Rural-Urban Disparities and Dynamics

In 2011, nearly 50 percent of the population in developing countries lived in areas classified as urban, compared with less than 30 percent in the 1980s (figure 2.1). Urbanization has implications for attaining the Millennium Development Goals (MDGs). Managed with care, it can benefit residents of both urban and rural areas; managed poorly, urbanization can marginalize the poor in both areas. Slums are a symptom of the marginalization of the urban poor. Close to 1 billion people live in urban slums in developing countries, including middle-income countries like Brazil and emerging countries like China and India (UN-Habitat 2010).

Location remains important at all stages of development, but it matters less in rich countries than in poor ones. Estimates from more than 100 Living Standard Surveys indicate that households in the most prosperous areas of developing countries such as Brazil, Bulgaria, Ghana, Indonesia, Morocco, and Sri Lanka have an average consumption almost 75 percent higher than that of similar households in the lagging areas of these countries. In comparison, the disparity is less than 25 percent in developed countries such as Canada, Japan, and the United States (World Bank 2009).

According to various estimates, 40 percent of the increase in the urban population in developing countries comes from migration or reclassification of rural to urban (Chen et al. 1998; UN-Habitat 2008). In China and Indonesia, however, rural-urban migration and reclassification of rural and urban boundaries are estimated to account for more than 70 percent of urban growth in the 1980s and about 80 percent in the 1990s. These migration patterns have vital consequences for the effect of urbanization on poverty as well as implications for policies that can make urbanization a force for poverty reduction.

To better understand these rural-urban dynamics, this chapter looks first at the disparities in attaining the MDGs between rural and urban areas, including small towns and peri-urban areas. The chapter continues with an overview of the pace and causes of urbanization, the role of rural-to-urban migration dynamics, and the consequences for attainment of the eight MDGs discussed in this report.

**Trends in rural-urban poverty**

Of the 1.3 billion poor in developing countries in 2008, 76 percent resided in rural areas
(figure 2.2). In South Asia, which had the largest number of poor in 2008, poverty was high in rural and urban areas (table 2.1). A ten percentage point difference between rural and urban poverty rates in 1990 persisted until 2008. In 1990, East Asia had almost 1 billion poor and the highest rural poverty rate of about 67 percent. Its achievement in reducing rural poverty to 20 percent by 2008 is spectacular. East Asia has an equally impressive record in eradicating urban poverty from 24 percent in 1990 to 4 percent in 2008. Sub-Saharan Africa remains the last frontier in the fight to reduce poverty. Nearly half of the rural and one third of the urban population lived on less than $1.25 a day in 2008. For each poor person in an urban area, there were 2.5 as many in rural areas. In South Asia, for each poor person in an urban area, there were three poor ones in rural areas (map 2.1).

**Unveiling the face of urban poverty**

Urban poverty is not uniformly distributed across a country’s cities and towns. Populations are typically conceptualized as being spatially bipolar: people live in either rural or urban places. Poverty, too, is typically seen from this perspective. In reality, people and poverty are located along a continuous “settlement” spectrum ranging from sparsely populated rural areas, to small towns to...
small cities, to megacities (figure 2.3). In 2010, some 17.5 percent of the urban population in developing countries lived in cities of 5 million or more; 31 percent lived in cities of 0.5 to 5 million, and 51 percent lived in smaller towns (table 2.2) (UN 2011). The distribution of the urban poor follows a similar pattern, with the smallest share living in megacities and larger shares living in medium and small towns. Indeed, the large cities are not necessarily places where the poor are also concentrated (table 2.3).
With the aid of new analytical techniques that combine census and household survey data, researchers have constructed “poverty–city size gradients” that reveal interesting insights on the relationship between poverty and city size (Elbers, Lanjouw, and Lanjouw 2002, 2003). Recent research for a large number of countries shows that urban poverty is clearly lowest in the largest cities (Ferré, Ferreira, and Lanjouw 2012). In the 1970s and 1980s, better provision of services in urban areas of developing countries led to the perception that governments had an “urban bias” (Lipton 1977). In recent years, researchers who have analyzed the poverty–city size gradient have raised similar questions: Is there a “metropolitan bias” in the allocation of resources to larger cities at the expense of smaller towns?2

In a fairly large number of developing countries, not only is the incidence of poverty higher in small cities and towns than in the large urban areas, but these smaller urban centers also account for a larger share of the urban poor. In such countries as Brazil and Thailand, with well-known megacities such as São Paulo, Rio de Janeiro, and Bangkok, the share of the urban poor residing in small- and medium-size towns exceeds that in the largest cities. In Brazil, one of the most urbanized developing countries, 83 percent of the population is settled relatively evenly along the urban spatial spectrum—22 percent in megacities, 33 percent in intermediate-size cities, and 28 percent in the smallest towns. Brazilian poverty has a predominantly urban face, though not in its megacities: 72 percent of the poor live in urban areas, but surprisingly, only 9 percent reside in the megacities of Rio de Janeiro and São Paulo. The rest of the poor are concentrated in medium (17 percent) and very small towns (39 percent). In Thailand, the share of the urban poor is 17 percent, of which 76 percent resides in extra small towns.

Findings from a study of eight developing countries show that with the exception of Mexico, the urban population was concentrated in the largest cities but the urban poor were dispersed along a continuum of medium, small, and extra small towns (table 2.3). Lower rates of poverty in large cities are consistent with the hypotheses of urban growth being driven by agglomeration externalities.

