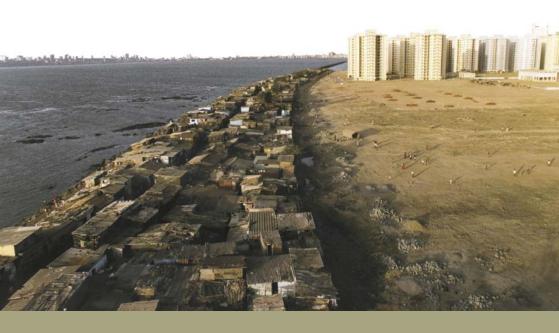


# The New Global Global Frontier

Urbanization, Poverty and Environment in the 21st Century



Edited by George Martine, Gordon McGranahan, Mark Montgomery and Rogelio Fernández-Castilla

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# Acronyms and abbreviations

APHRC African Population and Health Research Center AUWSP Accelerated Urban Water Supply Programme (India)

BNH Banco Nacional de Habitacao

BSUP Basic Services to Urban Poor (JNNURM, India)

CEP Centre for Economic Performance (LSE)
CIAT International Center for Tropical Agriculture

CIESIN Center for International Earth Science Information Network
CODI Community Organizations Development Institute (Thailand)

COHRE Centre for Housing Rights and Evictions
CSH Centre de Sciences Humaines (India)
DHS Demographic and Health Survey
DSS demographic surveillance systems

ECLAC Economic Commission for Latin America and the Caribbean ESCAP Economic and Social Commission for Asia and the Pacific

EPZ export processing zone

FAO Food and Agricultural Organization of the United Nation

FDI foreign development investment

GDP gross domestic product
GEC global environmental change
GIS geographic information system

GRUMP Global Rural-Urban Mapping Project

GTZ German Technical Cooperation

IDSMT Integrated Development of Small and Medium Towns (India)

IFPRI International Food Policy Research Institute

IIED International Institute for Environment and Development

ILO International Labour Organization

INEC Instituto Nacional de Estadística y Censos (Ecuador)

IPPF International Planned Parenthood Federation

IT information technology

JNNURM Jawaharlal Nehru National Urban Renewal Mission (India)

LAC Latin America and the Caribbean

LDC least developed country
LDR less developed region
LECZ low elevation coastal zone
LSE London School of Economics
MDG Millennium Development Goal

MDR more developed region

MICS Multiple Indicator Cluster Survey

MIDUVI Ministerio de Desarrollo Urbano y Vivienda (Ecuador)

MIPAA Madrid International Plan of Action on Ageing

MPCE monthly per capita expenditure

MSF Médecins san Frontières

NGO non-governmental organization

NOAA National Oceanic Atmospheric Administration
NIUA National Institute of Urban Affairs (India)

NRCIM National Research Council and Institute of Medicine

NSSO National Sample Survey Organization (Government of India)

OAF Fraternal Assistance Organization

OECD Organisation for Economic Co-operation and Development

OUP organization of the urban poor

PEVODE People's Voice for Development (Tanzania) SDI socioeconomic and demographic information

SDI Shack/Slum Dwellers International

SEDAC Socioeconomic Data and Applications Center (GRUMP)

SERFHAU Servico Federal de Habitacao e Urbanismo SEWA Self-Employed Women's Association (India)

SRTM Shuttle Radar Topography Mission

SSA sub-Saharan Africa

SUDENE Superintendencia do Desenvolvimento do Nordeste

TSP total suspended particulates
TVE township and village enterprise

UHI urban heat island UN United Nations

UNDP United Nations Development Programme

UNFPA United Nations Population Fund

UN-Habitat United Nations Human Settlements Programme

UNRISD United Nations Research Institute for Social Development WCRC Wattville Concerned Residents Committee (South Africa)

WFS World Fertility Survey

WIDER World Institute for Development Economics Research

WIEGO Women in Informal Employment: Globalizing and Organizing

WPR workforce participation rate

# Introduction

# The New Global Frontier: Cities, Poverty and Environment in the 21st Century

### THE EMERGING PROFILE OF THE NEW FRONTIER

The cities and towns<sup>1</sup> of Africa, Asia and Latin America are central to the demographic, economic and environmental challenges of the 21st century. The urban centres of low- and middle-income countries represent the new global frontier. Virtually all of the world's population growth is projected to occur in these cities and towns, and it is likely that they will account for most of the economic growth as well. Currently, more than 3.3 billion people live in towns and cities; the number is expected to rise to some 5 billion by 2030. Over 80 per cent of this growth will accrue to Asia and Africa, with most of the rest to Latin America.<sup>2</sup>

The urban transformation can be viewed as a set of momentous demographic and economic developments that present policymakers with opportunities as well as challenges. Cities are the locus of most economic expansion, and exemplify to rural and urban residents alike the hope of social advancement; they also concentrate poverty and environmental degradation. Massive urban growth in developing areas during coming decades may bring hope and wellbeing to millions of people, or it may exacerbate suffering and misery for the majority of new urbanites. The welfare of billions of people depends directly on how the world prepares for this inevitable growth in developing areas.

The quality of governance and planning in these urban areas will thus have both local and global significance. The residents of cities that are economically unsuccessful are likely to be exposed to environmental health burdens; even cities that are successful in narrowly economic terms may, if they are not properly governed, do global environmental damage (as currently affluent urban centres already do).

While accommodating urbanization and urban growth will no doubt be difficult, efforts to prevent these developments are likely to make matters worse, and not just for the urban-dwellers. For reasons outlined in this book, the fundamental challenge is not to control the rate of urbanization, but rather to achieve a pace and pattern of urban development that is beneficial. The benefits must reach the urban poor as well as the elites, and must also be extended to both rural-dwellers and future generations. This challenge demands a proactive approach to urban planning which considers demographic and environmental futures while responding to current priorities. Such an approach demands, in turn, a sound understanding of urban development processes, locally, nationally and even internationally. This book is an attempt to contribute to this understanding.

Although it has not gone unnoticed, the urban transformation has yet to receive anything close to the attention it deserves. Of course, the *current* plight of cities and their slums, as well as the purported deterioration in their social and environmental conditions, are frequently highlighted. On occasion, at least, the productive potential of cities in the context of globalization has also been recognized. Yet the enormity of the impacts expected from urban growth in the developing world has not yet sunk in. Even less recognized is the fact that the future of developing-world cities – and, therefore, the very future of humanity – depends to a large extent on decisions that are taken *now* with respect to the organization of upcoming city growth.

