967	38 317	140,271	60 551	2.7/0	1.3%	3.41%
Africa	< 500,000-111111011	127 //3	174 820	227 750	281 747	302 651	6.4%	6.5%	1 91%
Fastern Africa	< 300,000	127,745			5 677	13 419	0.0%	0.3%	N/A
Eastern Africa	1-5 million	6 569	13 837	18 866	31 981	37 015	0.5%	0.8%	4.60%
Eastern Africa	500.000-1 million	3.806	1.877	7,703	8.367	13.727	0.2%	0.3%	3.93%
Eastern Africa	< 500.000	24.729	37.410	51,385	71.736	79,920	1.4%	1.7%	2.99%
Central Africa	10 million or more	· _	_		12,322	14,535	0.0%	0.3%	N/A
Central Africa	5-10 million	_	5,414	8,415	7,555	8,924	0.2%	0.2%	0.39%
Central Africa	1-5 million	5,088	6,454	16,010	20,070	25,968	0.4%	0.6%	3.28%
Central Africa	500,000-1 million	3,641	5,299	4,389	6,266	9,062	0.1%	0.2%	4.95%
Central Africa	< 500,000	14,493	17,608	23,046	28,296	29,310	0.6%	0.6%	1.62%
Northern Africa	10 million or more	_	10,170	11,031	13,254	14,740	0.3%	0.3%	1.95%
Northern Africa	5-10 million	9,061	—	_	11,545	13,279	0.0%	0.3%	N/A
Northern Africa	1-5 million	11,099	14,840	18,758	13,185	18,725	0.5%	0.4%	0.01%
Northern Africa	500,000-1 million	3,416	5,296	7,534	13,341	13,409	0.2%	0.3%	3.92%
Northern Africa	< 500,000	40,392	51,773	64,926	73,705	76,720	1.8%	1.7%	1.12%
Southern Africa	1-5 million	7,307	11,227	17,231	20,327	21,829	0.5%	0.5%	1.59%
Southern Africa	500,000-1 million	2,482	1,855	632	2,970	3,292	0.0%	0.1%	11.63%
Southern Africa	< 500,000	10,755	14,565	15,914	15,075	15,526	0.4%	0.3%	-0.16%
Western Africa	10 million or more	_	—	10,788	15,825	18,857	0.3%	0.4%	3.79%