Many small countries do not have a megacity, and nearly all large countries have many large cities of various sizes as well as one or several megacities. Similarly, the small towns in small countries are significantly smaller than the small towns in large countries. In addition, while official boundaries rarely demarcate them as “slums,” the size of urban cityscapes that can be considered slums is significant. Almost by definition, slums are home to many of the urban poor. Asia is

<table>
<thead>
<tr>
<th>City size class</th>
<th>Number of agglomerations</th>
<th>Population in urban areas (in 1,000s)</th>
<th>Percentage of urban population</th>
</tr>
</thead>
<tbody>
<tr>
<td>10 million or more</td>
<td>3</td>
<td>19</td>
<td>23</td>
</tr>
<tr>
<td>5 to 10 million</td>
<td>14</td>
<td>33</td>
<td>38</td>
</tr>
<tr>
<td>1 to 5 million</td>
<td>144</td>
<td>340</td>
<td>388</td>
</tr>
<tr>
<td>500,000 to 1 million</td>
<td>224</td>
<td>463</td>
<td>513</td>
</tr>
<tr>
<td>Fewer than 500,000</td>
<td>—</td>
<td>—</td>
<td>—</td>
</tr>
</tbody>
</table>

Source: UN 2011.
Note: — = not available.
home to 61 percent of the world’s nearly 1 billion slum dwellers; Africa 25.5 percent; and Latin America, 13.4 percent. The number of slum dwellers is projected to grow by nearly 500 million between now and 2020 (UN-Habitat 2010). The proportion of urban residents living in slums is already about 62 percent in Africa. Between 2000 and 2010, the increase in the absolute number of slum dwellers was greatest in Sub-Saharan Africa, southeastern Asia, southern Asia, and western Asia.\(^3\) While southern Asia, southeastern Asia, and eastern Asia have made impressive progress in moving people out of slums, the most significant reductions have occurred in North Africa. During 2000–10, regional differences in the success of addressing the MDG 7.d slum target (achieve, by 2020, a significant improvement in the lives of at least 100 million slum dwellers), were self-evident, with some 227 million people moving out of slum conditions.\(^4\)

The effects of urban poverty can be as dehumanizing and intense as those associated with rural poverty. Various MDG indicators showed remarkable similarities between slum and rural areas. For instance, in low-income countries such as Bangladesh, Ethiopia, Haiti, India, Nepal, and Niger—countries where poverty is seen as primarily a rural phenomenon—4 of every 10 slum children are malnourished, a rate comparable to that found in the rural areas of these countries. Likewise, in cities such as Khartoum and Nairobi, the prevalence of diarrhea is much higher among slum children than among children in the rural areas of Kenya and Sudan. In slums, child deaths result less from

---

**TABLE 2.3 The poor are disproportionately concentrated in smaller cities and towns**

<table>
<thead>
<tr>
<th>Country</th>
<th>Urban</th>
<th>XL</th>
<th>L</th>
<th>M</th>
<th>S</th>
<th>XS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Albania</td>
<td>42</td>
<td>—</td>
<td>—</td>
<td>15</td>
<td>13</td>
<td>14</td>
</tr>
<tr>
<td></td>
<td>31</td>
<td>—</td>
<td>—</td>
<td>11</td>
<td>9</td>
<td>11</td>
</tr>
<tr>
<td>Brazil</td>
<td>83</td>
<td>22</td>
<td>7</td>
<td>24</td>
<td>1</td>
<td>28</td>
</tr>
<tr>
<td></td>
<td>72</td>
<td>9</td>
<td>6</td>
<td>17</td>
<td>1</td>
<td>39</td>
</tr>
<tr>
<td>Kazakhstan</td>
<td>57</td>
<td>8</td>
<td>—</td>
<td>29</td>
<td>5</td>
<td>15</td>
</tr>
<tr>
<td></td>
<td>43</td>
<td>7</td>
<td>—</td>
<td>21</td>
<td>5</td>
<td>15</td>
</tr>
<tr>
<td>Kenya</td>
<td>19</td>
<td>7</td>
<td>2</td>
<td>3</td>
<td>2</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>16</td>
<td>6</td>
<td>2</td>
<td>3</td>
<td>2</td>
<td>4</td>
</tr>
<tr>
<td>Mexico</td>
<td>6</td>
<td>27</td>
<td>13</td>
<td>11</td>
<td>4</td>
<td>6</td>
</tr>
<tr>
<td></td>
<td>39</td>
<td>16</td>
<td>6</td>
<td>7</td>
<td>3</td>
<td>7</td>
</tr>
<tr>
<td>Morocco</td>
<td>51</td>
<td>12</td>
<td>9</td>
<td>27</td>
<td>3</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>34</td>
<td>3</td>
<td>7</td>
<td>2</td>
<td>3</td>
<td>1</td>
</tr>
<tr>
<td>Sri Lanka</td>
<td>12</td>
<td>—</td>
<td>3</td>
<td>3</td>
<td>2</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>5</td>
<td>—</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>Thailand</td>
<td>31</td>
<td>12</td>
<td>—</td>
<td>3</td>
<td>2</td>
<td>14</td>
</tr>
<tr>
<td></td>
<td>17</td>
<td>1</td>
<td>—</td>
<td>1</td>
<td>1</td>
<td>13</td>
</tr>
</tbody>
</table>

Source: Ferré, Ferreira and Lanjouw 2012.

Note: Population share = percent of the population living in each category; share of the poor = percent of the country’s poor living in each category.

XL = > 1m; L = 500k–1m; M = 100k–500k; S = 50k–100k; XS = < 50k.

— = not available.
infectious diseases and more from unhealthy living conditions, such as indoor air pollution or lack of access to safe water and sanitation, which lead to water-borne and respiratory illnesses among children (UN-Habitat 2008).