This book proposes to reflect on several key strands in the larger story of 21st-century urbanization, with the aim of getting a better grasp on some of the actions that could be taken to make this process a more positive force for human development. The topics covered range over a wide spectrum of social, demographic, economic and environmental concerns. A recurring point is that, with a little support in the form of proper policies, urbanization can help to unshackle the bonds of perennial poverty, give people a better chance to live fuller lives and even help to deflect environmental damage. It is already a well-documented fact that, although the poor have been urbanizing even more rapidly than the population as a whole, the process of urbanization has helped to reduce overall poverty. But this record could improve significantly if better policies and proactive approaches were to replace the increasingly negative stances of policymakers to the urban transformation.

# THE POTENTIALITIES OF THE NEW GLOBAL FRONTIER

Many policymakers and scholars still view urbanization as harmful and hope to somehow retard or even reverse it. To them, the concentration of poverty, slum growth, environmental problems and manifold social disturbances in cities paint a menacing picture. No one doubts that, in many countries, rural development priorities – which can play a vital role in reducing poverty and protecting the environment – do not receive the economic resources they deserve. The expert view, however, is all but unanimous: urbanization is not only inevitable but necessary

if poverty is to be reduced in the developing world and global sustainability enhanced.

Cities will inevitably have an increasingly critical role in future development scenarios. Urbanization can be critical for economic growth, for reduction of poverty, for stabilization of population growth and for long-term sustainability. But realizing this potential will require a different mindset on the part of policymakers, a proactive approach and better governance than has been observed up to now.

Urban development is essential – if not in itself sufficient – for economic and social development. No country has ever achieved significant economic growth in the modern age by retaining its population in rural areas. Most increments in national economic activity already take place in urban areas. These cities and towns account for a growing share of national economic production because of their advantages in terms of proximity, concentration and scale. In the context of globalized economic competition, these advantages can be heightened.

Proximity and concentration make it easier and cheaper for cities to provide their citizens with basic social services, infrastructure and amenities. The higher intensity of economic activity in cities can foster employment and income growth, the starting points for improved social welfare. These potential benefits are often only partly realized, however, with urbanization being accompanied by unnecessary increases in inequality and fast-growing slums. Both urban and rural poor often lose out to urban elites. They also lose out when the residents of low-income urban neighbourhoods are prevented from securing the advantages of their urban location.

For better or worse, urbanization also constitutes a prime mover of cultural change, with an enormous impact on ideas, values, beliefs and social organization. For migrants, cities present new opportunities for access to diverse resources and knowledge in a wide range of areas. Cities allow greater flexibility in the application of social norms that traditionally impinge on freedom of choice, especially for women. They have the potential to provide more opportunities for social and political participation and new roads to empowerment, as evident in the rise of women's movements, youth groups, community associations and organizations of the urban poor in developing-world cities. Cities are also at the heart of local, national and global environmental change. While it is true that cities currently concentrate and exemplify the environmental problems produced by conventional development strategies, they are also critical elements in the solutions. Demographic concentration is likely to be essential to the preservation of the world's remaining rural ecosystems. The potential value of urbanization for long-term environmental sustainability is thus being increasingly recognized. Settlement patterns, geographic and ecological location, density, and urban management practices can all have an extraordinary impact on how urban growth affects the environment.

The demographic importance of cities is not limited only to their size and growth but also to their role in the future evolution of fertility rates and thus of global population growth trends. In almost all developing countries, the fertility

transition occurs first and proceeds fastest in cities. Cities offer few incentives for large families. Moreover, access to health services, including reproductive health facilities, is typically better than in rural areas. Consequently, the pace of urbanization can be expected to have an important impact on the trajectory and timing of population stabilization in developing countries.

In short, social, economic, demographic and environmental outcomes for the future will hinge largely on what happens in the cities and towns of today's poor countries. Upcoming urban growth could, under the right policy framework, generate progress in all these domains. A new vision and improved governance, based on a better understanding of urban growth processes; better information; respect for the poor's right to the city; and enhanced participation by all sectors of urban society would help upcoming urban growth play multiple positive roles in improving people's lives.

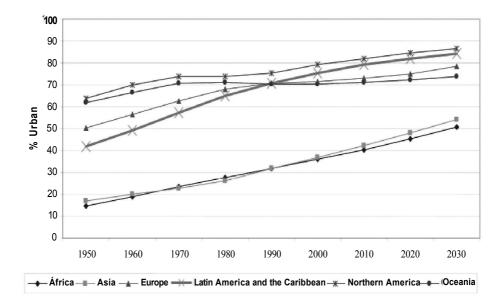
# FACTS, FALLACIES AND POLICIES ON URBAN GROWTH

To date, only a few countries and international agencies seem to have recognized the potential benefits of the new urban frontier. Progress has been hampered by the fact that urbanization and urban growth generally get bad press and are often viewed negatively by policymakers. Cities in developing countries tend to be viewed as unmanageable social cauldrons that concentrate not only people but also poverty and social disorganization. Much of this perception stems from misconceptions that need to be set right before more effective policies can be put into place. A brief review of key trends should help correct these misunderstandings and better set the stage for a fresh look at the new frontier.

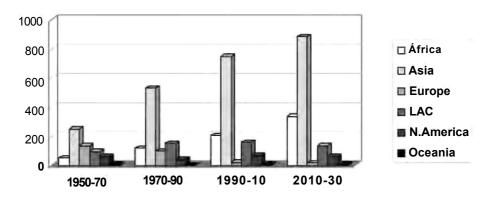
# First fallacy: All developing countries and regions are going through the same urban transition

Actually, there are large differences in the levels and patterns of urbanization between, and within, countries conventionally labelled as 'developing'. As seen in Figure I.1, the path of today's developing countries to urbanization and urban growth not only differs significantly from the past patterns of developed countries, but also varies considerably by region. For instance, most Latin American countries are well advanced in their urban transition; thus much could be learned from their experiences, both positive and negative. By contrast, several large, populous countries in Africa and Asia still have a predominantly rural base.

Among the three major developing regions, Latin America already has high levels of urbanization. Asia and Africa have initiated their urban transition at a much later date, with much larger population bases than was the case in Latin America. Consequently, as depicted in Figure I.2, Asia and Africa are projected to experience by far the largest expansion of absolute urban population. Between



**Figure I.1** Percentage of the total population living in urban areas, by region, 1950–2030



**Figure I.2** Absolute increases in urban population by world regions, selected periods (000s)

Source: United Nations, 2006 (see note 2).