### ANNEX 1 continued

## Population of Cities by Size, Proportion and Growth by Region

Major area, region, country or area	Site class of urban settlement	1990	2000	2010	2020	2025	2010	2025	2010- 2025
				Population				Per cent	
Western Africa	5-10 million	_	7,281	_	5,896	22,786	0.0%	0.5%	N/A
Western Africa	1-5 million	14,344	17,393	33,484	62,727	69,145	0.9%	1.5%	4.95%
Western Africa	500,000-1 million	9,126	12,640	18,059	18,495	21,060	0.5%	0.5%	1.03%
Western Africa	< 500,000	37,074	53,464	72,478	92,935	101,174	2.0%	2.2%	2.25%
Asia	10 million or more	77,435	135,210	210,301	351,773	396,412	5.9%	8.5%	4.32%
Asia	5-10 million	84,162	119,676	176,045	183,013	232,141	4.9%	5.0%	1.86%
Asia	1-5 million	180,067	269,214	353,443	522,319	589,545	9.9%	12.7%	3.47%
Asia	500,000-1 million	78,590	127,618	189,845	257,622	295,857	5.3%	6.4%	3.00%
Asia	< 500,000	612,020	740,513	918,098	989,990	998,079	25.8%	21.5%	0.56%
Eastern Asia	10 million or more	54,109	69,736	103,624	161,037	171,036	2.9%	3.7%	3.40%
Eastern Asia	5-10 million	20,377	51,324	85,559	96,413	135,795	2.4%	2.9%	3.13%
Eastern Asia	1-5 million	86,007	141,247	185,009	275,030	296,830	5.2%	6.4%	3.20%
Eastern Asia	500,000-1 million	33,266	70,253	106,508	150,333	166,478	3.0%	3.6%	3.02%
Eastern Asia	< 500,000	267,889	295,777	375,136	369,159	348,931	10.5%	7.5%	-0.48%
South-central Asia	10 million or more	23,326	65,473	84,070	140,613	170,144	2.4%	3.7%	4.81%
South-central Asia	5-10 million	35,197	29,700	50,249	46,505	46,345	1.4%	1.0%	-0.54%
South-central Asia	1-5 million	49,672	68,057	93,857	132,010	157,035	2.6%	3.4%	3.49%
South-central Asia	500,000-1 million	30,635	34,879	45,786	63,869	79,887	1.3%	1.7%	3.78%
South-central Asia	< 500,000	200,080	247,991	300,077	344,581	361,186	8.4%	7.8%	1.24%
Central Asia	1-5 million	3,180	3,294	3,613	4,198	6,813	0.1%	0.1%	4.32%
Central Asia	500,000-1 million	1,222	1,855	3,492	5,521	4,507	0.1%	0.1%	1.72%
Central Asia	< 500,000	18,132	17,909	17,589	18,576	19,319	0.5%	0.4%	0.63%
Southern Asia	10 million or more	23,326	65,473	84,070	140,613	170,144	2.4%	3.7%	4.81%
Southern Asia	5-10 million	35,197	29,700	50,249	46,505	46,345	1.4%	1.0%	-0.54%
Southern Asia	1–5 million	46,491	64,762	90,244	127,812	150,221	2.5%	3.2%	3.46%
Southern Asia	500,000–1 million	29,412	33,024	42,294	58,348	75,380	1.2%	1.6%	3.93%
Southern Asia	< 500,000	181,948	230,082	282,487	326,004	341,867	7.9%	7.4%	1.28%
South-eastern Asia	10 million or more	—	—	11,654	36,331	40,335	0.3%	0.9%	8.63%
South-eastern Asia	5-10 million	22,037	24,709	29,119	19,755	21,845	0.8%	0.5%	-1.90%
South-eastern Asia	1-5 million	19,814	27,706	28,634	48,392	58,185	0.8%	1.3%	4.84%
South-eastern Asia	500,000-1 million	5,947	9,711	17,822	17,090	21,979	0.5%	0.5%	1.41%
South-eastern Asia	< 500,000	93,111	138,054	174,303	206,455	218,968	4.9%	4.7%	1.53%
Western Asia	10 million or more		_	10,953	13,791	14,89/	0.3%	0.3%	2.0/%
Western Asia	5-10 million	6,552	13,944	11,118	20,340	28,155	0.3%	0.6%	6.39%
Western Asia	1-5 million	24,5/6	32,205	45,943	66,888	//,495	1.3%	1./%	3.55%
Western Asia	500,000-1 million	8,/43	12,775	19,730	26,330	27,513	0.6%	0.6%	2.24%
Western Asia	< 500,000	50,940	58,690	68,582	69,796	68,993	1.9%	1.5%	0.04%
Europe	10 million or more	-	10,005	21,988	24,159	34,994	0.6%	0.8%	3.15%
Europe	5-10 million	25,9/1	22,978	20,816	28,843	19,751	0.6%	0.4%	-0.35%
Europe	1-5 million	83,484	83,230	81,960	88,881	95,638	2.3%	2.1%	1.03%
	500,000-1 million	52,2/1	49,707	54,649	59,093	63,351	1.5%	1.4%	0.99%
	< 500,000	341,257	348,626	357,199	356,608	352,566	10.0%	7.6%	-0.09%
Eastern Europe	10 million or more	_	10,005	11,4/2	12,4/8	12,5/6	0.3%	0.3%	0.61%