**Sub-Saharan Africa: Low urban poverty concentrated in the largest cities**

An ongoing study of 12 Sub-Saharan African countries shows that although the poverty–city size gradient observed in African countries is similar to that seen in developing countries elsewhere, the African experience is different (Coulombe and Lanjouw 2013). Not surprising, poverty is a rural phenomenon in the region, with the share of the poor in rural areas ranging from 68 percent in the Central African Republic to 90 percent in Mali and Swaziland to 95 percent in Malawi. The urban poor are a small share of the total urban population, but unlike other regions, they are concentrated in large cities. Sub-Saharan Africa thus reflects a “largest city” model: the largest city accounts for a disproportionately large share of the total urban population and hence also for the bulk of the urban poor. For example, in the Central African Republic, Gabon, and Malawi, more than half of each country’s urban poor live in the largest city, which is usually the capital. In Guinea, Niger, Senegal, Sierra Leone, and Swaziland, 40 percent of the urban poor live in the largest city. In most African countries, “urban” is synonymous with “largest city.” In Malawi, Mali, and Togo, the combined population of the towns with 5,000–100,000 inhabitants account for just 2–6 percent of the total population. This pattern is different from other predominantly “rural” developing countries such as India and Vietnam. The primary reason for urban poverty’s relative concentration in the capital city is the paucity of better-paying, nonfarm jobs in smaller towns. Rural migration to urban areas in Sub-Saharan Africa has stalled in large part because the structural transformation from agriculture to industry (manufacturing and services) has been slow to emerge. Manufacturing, especially agro-industry, and related service sectors account for only 10 percent of the economy in the region, and industries related to them generally locate in the largest city.

**South and East Asia: High urban poverty concentrated in small towns**

Despite their megacities and sprawling slums, urban poverty in South and East Asia is firmly located in smaller towns, not in big cities. The majority of the poor in South Asia reside in rural areas where the poverty rate was 38 percent in 2008. At 30 percent, the urban poverty rate was only 4 percentage points below that in Sub-Saharan Africa in the same year. But unlike Africa, poverty rates in smaller towns are significantly higher than in megacities.

Recent research in India, for example, indicates that poverty is still primarily a rural phenomenon at the aggregate level, but that urban poverty is growing and, within urban areas, is concentrated in smaller towns. The poverty rate in India in 2004–05 was 28 percent in rural areas and 26 percent in urban areas. As figure 2.4a shows, among urban areas, the poverty rate in small towns (population less than 50,000) was double the rate in large towns with a population of 1 million or more (30 percent to 15 percent) (World Bank 2011; Lanjouw and Marra 2012).

The poverty–city size gradient is steep in India, however, so even a “medium” city has close to 1 million residents. In Vietnam, in contrast, the population of an average medium-size town is about 85,000. In Vietnam, the nexus between urban population and urban poverty is mirrored in a remarkable U-shape (figure 2.4b). Two megacities, Hanoi and Ho Chi Minh, with a population of over 4 million each, are home to about 30 percent of urban residents but only about 10 percent of the poor. In comparison, the 634 smallest Vietnamese towns, with an average population of about 10,000, are home to more than 55 percent of the urban poor (World Bank 2011; Lanjouw and Marra 2012).

Small towns can play an important role in arresting the “urbanization” of poverty if
policies that nurture economic activity and improve residents’ access to basic services are implemented. The reality of the poverty–city-size gradient shows that policies that improve service delivery and foster nonfarm job creation in small towns and peri-urban areas can offer rural migrants better livelihoods, thus helping to reduce both urban and rural poverty. In countries where population density is high in smaller towns, the scale economies may be sufficiently large to make service delivery, including infrastructure-related services, cost-effective.

More than 200 cities and towns dot Bangladesh and Pakistan, yet urbanization in both of these countries is dominated by a few large metropolitan cities with a population of more than 1 million. Chittagong and Dhaka account for 43 percent of Bangladesh’s urban population; in Pakistan, eight cities each with a population of more than 1 million account for 58 percent of the urban population. Another 24 percent of the urban population in Pakistan resides in 48 cities with populations of 100,000 to 1 million. Evidence from these countries reveals that the incidence of poverty is highest in rural areas (43 percent), followed by smaller towns and cities (38 percent), and then metropolitan areas (26 percent) (Deichmann, Shilpi, and Vakis 2009).

**The MDGs, human capital, and disparities along the rural-urban spectrum**

Not all MDG-related services have similar characteristics. Investments in primary education, nutrition, and health care lay the foundations for the human capital endowed in individuals, who can carry it with them when they move and add to it if they migrate to places where related secondary and tertiary services are available. In this sense, primary education and health care are portable.

Together, education, nutrition, and health care, combine to form human skills and abilities that have been powerfully linked to productivity growth and poverty reduction in the medium to longer run (Hanushek and Woessmann 2008; Commander and Svejnar 2011). As such, human capital is a fundamental ingredient for desirable job outcomes, in both rural and urban areas (World Bank 2013).
Primary education improves an individual’s opportunity to join the workforce, regardless of location. An additional year of schooling can raise wage earnings substantially, reflecting the higher productivity of more educated workers (Psacharopoulos and Patrinos 2004; Montenegro and Patrinos 2012). Education is also positively associated with farm productivity. And rural migrants who have had at least a primary education are better prepared to take advantage of job opportunities in urban areas. For many rural migrants, the basic education acquired in the village can be the turning point between being prepared for a better-paying job upon arrival in a city or remaining in poverty once in the city. Better health leads directly to higher labor productivity. Gender differentials in primary enrollments erode the human capital foundations of women, putting them at a disadvantage compared with men in all aspects of human welfare but especially economic empowerment. Lack of gender equality in one dimension can multiply the negative effects on other dimensions. World Development Report 2012: Gender Equality and Development (WDR 2012) noted that in Mozambique low levels of maternal education are strongly related to high levels of child malnutrition and low use of health services. Quality of primary education matters

East Asia and Pacific, Europe and Central Asia, and Latin America and the Caribbean have either already achieved or are close to achieving the MDG target of universal primary school completion by 2015. The differentials in primary school completion rates in rural and urban areas are surprisingly low across these regions (based on data from 46 countries) but mask enrollment shortfalls (see box 2.1). Gender differences in education, however, are also large in rural areas. In Sub-Saharan Africa, where rural enrollments are already low, gender differentials of 8–15 percentage points prevail in Cameroon, Côte d’Ivoire, Kenya, and Zambia.