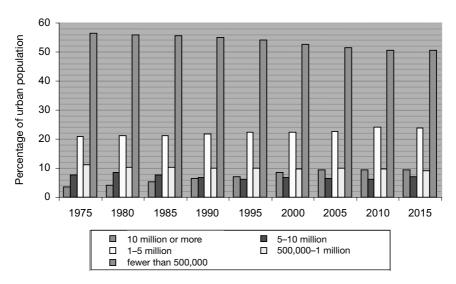
2000 and 2030, Asia's urban population will nearly double – from 1.36 to 2.64 billion. Africa's is projected to more than double from 294 to 742 million, though because of poor data, difficulties in taking account of the AIDS pandemic and economic instability, this projection is particularly uncertain. Latin America's urban population is expected to grow from 394 to 609 million. By 2030, Africa and Asia will include almost seven out of every ten urban inhabitants in the world.

# Second fallacy: Most urban growth is occurring in mega-cities

Much public attention in recent years has been centred on mega-cities, defined as urban centres with populations of 10 million or more. Actually, there are only 22 cities of that size today; the majority of them are dynamic and functional centres. Moreover, some of these larger cities have already shown a propensity for slower population growth. Still more important, cities of this size are *not* home to a large proportion of the world's urban population, nor are they expected to absorb a significant proportion of urban growth in the foreseeable future.

As shown in Figure I.3, smaller urban centres (those with less than 500,000 inhabitants) still contain more than half of the world's urban population. Moreover, they will continue to absorb about half of urban growth. Mega-cities, by contrast, account for only nine per cent of the current urban population, and this is not expected to change drastically in the future.

This distribution is of considerable importance for shaping policy, and a much closer look needs to be taken at the possibilities and difficulties of smaller urban centres. The good news is that smaller cities are likely to have more flexibility in terms of the direction of territorial expansion and, to some extent, the autonomy of decision-making. And in some cases they may be able to attract investments within the contexts of decentralization and globalized economic competition. The bad news is that smaller urban centres generally have more unaddressed problems in terms of adequate housing, piped water, sanitation, waste disposal and other services. Moreover, smaller urban centres tend to have fewer human, financial and



**Figure I.3** Percentage of world urban population by size class of settlement, 1975–2015

Source: United Nations, 2006 (see note 2).

technical resources at their disposal. The combination of these characteristics makes them prime candidates for technical and financial support.

# Third fallacy: The poor are a marginal minority in urban centres

The relationship between poverty and urbanization is complex and often misunderstood, which tends to perpetuate inadequate policies. On average, the residents of urban areas generally enjoy social and economic advantages relative to rural inhabitants. This disparity sometimes influences policymakers to favour solutions that try to resolve poverty in rural areas, while also attempting to prevent rural—urban migration, in the hope that this will prevent the transfer of poverty to cities. Yet the paradox is that, while urban poverty is growing and already much larger than generally depicted in global figures, the solutions to poverty, under good governance and proper policies, are more likely to be found in the economic dynamism of the cities.

It is important to look beneath the urban and rural averages in formulating pro-poor policies and programmes. Urban settlements in low- and middle-income countries almost invariably contain large pockets of poverty, and vulnerability can increase with rapid urban growth. The stark realities of slum life defy description and statistics. Large sections of the urban population in developing countries are malnourished, have below poverty-line incomes and face high infant and child mortality rates and large preventable disease and injury burdens. Global assessments tend to underestimate urban poverty by failing to account for the higher monetary cost of non-food needs. Moreover, poverty is growing rapidly in urban areas while decreasing in absolute terms in rural areas, partly because population growth in rural areas is slow or nil due to out-migration.

Urban policies therefore need to recognize the fact that the poor make up a large portion, and sometimes a majority, of the urban population in developing countries. According to UN-Habitat,<sup>3</sup> developing-world slums contain some 41 per cent of the urban population of these countries. About 72 per cent of urban populations in sub-Saharan Africa and 57 per cent of those in Southern Asia are slum-dwellers (UN-Habitat, 2006, p16). Furthermore, the percentage of slum-dwellers is largest in some of the subregions that are expected to experience the most substantial absolute urban growth over the coming decades.

It is of some relevance for policymakers that the poor make up an even larger component of *new* urban growth. Urban centres grow primarily through natural increase and through migration, and the poor tend to predominate in both these types of growth. Even though rural migrants generally benefit from the move, achieving higher standards of living than the rural average, many remain poor. Within urban areas, poor groups have higher rates of natural increase than the rest of the population.

Despite their numbers, poor people are often invisible to policymakers or are viewed by others as a marginal and temporary component of city life. Their needs are rarely prioritized in urban planning – which tends to be centred on making the city more functional for economic activity and for the needs of the middle and upper classes – and they fall through the cracks of formal real-estate markets. As a consequence, the poor often end up living on land that nobody else wants because it is too far from employment and services, too steep, too dangerous, too toxic, too ecologically vulnerable, or otherwise unacceptable for other uses.

This neglect of the needs of the poor is at the root of the appalling housing situations faced by slum-dwellers throughout the developing world. Shelter deprivation, lack of water and lack of sanitation all have important implications for people's lives. Lack of a decent shelter makes it much more difficult for poor people to take advantage of what the city has to offer. The neglect of the poor also makes it more difficult for the city to compete for productive investments, to generate a tax base, to create jobs and income, and, thus, to improve the overall quality of life.

# Fourth fallacy: The poor are a drain on the urban economy

This commonly held view reflects a lack of understanding of the role that the urban 'informal' sector plays in urban and national economic growth. It is certainly the case that many of the urban poor work in informal activities. But in today's world, this sector is critical to the economy of developing countries — much of it is competitive and dynamic, well integrated into the urban and even the global economies. Informal activities can account for as much as two-thirds of urban employment in some countries and are a main source of employment and income for poor urban women.

However, a major consideration is that rural areas generally present even *fewer* options for gainful employment and for fulfilling minimal socioeconomic aspirations. Urban centres are more dynamic in generating economic activity and income. They inevitably have advantages of scale and proximity in terms of providing people with infrastructure and services.