#### ANNEX 1 continued

## Population of Cities by Size, Proportion and Growth by Region

Major area, region, country or area	Site class of urban settlement	1990	2000	2010	2020	2025	2010	2025	2010- 2025
				Populatio				Per cent	
Eastern Europe	5-10 million	8,987	_		5,065	5,143	0.0%	0.1%	
Eastern Europe	1-5 million	34,177	34,034	32,615	29,980	30,742	0.9%	0.7%	-0.39%
Eastern Europe	500,000-1 million	19,836	18,556	22,811	23,143	23,794	0.6%	0.5%	0.28%
Eastern Europe	< 500,000	148,167	144,878	136,143	133,516	131,983	3.8%	2.8%	-0.21%
Northern Europe	10 million or more	_	_	_	_	10,255	0.0%	0.2%	
Northern Europe	5-10 million	7,654	8,225	8,923	9,796	—	0.3%	0.0%	-100.00%
Northern Europe	1-5 million	9,323	10,501	12,011	14,461	16,428	0.3%	0.4%	2.11%
Northern Europe	500,000-1 million	7,427	6,618	6,885	8,795	9,893	0.2%	0.2%	2.45%
Northern Europe	< 500,000	46,582	48,149	50,504	51,071	50,514	1.4%	1.1%	0.00%
Southern Europe	5-10 million	—	5,014	11,893	13,982	14,608	0.3%	0.3%	1.38%
Southern Europe	1-5 million	26,910	23,254	18,885	21,184	23,126	0.5%	0.5%	1.36%
Southern Europe	500,000-1 million	11,235	11,826	12,158	14,290	16,639	0.3%	0.4%	2.11%
Southern Europe	< 500,000	52,765	54,919	62,083	62,030	59,772	1.7%	1.3%	-0.25%
Western Europe	10 million or more	—	—	10,516	11,681	12,163	0.3%	0.3%	0.97%
Western Europe	5-10 million	9,330	9,739		—	—	0.0%	0.0%	
Western Europe	1-5 million	13,074	15,441	18,448	23,256	25,342	0.5%	0.5%	2.14%
Western Europe	500,000-1 million	13,774	12,707	12,794	12,866	13,025	0.4%	0.3%	0.12%
Western Europe	< 500,000	93,743	100,680	108,470	109,992	110,297	3.0%	2.4%	0.11%
Latin America/Caribbean	10 million or more	40,601	57,771	65,029	94,653	99,774	1.8%	2.1%	2.89%
Latin America/Caribbean	5-10 million	15,432	18,925	28,818	23,3/1	30,031	0.8%	0.6%	0.28%
Latin America/Caribbean	1-5 million	66,033	83,/8/	110,142	137,484	153,087	3.1%	3.3%	2.22%
Latin America/Caribbean	500,000-1 million	29,478	37,445	42,039	46,873	51,192	1.2%	1.1%	0.20%
Latin America/Caribbean	< 500,000	7,000	195,693	219,219	228,855	10 792	0.2%	4.9%	1.20%
Caribbean	1-5 million	7,092	8,201	8,903	1 212	1 422	0.3%	0.2%	1.20%
Caribbean	500,000-1 million	11 422	14 704	1,143	20 020	1,432	0.0%	0.0%	1.07%
	< 500,000	15 21 2	14,794	20 142	20,020	20,734	0.5%	0.4%	1.07 /6
	5 10 million	13,312	10,022	20,142	10 /05	11 168	0.0%	0.3%	1.5470
	1.5 million	7 201	18 /61	28 228	33 682	/2 330	0.0%	0.2%	2 74%
Central America	500.000-1 million	1/ 836	15 335	19 721	19/117	18 263	0.6%	0.7%	-0 51%
Central America	< 500.000	36 149	41 427	44 247	45,346	44 900	1.2%	1.0%	0.10%
South America	10 million or more	25,289	39.749	44.887	71,414	75,193	1.3%	1.6%	3.50%
South America	5-10 million	15,432	18,925	28,818	, 12,966	18,863	0.8%	0.4%	-2.79%
South America	1-5 million	51,650	57,124	73,010	93,781	99,975	2.1%	2.2%	2.12%
South America	500,000-1 million	14,060	21,530	21,175	26,144	31,497	0.6%	0.7%	2.68%
South America	< 500,000	112,505	139,472	157,293	163,481	160,313	4.4%	3.5%	0.13%
Northern America	10 million or more	26,969	29,659	33,327	48,226	50,693	0.9%	1.1%	2.84%
Northern America	5-10 million	7,374	13,494	31,984	52,723	55,985	0.9%	1.2%	3.80%
Northern America	1-5 million	71,227	85,310	95,452	90,683	103,506	2.7%	2.2%	0.54%
Northern America	500,000-1 million	21,736	27,380	27,857	36,053	41,075	0.8%	0.9%	2.62%
Northern America	< 500,000	84,783	92,068	93,860	87,221	78,782	2.6%	1.7%	-1.16%
Oceania	5-10 million	_	_	_	5,254	5,646	0.0%	0.1%	
Oceania	1-5 million	10,283	12,652	14,573	12,156	13,132	0.4%	0.3%	-0.69%