The differentials in the quality of education, on the other hand, are greater: Urban areas have a higher percentage of pupils reaching reading competency than do rural areas.

As with poverty, learning also varies along the rural-urban spectrum. A comprehensive study in 2007 in 15 Sub-Saharan countries recorded considerable rural-urban differentials in the share of sixth-grade pupils reaching competency levels in reading and mathematics relative to national scores. Several findings of the study were both noteworthy and worrisome. First, the rural-urban differentials were vast. On average, only 57 percent of rural students reached competency in reading levels 4–8 compared with 75 percent of urban students. In Malawi and Zambia, the corresponding figures were under 25 percent in rural schools and 40 percent in urban schools. Competency in mathematics at level 4 was discouragingly low: only 18 percent of children in rural schools and 24 percent in urban schools reached this level. Worse, only 1.2 percent of all pupils reached competency in mathematics level 8. Clearly, governments need to pay as much, if not more, attention to the quality of schooling in Sub-Saharan Africa as they do to completion rates (SACMEQ 2010).

Poor literacy (reading and writing) scores in rural Sub-Saharan Africa highlight the risk of overestimating the schooling benefits associated with urban living (figure 2.5). In a study of 12 Sub-Saharan African countries, the differentials in urban-rural literacy rates range from 32 percent–39 percent in 7 countries, and around 22 percent in another 2 countries. The differences between the small towns and large cities are small in several countries and are explained by the fact that the poverty city-size gradient is not as pronounced in Sub-Saharan Africa as in other regions (Coulombe and Lanjouw, 2013).

Children attending primary school in rural areas are often disadvantaged because it is difficult to attract teachers to rural areas. One study finds that many parents in rural schools complain that the schools do not have enough teachers. Parents also complain about high rates of teacher absenteeism (Wodon 2013a).
rural-urban differentials in health indicators

“Successful development is so intimately related to health—to measures that directly or indirectly help individuals, households, or communities avoid or prevent disease, injury, and inadequate food intake” (Satterthwaite 2011). The foundations of good health start even before birth. Like basic education, the human capital formation of good health is cumulative and continues to be formed throughout childhood and young adulthood. Of crucial importance are adequate health and nutrition during “the first 1,000 days,” from conception to two years of age (World Bank 2012a).

While many factors underlie the differences in rural and urban mortality rates, including differences in income, consumption, and wealth between urban and rural households, fertility rates and access to safe water, sanitation, and health services play a critical role.

Rural-urban differentials in access to primary health care are significant across all regions. Evidence from DHS surveys for a large number of developing countries indicates that urban infant mortality rates are 8–9 percentage points lower than the rural
rates in Latin America, Europe and Central Asia, and 10–16 percentage points in the Middle East and North Africa, South Asia, and Sub-Saharan Africa. East Asia has the highest differential, at 21 percentage points. Individual country differences are more informative (figure 2.6).

A study of 40 Sub-Saharan African countries based on DHS data indicates that the infant mortality rate is 65 (per 1,000 live births) in urban areas and 80 in rural areas. The percentage of deliveries in health facilities in urban areas is about 78 percent on average across the countries, compared with 43 percent in rural areas, in a sample of 28 Sub-Saharan Africa countries. The largest rural-urban differences are in some of the poorest countries (Wodon 2013b). Similar patterns are observed for measures of child malnutrition. Countries with the worst indicators for infant and child mortality also have the largest absolute differences between rural and urban areas. The average share of stunting in children is 42 percent in rural areas compared to 30 percent in urban areas (Wodon 2013b).

It is sometimes argued that other dimensions of poverty—health outcomes, for example—tend to be better in large cities. Analysis of anthropometric health outcomes for children across cities of different sizes in Mexico (based on small-area estimation methods) suggests that the prevalence of child stunting in Mexico tends to be higher in small towns than in the largest cities (Ferre, Ferreira, and Lanjouw 2012). This corresponds with findings regarding poverty, which is more pronounced in smaller cities than in larger cities.

**Understanding the broader economic consequences of closing health gaps in low-income countries**

Most countries are lagging behind in all three health-related MDGs. It is therefore useful to quantitatively evaluate the broader economic consequences of closing health gaps in low-income countries. In a simulation exercise conducted for this report, the broader economic consequences of closing health gaps in low-income countries were explored by adapting maquette for MDG simulations (MAMS), a computable general equilibrium (CGE) model for country strategy analysis, to address the rural-urban aspects of MDG achievement (Lofgren 2013). The database used was designed to capture characteristics typical of low-income countries, including their MDG outcomes, sectoral shares in value-added of agriculture, manufacturing and services, degree of urbanization, and population growth. Annex 2A.1 presents the results of this exercise. The main results
indicate that if the government can finance increased access to rural health care through a combination of borrowing and greater efficiency in health sector spending, it can considerably reduce rural under-five mortality. If the financing is a combination of grants and greater efficiency in health sector spending, government can do even more—it can reduce rural under-five mortality and contribute to other MDGs, including poverty reduction. If the government has to rely solely on domestic resources, however, then the trade-off is lower poverty reduction and less progress in other MDGs. These trade-offs are especially difficult for governments in low-income countries.

Increasingly, governments are becoming interested in collaborating with the private sector or nongovernmental organizations (NGOs) to deliver services to the poor. Such partnerships can be instrumental in improving the delivery of health care, especially in South Asia, East Asia and Pacific, and Sub-Saharan Africa, where over 90 percent of the poor live (box 2.2).