Since the needs of the poor are not effectively addressed by urban administrations in poor countries, providing services for them has not generally strained budgets as much as attending to the needs of the better-off population. The fact that urban poverty is more visible and more politically volatile seems to be the primary implicit rationale for keeping people out of the cities. Unfortunately, such attitudes also lead to poor governance and to the failure to capitalize on the potential advantages that cities have to offer. Ultimately, treating 'rural' and 'urban' poverty as somehow separate is a short-sighted view of the problem. Successful urban development stimulates rural development and vice versa.

# Fifth fallacy: Urbanization leads to environmental degradation

Economic and population growth create environmental pressures, not just in the locations where they occur but often in distant parts of the world. Since urbanization concentrates both people and economic activities, it is not surprising that it often gets blamed for creating these environmental pressures and the resulting degradation. Paradoxically, however, by concentrating these activities, urbanization often creates opportunities for reducing environmental pressures. Moreover, the local environmental health hazards associated with inadequate water and sanitation can be addressed more efficiently in urban areas due to returns to scale.

Transportation is one of the major sources of environmental burdens, and while urban settlements are transport hubs, urban clustering actually reflects the efforts of people and enterprises to reduce their need for transport. If people and enterprises were forced to stay in rural areas, then, for them to succeed economically, they would be likely to require more transportation than their urban counterparts. Well-planned urban settlement can have much lower built-over land requirements than rural alternatives, and compact urban development is less land-intensive than urban sprawl. Furthermore, concentrating environmentally harmful activities makes them not only more evident, but easier to control. Thus, while China's past policy of promoting 'town and village enterprises' had many successes, it was well known for creating severe environmental problems.

This is not to say that affluent urban centres are less of a threat to the global environment than are poor rural villages. On the contrary, while the living environment of affluent urbanites is typically far healthier than that of poor rural-dwellers, their 'ecological footprint' per capita is far greater. The fallacy is that it is urbanization itself that creates these environmental burdens. Indeed, where urban development is well managed, urbanization can help cushion the environmental impacts of economic growth.

In considering the alternatives to urbanization, it is also important to reflect on how these alternatives are to be achieved. It is all very well to posit an alternative where fewer people leave their rural homes and instead try to achieve their ambitions in rural areas. But how would this be accomplished? This leads to the last, and in some ways most fundamental fallacy.

# Sixth fallacy: Governments should try to control rural-urban migration

The fact that urban poverty is readily visible to policymakers, some of whom view it as politically explosive, has in many countries led to anti-urban attitudes and policies.

It may seem sensible to suppress rural-urban migration to a level consistent with the availability of urban jobs and services. But on closer examination, the

view that rural—urban migration is a principal cause of urban poverty proves to be misguided. Indeed, measures to curb urbanization can make both rural and urban poverty worse. Because rural areas generally present even *fewer* options for gainful employment and for fulfilling minimal socioeconomic aspirations, mobility is a strategy that households and individuals adopt to improve their lives and to reduce risk and vulnerability. Facilitating urbanization and increasing interaction between rural and urban areas, rather than trying to prevent or ignore it, can stimulate both rural and urban development. Ultimately, treating 'rural' and 'urban' poverty as somehow separate is a short-sighted view of the problem. Successful urban development and rural development are mutually beneficial.

Moreover, the implicit assumption that most governments have suitable policy tools for implementing planned changes in migratory flows is wrong. Policies that attempt to control migration flows directly are almost invariably punitive and economically costly. Policies that influence migration indirectly are almost invariably better if justified in terms other than the size of the impact on migration.

The best-known policies that have successfully controlled rural—urban migration have had to be very harsh. Many colonial policies limited the rights of rural-dwellers to come to urban areas, leading to a burst of migration in the wake of independence. In centrally planned regimes, rural—urban migration was often controlled tightly — as with the *Hukou* (household registration) system in China — but these controls have proved far harder to maintain with the loosening of markets. Apartheid South Africa instituted strict controls, but, again, these were dismantled with the decline of the authoritarian regime. In effect, measures to control internal migration have to be harsh when the migrants perceive clearly that they would benefit substantially from a move.

It is sometimes argued that a better way to control rural—urban migration is to invest in rural areas. However, even when it is sorely needed, rural investment does not necessarily reduce rural—urban migration — particularly if poverty is inhibiting people from migrating, as is often the case, or if the rural investment displaces rural-dwellers, as is also often the case. More important, the suitability of rural investment cannot be judged on the basis of its effects on migration, and to do so would be bad economics.

In any case, in demographic terms, the main cause of urban growth in most countries is not rural—urban migration but natural increase: the difference between births and deaths. Overall, some 60 per cent of urban growth is due to natural increase, with rural—urban migration and reclassification accounting for the remainder. As urbanization advances, the contribution of natural increase eventually becomes greater — even after factoring in the usual decline in fertility that accompanies urbanization. For instance, the current contribution of natural increase to city growth in the Latin American and Caribbean region is estimated to be 65 per cent, despite the significant reduction in urban fertility.

In situations where decision-makers are legitimately concerned with the rapid pace of urban growth, it may well make sense to assist women who want to lower their fertility – through social development, the empowerment of women and better access to health services, including reproductive health services. It is unlikely to make sense to try to prevent people from moving to urban areas.

### **ORGANIZATION OF THIS VOLUME**

This book is divided into five parts, each examining a particular aspect of the urban challenge and containing between three and six chapters. The first part reviews the demographics of the urban transition and the importance of rural—urban relations. The next two parts focus on two of the major urban challenges of the 21st century: eliminating poverty and achieving environmental sustainability. These challenges must be met in changing demographic and social circumstances, and the fourth part considers several of the most significant of these changes. The challenges also vary across the world, and the final part explores the regional patterns of urbanization in parts of Africa, Asia and Latin America.

Each of these five topics is briefly summarized below. More detailed summaries, describing the content of individual chapters, are provided as introductions to each part.

### Urban transitions

Although the demographics of the transition from rural to urban are comparatively well documented, there remain both real uncertainties and misconceptions. The three chapters of this part challenge the misconceptions and explore the uncertainties. The misconceptions range from the view that urban growth is predominantly the result of migration and is concentrated in mega-cities to the view that excessive rural—urban migration predominates in the emergence of slums and that the policy challenge is to reduce this migration. Uncertainties arise from the still crude nature of most spatial information and the enormous variety of local conditions and changes over time. The state of play is changing rapidly, however, and the coming decades are likely to see major advances in our understanding of urban transitions.