### ANNEX 1 continued

## Population of Cities by Size, Proportion and Growth by Region

Major area, region, country or area	Site class of urban settlement	1990	2000	2010	2020	2025	2010	2025	2010- 2025
				Population				Percent	
Oceania	500,000-1 million	870	—	1,095	1,356	3,694	0.0%	0.1%	8.45%
Oceania	< 500,000	7,903	9,272	10,189	11,059	9,286	0.3%	0.2%	-0.62%
Australia/New Zealand	5-10 million	_	—	—	5,254	5,646	0.0%	0.1%	
Australia/New Zealand	1-5 million	10,283	12,652	14,573	12,156	13,132	0.4%	0.3%	-0.69%
Australia/New Zealand	500,000-1 million	870	—	1,095	1,356	3,084	0.0%	0.1%	7.15%
Australia/New Zealand	< 500,000	6,327	7,358	7,926	8,232	6,676	0.2%	0.1%	-1.14%
Melanesia	< 500,000	1,097	1,335	1,621	2,098	1,833	0.0%	0.0%	0.82%
Micronesia	< 500,000	261	325	358	412	439	0.0%	0.0%	1.37%
Polynesia	< 500,000	218	254	284	317	338	0.0%	0.0%	1.17%

Source: United Nations (2012)

## Percentage Population Living in Cities by Population Size 1995, 2010, 2025

	10 mil	lion or	more	5-1	0 milli	on	1-	5 millio	on	0.5	-1 milli	on	Less t	han 50	0,000
	1995	2010	2025	1995	2010	2025	1995	2010	2025	1995	2010	2025	1995	2010	2025
WORLD	7.3	9.9	13.6	5.6	7.5	8.7	20.8	21.4	24.3	9.1	9.9	11.1	57.2	51.3	42.4
Less-developed	6.6	9.6	13.7	6.4	8.2	8.9	20.1	21.2	25.0	9.1	10.3	11.2	57.8	50.7	41.2
regions															
AFRICA	—	5.4	7.5	6.4	2.1	9.1	20.9	26.0	26.9	10.5	9.6	9.4	62.1	56.8	47.1
Sub-Saharan Africa	—	3.6	6.6	3.5	2.8	8.9	22.5	28.7	30.5	12.2	10.3	9.3	61.8	54.6	44.7
Eastern Africa				—	—	9.3	21.0	24.2	25.7	9.1	9.9	9.5	69.9	65.9	55.5
Central Africa	—	—	16.6	—	16.2	10.2	29.8	30.9	29.6	12.0	8.5	10.3	58.2	44.4	33.4
Northern Africa	—	10.8	10.8	13.2	—	9.7	17.3	18.3	13.7	6.6	7.4	9.8	62.9	63.5	56.1
Southern Africa							35.5	51.0	53.7	10.9	1.9	8.1	53.6	47.1	38.2
Western Africa	—	8.0	8.1	8.1	—	9.8	16.3	24.8	29.7	14.5	13.4	9.0	61.1	53.8	43.4
ASIA	8.6	11.4	15.8	6.7	9.5	9.2	19.4	19.1	23.5	7.9	10.3	11.8	57.4	49.7	39.7
Eastern Asia	12.0	12.1	15.3	3.7	10.0	12.1	21.4	21.6	26.5	8.3	12.4	14.9	54.7	43.8	31.2
South-Central Asia	9.9	14.6	20.9	7.5	8.8	5.7	16.4	16.4	19.3	8.4	8.0	9.8	57.8	52.3	44.3
Central Asia							14.1	14.6	22.2	5.6	14.1	14.7	80.4	71.2	63.1
Southern Asia	10.5	15.3	21.7	8.0	9.1	5.9	16.6	16.4	19.2	8.6	7.7	9.6	56.4	51.4	43.6
South-Eastern Asia	—	4.5	11.2	14.2	11.1	6.0	13.7	10.9	16.1	4.7	6.8	6.1	67.4	66.6	60.6
Western Asia	—	7.0	6.9	7.3	7.1	13.0	29.1	29.4	35.7	9.5	12.6	12.7	54.1	43.9	31.8