**Affordable access to sanitation and water: Infrastructure needs scale economies**

In comparison to basic education and health care whose benefits are embedded in an individual’s human capital, infrastructure needed to increase access to safe water and sanitation must be provided at a fixed spatial location. New or old connections in a rural area cannot be moved costlessly to an urban area. The initial fixed costs of establishing these services are high; routine maintenance is also costly. Because sparsely populated areas do not have sufficient population density, they are unable to benefit from scale economies that reduce the unit costs of network infrastructure services. As a result, residents in less agglomerated areas (typically, rural populations, very small towns, and less densely populated peri-urban areas) often receive a lower level of service (map 2.2).

The greatest rural-urban disparities in the delivery of MDG-related infrastructure services are in South Asia and Sub-Saharan Africa. In these two regions, access to sanitation among the rural population, which accounts for between 60–80 percent of the total population, is significantly lower than in most urban areas. This disparity would appear to be a combination of extreme poverty in the rural areas combined with the lack of network scale economies. In regions with higher proportions of their populations in urban areas, access to sanitation is higher in both urban and rural areas and the rural-urban differentials are much smaller.
BOX 2.2 Leveraging the private sector to reach the health-related MDGs

More than 90 percent of the poor live in South Asia, East Asia and Pacific, and Sub-Saharan Africa. In these three regions, the private sector provides at least 50 percent of the health services that the poor receive. Furthermore, delivery of priority health services by the private sector has been growing rapidly. For example, the proportion of women who delivered children in private facilities increased from 8 percent in 1990 to 22 percent in 2008. Indeed, the private sector already plays and must continue to play an important role in many countries if they are to meet their health-related MDGs.

Some of the innovative mechanisms being pioneered around the world to leverage the private sector are:

• **Smart policies and regulations** with a dual approach to reaching the poor. On one hand, marketwide reforms such as simplifying licensing of health facilities and establishing enforceable patient safety and quality standards are expected to disproportionately benefit the poor. On the other, interventions explicitly target the poor and those private providers that serve them. In Kenya, for example, the World Bank and the International Finance Corporation (IFC) are helping the National Health Insurance Fund introduce poverty-targeted subsidized coverage. They are also working with the Ministry of Health to introduce the legal and regulatory framework for newly established local governments to contract services from faith-based organizations and other nongovernmental organizations located in the hardest-to-reach areas of the country.

• **Public-private partnerships** that tap the capital, management capacity, and creativity of the private sector to improve public services. In India, the IFC helped the state of Meghalaya design an innovative insurance scheme whereby the government, a private sector insurer, and hundreds of surveyed public and private health care providers cooperated in a large-scale partnership to enhance financial protection and access to quality health care for the population of one of the lowest-income states in the country.

• **Capital finance** that fuels expansion of access to quality health services and products from the private sector. The IFC is investing in and advising health care companies seeking to expand access to quality health services and products to those at the “bottom of the pyramid.” In Africa, the IFC helped establish an innovative private equity fund that not only focuses on health but is also given explicit incentives to finance companies that serve the poorest. One such company is the Nairobi Women’s Hospital. An independent assessment shows that about three-fifths of its patients are at the bottom of the pyramid. In India, IFC investee Apollo Hospitals is seeking to expand its top quality services to smaller cities and rural areas.

**FIGURE B2.2.1** Percent seeking care in private versus public facilities by region

![Figure showing percent seeking care in private versus public facilities by region](image-url)

Source: Demographic and Health surveys.

Note: The figure shows the shares of health care facilities funded by public and private providers for the poorest quintile.


b. The bottom of the pyramid is defined as those with an annual household income of less than $3,000.
To the extent that infrastructure availability acts as a determinant of urban growth and poverty reduction, the imbalance of service availability could help explain lower welfare outcomes in smaller towns. For many of the 12 Sub-Saharan African countries shown in figure 2.7, the differences in access to sanitation between the largest cities and smaller towns are as stark as those between urban areas as a whole and rural areas. In Côte d’Ivoire, Guinea, Mauritania, and Sierra Leone, access to sanitation in the smallest towns is significantly lower than in larger cities. In Gabon, Malawi, Niger, and Swaziland, access in smaller towns is as good as it is in larger towns (Coulombe and Lanjouwe 2013).

All regions offer better access to safe drinking water in urban than in rural areas, although rural-urban differentials are shrinking (see MDG 7 in the report card, which follows the overview). In 2010, 96 percent of the urban population in developing countries had access to safe drinking water compared to 81 percent of the rural population. In general, the rural-urban differentials in access to water diminish with the level of urbanization in most regions. The largest differentials (about 70 percent or higher) are in Ethiopia, Gambia, Niger, and Sierra Leone, which are mostly rural.

Through their density, urban areas make public services more accessible and affordable. For example, on average a cubic meter of piped water costs $0.70–$0.80 to provide in urban areas compared with $2 in sparsely populated areas (Kariuki and Schwartz 2005). As a result, the poor often pay the highest price for the water they consume while having the lowest consumption levels. For example, in Niger, the average price of a cubic meter of water cost CFAF 182 when it
Small towns have generally poorer service delivery than large cities

City-size gradient: larger towns have better access to sanitation (%)

Population with access to sanitation (%)

Malawi Niger Guinea Togo Mauritania Gabon Côte d'Ivoire Central African Republic Senegal Swaziland Mali

XXS XS S M XL XXL Rural

From: Coulombe and Lanjouw 2013.

Note: XXS = < 5k; XS = 5k–10k; S = 10k–25k; M = 25k–50k; L = 50k–100k; XL = 100k–1m; XXL = > 1m.

was piped from a network, CFAF 534 when it came from a public fountain, and CFAF 926 when it came from a vendor (Bardasi and Wodon 2008). This means that the urban poor without access to the network often pay the highest price for the water they consume while having the lowest consumption levels. More than 55 percent of households did not have access to piped water in their dwelling. Having a private connection was strongly correlated with wealth: among the poorest 20 percent of households, none had a private connection, while 65 percent of households in the top quintile were connected.