# Shelter and urban poverty

Soon after the start of the 21st century, the world's urban population outnumbered its rural population. Over the course of the next few decades, the urban poor are likely to outnumber the rural poor. The pace of urbanization is likely to depend in large part on rates of economic growth and where this growth is concentrated.

However, the scale of urban and even world poverty will depend heavily on urban policies and development strategies. The four chapters in this part explore the experiences of the past and draw lessons for the future. While there have been many failed attempts to address urban shelter and poverty problems, there have also been notable successes. Special attention is paid to relations between organizations of the urban poor and their local governments, and to proactive planning for urban growth and expansion. If successful approaches to both of these can be combined effectively, the possibilities for addressing urban poverty in the 21st century will be greatly enhanced.

# Urban growth and its challenge for sustainability

Urbanization is not in itself bad for the environment, and indeed provides many opportunities for improving people's living environments, reducing pressures on local ecosystems and even reducing global environmental burdens. Rapid and undirected urban growth does pose major environmental challenges, however, and these challenges are not being met. Instead, there has been an overly narrow focus on economic growth, and the positive environmental potential of urbanization is not being exploited. The chapters in this section both set out the challenges and examine different ways of addressing them. New ways of conceptualizing the relationship between urban development and the environment are described. Old debates, such as that surrounding urban sprawl, are re-examined. New threats, such as those from sea-level rise and more severe storms, are assessed. While there is still a long way to go in our understanding of urban growth and its challenge for environmental sustainability, these chapters make it clear that this is no excuse for inaction.

# The changing face of urban demography and its potentialities

Ongoing rapid changes in fertility patterns, age composition and migratory behaviour in developing countries create a fast-changing panorama of opportunities and challenges in urban areas. A key consideration that is finally receiving its due in the literature, and that is explored herein, is that urbanization is, in itself, a prime factor in poverty reduction. Changing urban dynamics also present new options for enhancing women's and youths' empowerment, addressing the issues of ageing and confronting the AIDS epidemic. However, as the several chapters in this part make clear, policymaking will have to be refocused if developing countries are to take advantage of these potential benefits. Moreover, the importance of different community associations and social movements, including women's and youth groups, means that these will have to be given a larger role in decisions that affect them. It is also evident that making available reliable and updated information to local communities, to planners and to the media can help materialize the urban

advantages by fostering the open discussion of strategies leading to more focused policies and more effective programmes.

# Regional patterns of urbanization and linkages to development

There is enormous variation around the world in the patterns of urbanization and their linkages to development. Perhaps surprisingly, there is a large regional component to this variation. Within what is often termed the 'South', Latin American countries tend to be largely urban already; Asian countries are more likely to be rapidly both urbanizing and growing economically; sub-Saharan African countries are the least urban and many have been experiencing economic difficulties. But even regional generalization can be misleading. The urban areas of sub-Saharan Africa are perhaps not so lacking in opportunity as many would claim. China and India may both be large countries undergoing both rapid economic growth and urbanization - but the differences within as well as between them are enormous, and often their policy issues are very localized. On the other hand, the lessons from one region are often relevant to the others. Thus, for example, Latin American experiences illustrate the dangers in trying to inhibit urbanization, rather than turning it into a positive force, not only for economic development but also for reducing the poverty and environmental burdens that often accompany economic growth.

## **NOTES**

- 1 For the sake of simplicity, we have tended to avoid referring to 'towns and cities' in this book; as is accepted practice, the term 'urban' applies to all manner of towns and cities defined as such by their respective countries, and the term 'cities' is used as shorthand for the more cumbersome 'towns and cities'.
- 2 Unless otherwise mentioned, all data in this chapter are based on United Nations (2006) *World Urbanization Prospects: The 2005 Revision*, Population Division, United Nations, New York, NY.
- 3 UN-Habitat (2006) The State of the World's Cities 2006/7, Earthscan, London.

# Part I

# **Urban Transitions**

## INTRODUCTION

Among all the varied social and economic factors that propel urbanization in poor countries, the elemental demographic forces of fertility, mortality and migration are perhaps the most systematically documented. Since the late 1970s, the United Nations Population Division has issued a steady stream of reports (since 1990 titled World Urbanization Prospects) showing how the demographic rates are expressed in the sizes and rates of growth of town, city and urban populations. In spite of this quarter-century of focused effort on the part of the UN, however, even the academic literature on urbanization continues to be plagued by misunderstandings of the demographic components of growth, leaving policymakers without the guidance they need to correctly apprehend and respond to it. In addition, as urbanization proceeds it is thrusting into view unresolved conceptual and measurement concerns - What is meant by urban? By city? - that increasingly touch on fundamental concerns of governance and planning. The scientific and policy agendas intersect in the need to devise meaningful forecasts of city growth: much remains to be done on the scientific side to provide forecasts with errors small enough to be tolerable, and, for most poor countries, mechanisms are yet to be developed that will place spatially disaggregated demographic data and forecasts in the hands of local and regional planners.

The chapters in this part share a concern for these demographic complexities, but also ask how progress on the scientific front can be reflected in better planning, policies and governance. The main demographic features of the urban transition are reviewed in Chapter 1 by Montgomery, who draws upon the most recent data made available by the UN Population Division. This chapter examines two common misconceptions of urbanization that have injected biases into policymaking: the view that urban-dwellers in poor countries reside mainly in huge urban agglomerations (small cities and towns are far more important in numerical terms, yet receive far less attention) and the view that city growth is principally fuelled by rural-to-urban migration (natural increase is usually more important, suggesting that urban family planning programmes should have a fundamental role in urban-growth policies). The current state of city and urban forecasting is also discussed in this chapter, which closes with a discussion of new data and methods using remote sensing techniques, which have the potential to provide timely and useful guidance to policymakers if combined with disaggregated data from national censuses.

Tacoli, McGranahan and Satterthwaite emphasize the artificiality of separating urban from rural populations in development policy debates. This unfortunate but

pervasive habit of thought has had the effect of obscuring the multiple linkages that connect rural to urban wellbeing. Among other things, productive agriculture stimulates the growth of producer services in nearby cities (especially in the provision of credit, tools and machinery) and can also stimulate demand for consumer goods (provided that access to land is sufficiently equitable to allow numerous rural households to partake of increases in incomes). Income growth in urban areas, in turn, stimulates demands for foods and high-value agricultural products; it also allows urban residents to transfer remittances to their rural families. As the authors point out, although the benefits of international remittances for the sending countries are now widely acknowledged, there is curiously little recognition of what are likely to be equally or more significant transfers stemming from internal migration. The general neglect of the benefits of internal migration is evident in what appears to be a hardening of anti-urban attitudes among policymakers, who often view migration as a factor that exacerbates urban poverty and needs to be directly controlled. Yet, as the authors argue, there is much empirical evidence indicating that rural-to-urban migrants themselves benefit from relocation, and very little evidence to suggest that migration drives up urban poverty.