EUROPE	—	4.1	6.2	5.2	3.9	3.5	16.6	15.3	16.9	10.2	10.2	11.2	68.0	66.6	62.3
Eastern Europe	—	5.6	6.2	4.4	—	2.5	16.4	16.1	15.1	8.8	11.2	11.6	70.4	67.1	64.6
Northern Europe	—	—	11.8	10.9	11.4	-	13.0	15.3	18.9	10.4	8.8	11.4	65.6	64.5	58.0
Southern Europe				_	11.3	12.8	29.6	18.0	20.3	12.1	11.6	14.6	58.2	59.1	52.4
Western Europe	—	7.0	7.6	7.0	—	-	9.9	12.3	15.8	10.8	8.5	8.1	72.3	72.2	68.6
Latin America/ Caribbean	15.3	14.0	17.8	3.4	6.2	5.4	20.7	23.7	27.3	10.1	9.0	9.1	50.5	47.1	40.3
Caribbean							35.7	32.1	32.7	2.7	4.1	4.3	61.6	63.8	62.9
Central America	20.1	17.9	17.4	—	—	7.9	13.6	25.1	30.0	20.0	17.6	12.9	46.3	39.4	31.8
South America	15.1	13.8	19.5	4.9	8.9	4.9	21.8	22.5	25.9	7.3	6.5	8.2	51.0	48.4	41.5
Northern America	12.4	11.8	15.4	3.4	11.3	17.0	35.3	33.8	31.4	10.4	9.9	12.4	38.5	33.2	23.9
Oceania				—	—	17.8	53.3	56.4	41.3	4.8	4.2	11.6	42.0	39.4	29.2
Australia/New				—	—	19.8	58.2	61.8	46.0	5.2	4.6	10.8	36.5	33.6	23.4
Zealand															
Melanesia										—	—	25.0	100.0	100.0	75.0

Source: United Nations (2012)

## Number of Cities by Population Size 1995, 2010, 2025

	10 mil	lion or	more	5-	10 mill	ion	1-	5 millio	on	500,0	000-1 n	nillion
	1995	2010	2025	1995	2010	2025	1995	2010	2025	1995	2010	2025
WORLD	13	23	37	19	38	59	270	388	572	338	513	750
AFRICA	—	2	3	2	1	9	26	47	81	36	55	91
Sub-Saharan Africa	—	1	2	1	1	7	21	40	71	29	44	71
Eastern Africa				—	—	2	6	9	17	5	11	21
Central Africa	—	—	1	—	1	1	4	8	12	5	6	14
Northern Africa	—	1	1	1	—	2	5	7	10	7	11	20
Southern Africa							4	7	7	3	1	5
Western Africa	—	1	1	1	—	4	7	16	35	16	26	31
ASIA	7	13	22	11	25	32	119	188	305	139	274	424
Eastern Asia	4	6	9	3	12	19	57	95	157	68	156	237
South-Central Asia	3	5	9	4	7	6	35	53	79	45	65	115
Central Asia							2	2	4	2	5	6
Southern Asia	3	5	9	4	7	6	33	51	75	43	60	109
South-Eastern Asia	—	1	3	3	4	3	11	16	31	12	24	33
Western Asia	—	1	1	1	2	4	16	24	38	14	29	39
EUROPE	—	2	3	3	3	3	47	49	57	77	83	96
Eastern Europe	—	1	1	1	—	1	23	21	21	29	35	35
Northern Europe	—	—	1	1	1	—	6	8	10	10	10	15
Southern Europe				—	2	2	10	8	10	17	18	25
Western Europe	—	1	1	1	—	—	8	12	16	21	20	21
Latin America/Caribbean	4	4	6	2	4	5	37	55	74	51	60	73
Caribbean							4	4	4	1	2	2
Central America	1	1	1	—	—	2	6	16	27	23	28	25
South America	3	3	5	2	4	3	27	35	43	27	30	46
Northern America	2	2	3	1	5	9	36	43	50	34	39	60
Oceania				—	—	1	5	6	5	1	2	6
Australia/New Zealand				—	—	1	5	6	5	1	2	5
Melanesia							—	—			—	1