Poor access to basic infrastructure disproportionately affects rural women by directly reducing the time they have available for income generating activities because they perform most of the domestic chores and often walk long distances to reach clean water. WDR 2012 on gender noted that in rural Guinea, women spend three and a half times more than men in fetching water. In several rural and small towns in Sub-Saharan Africa, where network connections are often not economically viable, public private partnerships have been designed to leverage innovative means for delivering safe water (box 2.3).

**Why urbanization matters for the MDGs**

Urbanization matters for the MDGs. It can facilitate several factors that play an important role in attaining those goals. It can reduce poverty in two main ways: through the benefits of agglomeration, cities potentially generate higher living standards for all their residents and reduce urban poverty; and through the benefits of scale economies, public services, including those related to the MDGs can be provided in urban areas at a lower fixed unit cost. Cities are also a source of revenues that governments need to foster agglomeration economies for firms and households, and to finance services for rural and urban migrants. But when the positive forces driving cities are strained by urban congestion, service delivery is unable to keep pace with demand and slums can emerge. An important negative externality of excessive urban congestion is pollution.
Agglomeration economies arise when there is a confluence of people, or population density, and firms, or economic density. The main outcome is the creation of jobs, which are central to poverty reduction and reaching MDG 1. According to the World Development Report 2013: Jobs (WDR 2013), in 26 countries across all regions, more than 50 percent of the reduction in poverty can be attributed to an increase in labor income (World Bank 2013).

Higher economic and population densities of urban areas are also good for governments. They generate tax revenues that are essential
for financing the public goods necessary for poverty reduction.

Successful urbanization is reflected in dynamic cities that foster agglomeration economies. The latter thrive on large numbers of businesses and create plenty of jobs. Urbanization is a “win-win” recipe for poverty reduction when it generates higher incomes than workers would earn elsewhere, provides access to services essential for a decent livelihood, and creates opportunities for workers to enjoy higher standards of living.

The effects of urbanization on prosperity and poverty

According to World Development Report 2009: Reshaping Economic Geography (WDR 2009), it is not a coincidence that the high-income countries are more urbanized: “Place is the most important correlate of a person’s welfare. . . . The best predictor of income in the world today is not what or whom you know, but where you work.” Economic history shows that this has always been true. Before the Industrial Revolution, the world was a “rural” place, where the differences in living standards between countries were minimal. England’s Industrial Revolution unleashed a wave of industrialization that was necessarily grounded in cities or urban spaces. The mechanization of production was powered by economies of scale and a concentration of population available only in cities. Rapid industrialization was accompanied by increasing urbanization, which, in turn, nurtured agglomeration economies.

There is a nexus between urbanization, poverty, and prosperity (figure 2.8). Urbanization in developing countries can offer similar benefits to its citizens. Income per capita tends to rise as the share of the urban population rises. Urbanization rates above 70 percent are typically found in high-income countries, whereas those in poorer countries, such as Chad Ethiopia, Laos, and Uganda, are closer to 20–30 percent.

The relationship between the level of urbanization and poverty is negative. Countries with low levels of urbanization have significantly higher poverty rates than countries with high levels of urbanization (map 2.3). Rising urbanization is also positively related to increases in the share of gross domestic

![Figure 2.8](image-url)

**Figure 2.8** Nexus between urbanization, poverty, and prosperity

a. More urbanized countries have lower poverty rates

b. Urbanization goes hand in hand with more prosperity

Source: GMR team 2013

Note: PPP = purchasing power parity.
product (GDP) generated by industry and services as well as with the share of the labor force working in those sectors (Satterthwaite 2007). Indeed, together with complementary macroeconomic policies and an investment and business-friendly climate, urbanization is one of the important ingredients of a policy mix that fosters economic growth and prosperity.

The potential of urbanization to close the gender gap in earnings and enhance women’s empowerment is enormous and rests to a large extent on women’s access to education. Women earn less than men everywhere—in the informal sector, paid work, and farm and nonfarm jobs. WDR 2012 reports that wage differences by gender range from 20 percent in Mozambique and Pakistan to more than 80 percent in Jordan, Latvia, and the Slovak Republic. The emergence of agglomeration economies benefits poor women with basic education through large-scale job opportunities in light manufacturing. The feminization of export industries that produce labor-intensive goods is prolific in countries such as Bangladesh, Cambodia, China, India, Laos, Lesotho, Nepal, and Vietnam. While the average share of female employment in manufacturing is 30 percent, it is as high as 56–66 percent in apparel and accessories, leather tanning and finishing, retail bakeries, and garments (Do, Levchenko and Radatz 2011) that are also less skill intensive. In Bangladesh, Kabeer and Mahnud (2004) find that 1.5 million of the 1.8 million jobs created in export-oriented garment industries in 2000 went to women. According to WDR 2013, in the urban areas of India, the abundance of call center jobs for women is another source of women’s economic empowerment but more than primary education is required for these jobs (World Bank 2012d). South Africa provides similar
evidence (Levinsohn 2007). On average, women are more reliable remitters than men and form the backbone of rural household support in many cases (Vullnetari and King 2011; Piotrowski and Rindfuss 2006; Tacoli and Mabala 2010).

Urbanization has not always led to poverty reduction. In most countries, structural transformation from agriculture to manufacturing and services has been in lockstep with urbanization. Industrialization often begins in a light manufacturing export sector and has created large numbers of better-paying jobs, stimulating the urbanization process by attracting rural migrants to the urban areas (Chandra, Lin, and Wang 2013). In Latin America, where the share of the urban population is over 80 percent, quantitative analysis confirms that in 10 of 18 Latin American countries, changes in labor income explain more than half the reduction in poverty, and in another five countries, more than a third (World Bank 2013).