In Chapter 3, Skeldon resituates the urban transition in the broader context of the demographic transition. As he notes, urbanization was a centrepiece in the early theoretical formulations of the demographic transition, establishing social and economic conditions that facilitate declines in both mortality and fertility rates. He observes that, while lower fertility and mortality are almost universally viewed in a positive light, urbanization is not similarly regarded, as clearly demonstrated in a review of anti-urban policies and measures taken to control internal migration in poor countries. These actions have rarely proven to be effective in either slowing or redirecting urban growth. Looking to the future, Skeldon foresees an era in which internal migration flows will slow and urban labour shortages begin to emerge in certain high-skill sectors, as may already be happening in the fastest-growing regions of coastal China. He speculates that international labour migration may come to play an increasingly important role in fostering growth and maintaining the vitality of city economies in poor countries.

# The Demography of the Urban Transition: What We Know and Don't Know

Mark R. Montgomery

### **INTRODUCTION**

As their urban populations continue to grow, poor countries will come under mounting pressure to rethink their development strategies and set priorities with both rural and urban interests in mind. Ideally, the demographic research community would assist in setting priorities by providing countries and international aid agencies with informative urban population estimates and scientifically credible forecasts of the pace and distribution of future growth. Although the urban transition has been in the making for decades, much remains to be done if demographers are to supply planners and policymakers with useful guidance, especially where the spatial dimensions of city growth are concerned.

In the first main section of this chapter, the long-standing problems of definition that influence urban population counts and growth rates are noted. As is discussed with reference to the estimates of absolute poverty in developing countries, these problems are not confined to demography: they spill over to contaminate measurement of other fundamental aspects of economic development. With this as background, the second section describes the main demographic features of urban and city growth, drawing upon the work of the United Nations Population Division. In reviewing this material, two points that have often escaped attention will be stressed: the continuing significance of small and medium-sized cities in the urban scene and the role of urban natural increase, which rivals and

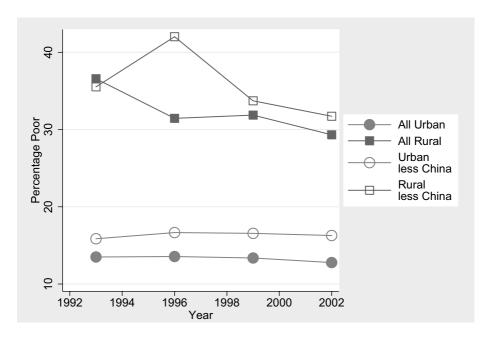
often outstrips migration as a source of city growth. As UNFPA (2007) makes clear, there are policy opportunities here that warrant careful consideration.

In the third section, the current state of urban demographic research is reviewed. As the developing world continues to urbanize, and both local and national planners struggle to anticipate and adapt to city growth, they will increasingly need to make use of disaggregated demographic data for small geographic units. From where will such disaggregated data come? In the past, the demographic research community has tended to neglect population censuses providing geographically detailed data in favour of national sample surveys, and the international agencies supporting census-taking have not given high priority to spatially disaggregated analyses of these censuses. In consequence, a large agenda lies ahead for those demographers who wish to ready their data sources and methods for the upcoming urban era.

### URBAN DEFINITIONS MATTER

To understand the scientific foundations of the work of the United Nations, and see how urban definitions affect the framework in which policy is made, consider the case of Beijing. As have other countries, China has made frequent changes to its small-area administrative boundaries and the accompanying urban definitions (Chan and Hu, 2003; Chan, 2007). For 2000, the population of 'Beijing' was reported by China's National Bureau of Statistics to be 11.5 million. This count departed significantly from previous practice in that it included what is known as the 'floating population' of migrants who live in Beijing without having de jure urban registration status. In geographic terms, Beijing is defined to take in the districts of the city proper, where some 8.5 million people live, as well as the full populations of the neighbouring 'city districts' (an additional 3 million), evidently because these districts are functionally linked to Beijing proper. But the populations of the city districts are more rural than urban, and if only their urban residents had been counted by the Chinese authorities, the Beijing total would have been 9.9 rather than 11.5 million. If the authorities had judged that the outlying counties of Beijing Province are also closely linked to the city of Beijing and added the urban residents of the small cities and towns in these counties to the 9.9 million, the population of Beijing would have been reported as 10.5 million persons.

Because China's total population is so large, revisions of this sort made across the country would affect urban population percentages and totals for the developing world as a whole and would, among other things, influence thinking about the relative magnitudes of urban and rural poverty. Based on recent research by Ravallion et al (2007), Figure 1.1 depicts the proportion of poor people among developing-country rural and urban populations, using the World Bank's US\$1.08 per day absolute needs standard for rural areas, which is adjusted upward for urban areas by the country-specific ratio of urban to rural poverty lines. The percentage of the poor is shown over time both with and without China. Obviously, the



**Figure 1.1** Percentage of population living on less than US\$1.08 a day in rural and urban areas, developing countries

Source: Ravallion et al (2007).

definitions of urban and rural are of central importance here, in that alterations in China's definitions have the potential to shift large numbers of people between the urban and rural categories. Less obvious is the fact that the decision to count China's 'floating population' as urban on a *de facto* basis for 2000 differs from what was decided previously, with the surveys used by the World Bank to estimate poverty in China evidently taking these people to be rural residents (in accordance with their *de jure* status) rather than urban. Hence it is probable that the poverty rates for urban China are understated relative to what they would be if the floating population had been classified as urban.<sup>2</sup>

As this example suggests, multiple social, economic, administrative and political judgements come into play in the formulation of city definitions. It is not only national statistical authorities who have cause to make and remake their definitions. Urban researchers too are increasingly critical of the practice of declaring some places to be definitively urban and others rural, as evidence grows of the multiple linkages and flows across space of people, goods and information. Although the conventional, binary, urban—rural distinction still retains value, a

consensus is emerging that future classification schemes will need to reserve a place for additional categories and degrees of urban-ness as well as the rural and urban ends of the spectrum (McGee, 1991; Champion and Hugo, 2004; Champion, 2006). Achieving homogeneity in urban definitions across countries has probably never been a feasible goal, and doubts are emerging as to whether it is, in fact, desirable. What continues to be desired, however, is a means of comparing the implications of alternative definitions, as will be discussed later in this chapter.