Source: United Nations (2012)

## Urban Indicators for Selected Country Case Studies

		Population		٩	lumber of c	ities/agglor	nerations by	population	
	Country	10 largest cities	Largest city	Total number of cities	Under 500,000	500,000- 1 million	1-5 million	5-10 million	>10 million
Australia	22,800	13,502	4,428	17	10	2	5	0	0
Angola	19,698	4,827	2,825	10	9	0	1	0	0
Brazil	196,655	33,949	11,377	261	223	23	13	1	1
Colombia	46,295	17,113	7,539	46	36	6	3	1	0
Ethiopia	84,734	4,760	3,480	16	15	0	1	0	0
India	1,241,492	60,103	14,282	556	461	49	43	1	2
Indonesia	242,326	28,055	9,751	208	180	15	12	1	0
Kenya	41,610	5,763	3,476	7	5	1	1	0	0
Korea(South)	48,391	25,621	9,772	70	48	12	9	1	0
Nigeria	162,471	31,019	10,577	68	46	11	9	1	1
Senegal	12,768	3,063	2,682	7	6	0	1	0	0
South Africa	50,460	17,709	3,795	68	55	6	7	0	0
Tunisia	10,594	2,206	743	8	7	1	0	0	0
Turkey	73,640	27,996	12,900	79	66	7	5	0	1
Vietnam	88,792	8,540	6,167	31	28	1	2	1	0

"City" is defined as settlement with a population of 100,000 or more • Kenya and Senegal all have less than 10 cities defined. Calculation for population 10 largest cities is for the total number of cities as defined. • Figures taken from www.world-gazetteer.com

	Urban service	s (% of urban popu	lation with access)	Environment		Land marke	ts largest sec	ondary city
	Sanitation	Solid waste management	Reticulated water	Air pollution PM10 (country level)	Urban water quality	Home ownership	Land \$ (per ha)	Private ownership
Australia	100	100	100	14				
Angola	85	-	60	56				
Brazil	85	95	100	19		73		
Colombia	82	98	99	20		49		
Ethiopia	29	-	97	51				
India	58	-	97	57				
Indonesia	73	80	92	68				
Kenya	32	-	82	30				
Korea(South)	100	-	100	33				
Nigeria	35	-	74	42				
Senegal	70	-	93	80				
South Africa	86	-	99	26				
	96	95	99	23				
Turkey	97	-	100	37				
Vietnam	94	-	99	50				
	2011		2011					

Sanitation = urban population with at least adequate access to excreta-disposal facilities that can effectively prevent human, animal and insect contact with excreta. • Reticulated water = water provided from a source such as a household connection, public standpipe, borehole, protected well or spring and rainwater collection. • PM = particulate matter, which affects people more than any other pollutant. The aim is to achieve the lowest concentrations possible. Data from 2009 • Home ownership according to tenure status of housing - urban households
## ANNEX 4 continued

# Urban Indicators for Selected Country Case Studies

	Social						
	Average income	Total poverty ratio head count	Urban poverty ratio head count	Unemployment rate (%)	Literacy rate (% adults)	Hospital beds (per 10,000)	Gini coefficient (country)
Australia	44,938	-	-	5.2	-	3.8	-
Angola		-	-	-	70	-	-
Brazil		21.4	-	8.3	90	2.4	54.7
Colombia		37.2	33	11.6	93	1	55.9
Ethiopia		-	-	20.5	100	6.3	-
India		29.8	20.9	-	-	-	-
Indonesia		12.5	9.2	7.1	92	0.6	-
Kenya		-	-	-	87	1.4	-
Korea (South)	35,406	-	-	3.7	-	10.3	-
Nigeria		-	-	-	61	-	48.8
Senegal		-	-	-	50	0.3	-
South Africa		-	-	23.8	89	-	63.1
Tunisia		-	-	14.2	78	2.1	-
Turkey		18.1	8.9	11.9	91	2.5	39
Vietnam		14.5	3.3	2.4	93	3.1	35.6