Sub-Saharan Africa’s higher poverty rates and lower income levels have created a perception that African cities have grown larger without enjoying the attendant benefits of urbanization—better-paying jobs, prosperity, and higher standards of living. It appears that the advantages of urbanization set in only after it has reached a critical level: countries with urbanization rates of 40 percent or less have distinctly lower income levels and higher poverty rates (maps 2.4 and 2.5). They also have the largest rural-urban differentials, especially in access to basic services.

**Links between urbanization and rural poverty**

Urbanization and poverty reduction are linked in numerous ways. Rural-urban migration and nonfarm economic activity are two of them. Other intricate links between rural and urban sources of growth generate additional potential for poverty reduction.

The concentration of the rural population in agriculture has gone hand in hand with poverty in most developing countries. In developed countries, about 20 percent of the population lives in rural areas and 5 percent is dependent on agriculture for employment. In South Asia and Sub-Saharan Africa, more than half the labor force is employed in agriculture, mostly as unpaid family workers (figure 2.9). Indeed, in the absence of adequate safety nets, agriculture is an important fallback option for family members who lose their job to economic shocks or other crises. A consequence of limited job opportunities outside agriculture in low-income countries is that agriculture, by default, absorbs extra labor, which leads to underemployment, low labor productivity, and thus low farm incomes.

Economic growth is another link between rural and urban areas, where what happens in one area affects the other. Rural growth contributes to urban growth and vice versa, but rural growth cannot occur without good access to (urban) markets and vibrant farm and nonfarm activities. Successful land reforms and the green revolution in agriculture preceded East Asia’s rapid population and economic growth in urban areas (with some exceptions, such as the Republic of Korea) (Gollin 2009; Mellor 1996). Rural growth helped to lower food prices and real wages for urban areas and created demand for urban goods. Rising income in rural areas allowed rural households to invest in their own businesses and in their children’s health and education, better preparing them for their future. This cycle is not happening as fast in Sub-Saharan Africa and South Asia, where rural poverty is most pervasive.

A large literature documents how lack of market access adversely affects agricultural productivity as well as commercialization and specialization. Da Mata et al. (2007) found that the growth of cities in Brazil was positively associated with market potential in surrounding rural areas (measured by rural per capita income weighted by distance). Using household data from Nepal, Emran and Shilpi (2012) analyzed the relationship between market size, defined as the size of the population in a certain area, and the distance of that area to the closest market. They found that the crop portfolio of a village becomes
MAP 2.4  Level of urbanization in 1990

Source: GMR team 2013.
Note: For the definition of “urban” please see UN 2011.

MAP 2.5  Level of urbanization in 2010

Source: GMR team 2013.
Note: For the definition of “urban” please see UN 2011.
more diversified with a decrease in the size of the market up to a threshold, after which it becomes specialized. They also found that agricultural commercialization increased with a decline in the distance to a market.

Rural-urban migration

In most developing countries, especially low-income ones, urban areas symbolize many good things. They offer better jobs, sufficient food for children, a respite from toiling on a farm without a decent income, safe drinking water, and shorter distances to doctors and other health care facilities. These attributes explain why people from rural areas are “pulled” to cities. The “pull” effects, which work through the dynamics of rural-urban migration, are an important source of reductions in rural poverty. Through the natural movement of people, migration has the potential to move large numbers of poor people to urban areas where they have better economic opportunities and access to basic services. In countries where urban areas have benefited from structural transformation, rural-urban migration has been instrumental in moving large numbers of the rural poor to the cities. The extent to which migration alleviates rural poverty depends upon a variety of factors.

In Sub-Saharan Africa, poverty remains for now a predominantly rural phenomenon, but rural to urban migration is playing a prominent role in reducing overall poverty. In Kagera, a region in northwestern Tanzania, between 1991–94 and 2010, more than 50 percent of the rural population migrated to urban areas (Beegle, De Weerdt, and Dercon 2011). For more than 45 percent of male but only 15 percent of female migrants, the main motivation was to find better-paying work. In the same study, Beegle, De Weerdt, and Dercon (2011) looked at consumption levels of residents of the Kagera region, where agricultural production of food and a few cash crops are the mainstay for more than 80 percent of rural residents. On average, they found that over 19 years, consumption increased by more than 40 percent for residents who remained in Kagera, but for those who left, consumption tripled. Nearly all migrants escaped poverty, but poverty declined only modestly for those who remained in rural Kagera.

Several studies have estimated the magnitude of rural-urban migration for one or more regions but a global study that provides consistent estimates for all regions is not...
available. Demographic and Health Surveys indicate that in 26 of the 46 countries with data on female migrants, rural-rural migration is the most common type and tends to be highest in Africa. Rural-rural migration is also most common among male migrants in another seven countries, mostly located in Africa (UN-Habitat 2008). These results are supported by the Kagera region study, which puts a 50 percent estimate on rural-urban migration. New research from long-term longitudinal data for India finds evidence of migration rates of about 34 percent in comparison to rates of 55–80 percent in the past 20 years for China (Dercon, Krishnan, and Krutikova forthcoming).

Poor people are willing to move to gain access to basic services. Poor people already pay for access to services in rural areas, and they are also willing to pay for them in urban areas. Their desire to access better education and health services to enrich their families’ human capital and future income is a motivation for moving to urban areas. Lall, Timmins, and Yu (2009) combined a rich data set of public services at the municipality level with individual records from four decades of Brazilian census data to evaluate the relative importance of wage differences and public services in migrants’ decisions to move. Their findings showed a clear distinction in preferences according to income level: for relatively well-off people, basic public services were not important in the decision to move, but for the poor, differences in access to basic public services did matter. In fact, Brazilian minimum wage workers earning an average R$7 an hour (about US$2.30 in February 2008), for example, were willing to pay R$420 a year to have access to better health services, R$87 for a better water supply, and R$42 for electricity.