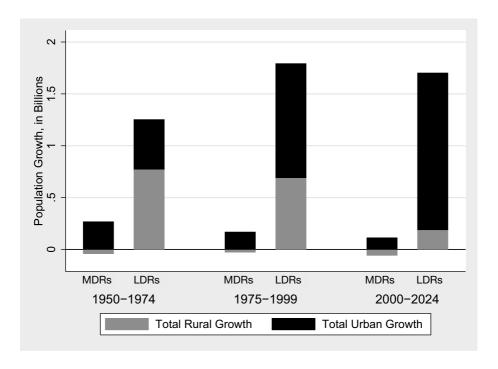
### AN URBAN LANDSCAPE EMERGES

This section offers a quantitative summary of the urban transition in developing countries, relying on data assembled by the United Nations Population Division.<sup>3</sup> It is no exaggeration to say that, over the past 40 years, the Population Division has been the sole source of internationally comparable city and urban estimates and projections. Much of the work has been carried out in-house, and the challenges that the UN faces in this endeavour are not well understood by the larger research and policy communities. The next section will take a closer look at the difficulties that plague this endeavour; here the main features of the urban transition as these are identified through the UN's data and methods will be surveyed.<sup>4</sup>

The scale of change anticipated for the upcoming decades can perhaps best be appreciated by examining Figure 1.2, which depicts the urban and rural population growth that has occurred since 1950 and the further growth expected to take place by 2024. In this figure, less developed regions (LDRs) are distinguished from more developed regions (MDRs). As can be seen, over the years from 2000 to 2024, the world's total population is projected to grow by 1.76 billion persons, with the greatest share of growth – some 86 per cent of the total – expected to take place in the cities and towns of developing countries. These near-term prospects stand in sharp contrast to what was experienced from 1950 to 1974, an era when rural growth still exceeded urban. These projections suggest that relatively little additional rural growth will occur in developing countries (an increase of some 190 million rural-dwellers in total from 2000 to 2024), and the UN anticipates that the rural populations of more developed countries will continue to decline.

Not surprisingly, given its dominance in terms of population overall, Asia now contains the largest total number of urban-dwellers among the major regions of developing countries and will continue to do so (Figure 1.3). By 2025, Africa is likely to have overtaken Latin America in terms of urban totals, moving into second place among the regions. The urban population of developing Oceania is also shown in the figure, but the totals for this region are very low in comparison with the other three regions, with only 1.92 million urban residents as of 2000 and 6.47 million urban-dwellers projected for 2050.

Figure 1.4 expresses regional trends in terms of annual growth rates. In the 1950s, 1960s and well into the 1970s, regional urban growth rates were in the



**Figure 1.2** Urban population growth in more developed regions (MDRs) and less developed regions (LDRs), 1950–2024

neighbourhood of four per cent per annum, although declines were already taking place in Latin America. (Growth rates for Oceania are shown for completeness.) Had the growth rates of this early era been sustained, the urban populations of the three major developing regions would have doubled roughly every 17 years. By 2000, however, urban growth rates had fallen considerably in each of these three regions. As the figure indicates, further growth rate declines are forecast for the first few decades of the 21st century, with urban Latin America projected to approach a state of zero growth.

Much as with population growth rates overall in developing countries, the urban growth rates in those countries before 2000 were substantially higher than the rates that were seen during comparable historical periods in the West, with the difference being due to lower urban mortality in present-day populations, stubbornly high urban fertility in some cases, and an inbuilt momentum in urban population growth that stems from the age and sex structures bequeathed by past growth (Montgomery et al, 2003). Even if the projected downward trends in growth rates come to pass, by 2050 urban growth rates in Africa will remain at

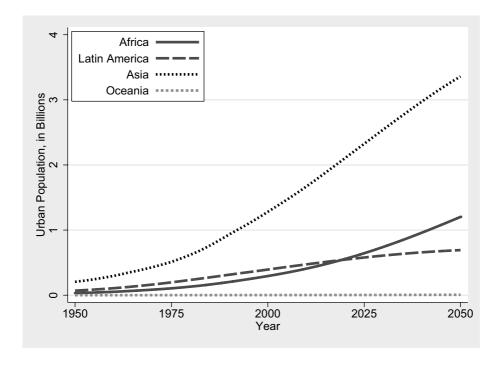


Figure 1.3 Total urban population by region, developing countries

about two per cent per annum, a rate that would double the urban population of that region in 35 years.

In its programme, the United Nations also documents trends in the percentage of the urban population in national totals. In each of the developing regions, the urban percentage is advancing in a seemingly inexorable fashion, and by 2030 urban majorities are projected to emerge in both Asia and Africa. Despite what is often assumed, when compared with the historical experience in Western countries, these decade-to-decade changes in urban percentages – sometimes termed the *pace of urbanization* – are not especially large (Montgomery et al, 2003, Tables 3–5). The literature exhibits some confusion on this point, often failing to distinguish rates of urban growth, which are rapid by historical standards, from the pace of urbanization, which falls well within the historical bounds.

It is clear that one feature of today's urban transition has no historical parallel: the emergence of hundreds of large cities. In 1950, only two metropolitan areas in the world – the Tokyo and the New York–Newark agglomerations – had populations of 10 million or more. (Cities of this size are commonly called *mega*-

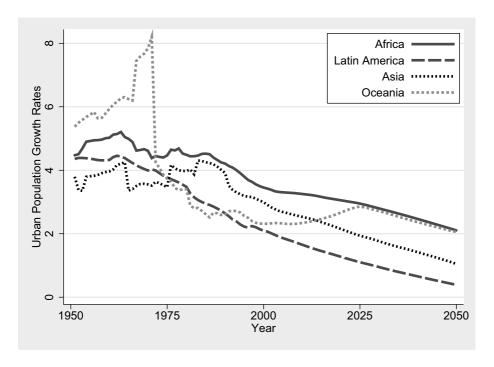
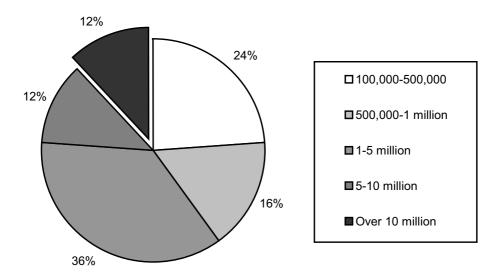


Figure 1.4 Growth rates of total urban population by region, developing countries

cities.) By 2025, according to UN forecasts, the developing countries alone will contain 21 cities of this size and another 5 will be found in the more developed countries. Even more striking is the number of cities in the 1–5 million range. In 1950, only 33 such cities were found in the developing world; by 2025, it is projected, there will be a total of no fewer than 431 cities in this range. Most of the large cities in developing countries are in Asia, in keeping with its large urban totals, but both Africa and Latin America have a number of cities in the 1–5 million category.