	Urbanization						
	Urban population (% of total)	Rural population (% of total)	Urban annual growth rate (%)	Projected annual urban growth rate (%)	Population density (per sq km)	Average population densities (urban)	Average population densities (non-urban)
Australia	89	11	3.9	1.6	3	1,700	
Angola	59	61	1.5	0.5	15		
Brazil	85	15	1.2	-0.1	23		
Colombia	75	25	1.7	0.4	42		
Ethiopia	17	83	3.6	2.4	83		
India	31	69	2.5	1.4	412		
Indonesia	51	49	2.5	0.5	132		
Kenya	24	76	4.4	3	71		
Korea (South)	83	17	0.7	-0.5	509		
Nigeria	50	50	3.8	2.4	174		
Senegal	43	57	3.3	2.2	65		
South Africa	62	38	1.2	0.5	41		
Tunisia	66	34	1.3	0.3	68		
Turkey	72	28	2.4	0.2	95		
Vietnam	31	69	3	0.9	280		

## ANNEX 4 continued

# Urban Indicators for Selected Country Case Studies

	Governance							
	Administrative system of government	Policy on urbanization	Policy regional development	Planning system	Per cent of funds to local government			
Australia	Federal, state, local	State/local		State/local				
Angola	National, regional, local (municipality & communes)							
Brazil	Federal, state/federal city district, municipal	National, local	Yes	Municipal				
Colombia	National, departments (regional)/ capital district, municipal	Provincial	No	Provincial/local	42			
Ethiopia	Federal, regional, woreda (city/ municipal), kebele (neighbourhood)	Federal	Yes	Regional/local	30			
India	Federal, state, local	Federal						
Indonesia	National, provincial, regencies kabupaten (cities) kota (districts) kecamatan (village groupings - either desa or kelurahan)	Central	Yes	National				
Kenya	National, county							
Korea (South)	National, province, local	Central	Yes	National				
Nigeria	National, state/federal capital territory, local	-		State/local				
Senegal	National, regional, departmental, sub- prefectural and village.			Local				
South Africa	Federal, province, municipal	Federal	?	Provincial/ municipal				
Tunisia	Governorates, delegations, sectors							
Turkey	National, district							
Vietnam	Province, towns/districts/villages							

Source: Brian Roberts

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SECONDARY CITIES have recently become the subject of renewed interest by scholars and international development organizations. Today they are no longer defined by population size, but rather by their functionality and connectivity with global and national systems of cities, which has a significant influence on the way they are defined.

Written specially for Cities Alliance, this book investigates the role secondary cities play in the development of global regions and nations. It includes:

- A literature review and redefinition of the term "secondary city" in the context of the role they play in global and national urban systems.
- A discussion of trends, influences and challenges, including the forces of New Economic Geography (NEG), facing the development of secondary cities in developing regions using a systems analysis perspective. This is dealt with under the headings: urban governance, economic, development, social and environmental systems.
- Fifteen regional case studies illustrate the way countries in developing regions have approached urbanization, decentralization and other developments in support of secondary cities development.
- An examination of the role of international development assistance agencies and organizations in supporting the development of systems of secondary cities.

"This book is a significant step forward in global understanding of the importance of secondary cities in the development process. Brian Roberts brings several decades of on-the-ground experience working with governments and scholars on urban issues. As usual, his insights are incisive and provocative. I commend the Cities Alliance for publishing this work and strongly recommend it to a global audience."

MICHAEL COHEN, DIRECTOR OF THE INTERNATIONAL AFFAIRS PROGRAM, THE NEW SCHOOL

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