This remarkable feature of the urban transition has attracted a great deal of attention in the popular press and appears to have fostered the impression that most urban residents of the developing world live in huge urban agglomerations. This is simply not the case. As Figure 1.5 shows, among all developing-country urban-dwellers living in cities of 100,000 and above, only 12 per cent live in mega-cities – about 1 in 8 urban residents. This is hardly a negligible figure, but it is only about half of the percentage of urbanites who live in smaller cities ranging from 100,000 to half a million.



**Figure 1.5** Distribution of urban population by city size, developing countries in 2000

As the Panel on Urban Population Dynamics has shown, smaller cities are generally less well provided with basic services, such as improved sanitation and adequate supplies of drinking water, than large cities (Montgomery et al, 2003). In smaller cities, rates of fertility and infant and child mortality can be little different from the rates prevailing in the countryside. Their municipal governments seldom possess the range of expertise and the managerial talent found in the governments of large cities. Yet, in an era of political decentralization, these smaller cities are increasingly being required to shoulder substantial burdens in service delivery and take on a larger share of revenue-raising responsibilities (Montgomery et al, 2003, Chapter 9). Given all this, it is surprising how often small cities have been neglected in policy discussions (but see UN-Habitat, 2006, for a treatment of the issues).

As Figure 1.6 shows for three large Asian cities, there is a tendency for city growth rates to decline with time. According to the estimates in the United Nations cities database, population growth rates in Jakarta were in excess of six percentage points annually in the early 1950s and rates in Seoul exceeded eight per cent. By the end of the century, however, Seoul's growth rate had fallen below zero and Jakarta's, although erratic, had dropped below four per cent. Meanwhile, growth

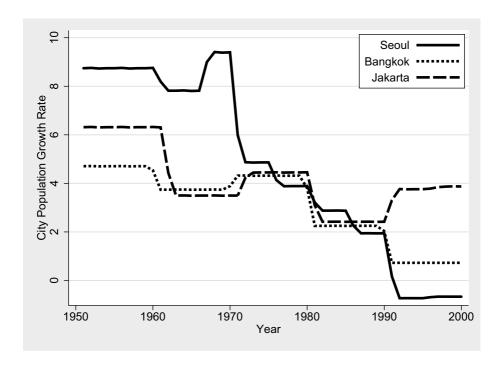


Figure 1.6 City growth rates for Seoul, Bangkok and Jakarta, 1950–2000

rates for Bangkok wended their way downwards from over four per cent to about one per cent at the end of this period.

When confronted with time series of city growth such as these, urban economists are apt to offer explanations that emphasize how increasing city size drives up rents and the many costs of congestion, which thus discourage rural migrants and encourage businesses to consider relocation. Urban geographers are likely to stress the difficulties in locating and properly measuring the growth of large cities, noting that faster population growth in an urban periphery – which may or may not be recorded in the growth rate statistics – often accompanies slower growth in the city centre. But there is an additional and equally plausible explanation that receives far too little attention: the possibility that city growth is driven down over time by declines in urban fertility rates.

Research by the UN Population Division, based on a sample of countries providing two or more national censuses, allows urban population growth rates to be divided into a natural urban growth component – the difference between urban birth and death rates – and a residual one that combines net migration with

spatial expansion (Chen et al, 1998). The results are strikingly at odds with the usual perception of the sources of urban growth. According to the UN findings, about 60 per cent of the urban growth rate in developing countries is due to natural growth; the remaining 40 per cent is due to migration and spatial expansion.<sup>5</sup> Recently, a very similar pattern was found for India over the four decades from 1961 to 2001, with urban natural growth again accounting for about 60 per cent of the total (Sivaramakrishnan et al, 2005, p32). Even in China, where the migration share is larger, natural growth is responsible for some 40 per cent of the urban growth rate.

As discussed in a recent UNFPA (2007) report, many developing-country policymakers have been apprehensive about rates of city growth in their countries, and they have not infrequently acted upon these concerns with aggressive interventions aimed at repelling rural-to-urban migrants and expelling slum residents. Such punitive policies have undoubtedly reduced the wellbeing of the urban poor and have probably caused more poverty than they have eliminated – and yet these policies have proven to be ineffective over the long term. More enlightened regional development policies, on the other hand, seldom generate the rapid changes in pace and spatial distribution that policymakers hope to achieve.

It is therefore surprising how little attention has been paid to a growth-rate policy of a very different character: urban voluntary family planning programmes. Over the past half-century, such programmes have compiled an impressive record of effectiveness across the developing world in facilitating fertility declines and reducing unwanted fertility. As will be shown in the next section, an empirical analysis of developing-country city growth and fertility suggests that, when national total fertility rates decline by one child, there is an associated decline of nearly one percentage point in the city population growth rates for that country. Hence, even if the health benefits of voluntary family planning programmes (in terms of reproductive health) are set aside by policymakers fixated on the need to slow city growth, these programmes deserve more attention than they have received. They offer an effective and humane alternative to the ineffective and brutalizing measures that have been applied all too often.

# URBAN DEMOGRAPHIC RESEARCH: BASIC NEEDS

As urban scholars and demographers well know, the scientific basis for cross-country urban estimates and projections is adequate for identifying broad features and dominant trends, but, where the finer details are concerned, difficulties in conceptualization, definitional heterogeneities and measurement errors leave the science in a less than satisfactory state. Yet, as urbanization proceeds, it is precisely the finer details of the process – that is, the spatially disaggregated estimates and forecasts – that become urgently needed by policymakers. In view of the wealth of new data for developing countries that has entered the public domain in recent