One reason for not migrating or migrating only to the nearest small town is the desire to remain close to rural support systems. Informal barriers such as language, ethnicity, and religious differences also impede migration. For example, Munshi and Rosenzweig (2009) found that strong mutual assistance networks among subcaste groups in the place of origin strongly discourage migration in India. Much of the migration in India is from rural to rural areas because more than half the migrants are women who move primarily for family reasons (marriage). Work is the primary reported motivation for migration for men. In some countries, higher costs of living in the larger cities can be a deterrent.

Two important factors that can facilitate rural-urban migration, as well as benefit the overall economy, are investment in education and health and the removal of direct and indirect restrictions on labor mobility. Education helps give workers the skills they need to compete for well-paying jobs; good health helps workers be their most productive; and labor mobility helps balance the supply of and demand for labor. Other factors that can encourage migration include proximity to paved roads and areas with higher housing prices or rents which reflect a premium for the provision of better services.

When migrants move to cities primarily for better access to services (“push effects”), congestion in cities can worsen urban poverty, and lead to the creation or expansion of slums. Migrants who move in the hope of finding better jobs (“pull factors”), and who have the human capital necessary to find a better job make a positive contribution to the process of urbanization. In this context, if people are migrating from villages to gain access to services (such as electricity or sanitation), policy makers can prioritize provision of these services in areas where it is less costly to provide them. In Nepal, where limited agricultural potential in the hills and mountains makes migration an important livelihood strategy, migrants also value proximity to paved roads because it is easier for them to travel back and forth between their families in rural areas and their jobs in urban areas (map 2.6). Paved roads reduce the time and costs of accessing schools, health facilities, and markets. Migrants are willing to accept lower wages to get access to better services (Fafchamps and Shilpi forthcoming; Lall, Timmins, and Yu 2009).

Many governments have placed restrictions on rural-urban migration in an effort
to preempt overcrowding in cities. These restrictions prevent the rural poor from benefiting from the advantages of urbanization. However, migration cannot be leveraged uniformly by policy makers to equalize the benefits of urbanization between rural and urban areas in every country. Higher population density in cities can accelerate scale economies that make the extension of basic network services (piped water, sewers) more affordable for resource-constrained governments. However, in countries in South Asia, where rural-urban migration is low, its equalizing potential will be limited.

The removal of official direct and indirect restrictions on labor mobility can help to reduce poverty and improve access to the basic services emphasized in the MDGs. Restrictions in the land market are detrimental not only to agricultural productivity growth but also hinder diversification into nonfarm activities that have higher returns. Evidence from Mozambique and Uganda suggests that free mobility of labor can eliminate welfare differences between rural and urban areas for unskilled and poorer workers and households (Dudwick et al. 2011). Many developing countries have in place land market policies in rural areas to discourage migration to urban areas but these tend to worsen poverty. Migration is officially restricted in a large number of developing countries, including Ethiopia and Vietnam. In China, the free movement of people from the countryside to the city was restricted under the hukou system that was established in 1958 (Au and Henderson 2006a, 2006b). In 2012, restrictions on migration to all urban areas except the large cities of China were abolished. To discourage migration from rural areas, many countries simply do not provide basic water and sanitation services to poorer urban areas, often the first destination of rural migrants. For example, governments in the richer and larger localities in an urban area in Brazil reduce provision of water and sewerage connections to the smaller houses in which poorer migrants would live to discourage in-migration and deflect migrants to other localities (Feler and Henderson 2011).

Economic growth is often concentrated geographically and described as being located in a leading region complemented with a lagging region where growth is stagnant. MDGs’ related issues in leading and lagging regions are quite similar to those for rural and urban areas. In Uganda, where the leading lagging region issue surfaces in policy discussions, the test the government faces is to allow, if not encourage, the concentration of economic activity while achieving a convergence of living standards and delivery of basic services like the MDGs across a geographical area (box 2.4).

**Nonfarm employment and rural poverty**

Rural areas also undergo profound transformation as rural workers move out of agriculture to nonfarm activities. Indeed, throughout the developing world, nonfarm sectors have been becoming increasingly important...
Economic growth, often concentrated geographically, can lead to specialization, and can induce migration. Certain regions thus lead economically, while other regions lag, creating a challenge for economic and social development. Governments face a test to allow, if not encourage, the concentration of economic activity while achieving a convergence of living standards and delivery of basic services like the MDGs across space.

Uganda realized that its development path is dominated by these types of challenges. Uganda has made commendable progress in reducing income poverty at the national level, but there are gaps with some geographical pockets (lagging regions) not improving as much as others (leading regions). The Midnorth, Northeast, and West Nile regions are lagging behind in the incidence of poverty compared to the national average. Kampala is well ahead of other regions, with the poverty head count declining from 14 percent to 4 percent between 1992 and 2010. Similar differentials are observed for other measures of welfare. Consequently, in collaboration with the World Bank, the government of Uganda is trying to prioritize policies that generate the highest payoff for economic efficiency and provide geographic equity at the same time (World Bank 2012b).

The process began by identifying four policy areas that can make possible the integration of lagging and leading regions. The first is facilitating integration through better labor mobility, which emphasizes equipping people with a minimum level of education and skills so they are able to take on the more demanding jobs in the leading regions. The second one is making land, a physically immobile asset, more fluid and its tenure more secure, allowing farmers to raise productivity within agriculture and to facilitate labor movement from agriculture to nonagricultural activities, as leasing and renting of land becomes feasible. One important policy action identified in Uganda is the development of a well-functioning system of conflict and dispute resolution through a clear legal and institutional framework to promote security and encourage development of the rental market. The third policy area is to support integration through improved connectivity, which allows for improved mobility of people, products, and technology. Isolation can confine producers to small markets and restrict them to inputs available in their geographic location. By enhancing connectivity, producers and firms can increase market size and consequently their ability to exploit economies of scale, draw from a larger pool of workers, and have greater access to raw materials and equipment. Finally, underpinning effectiveness of these areas of focus is broadening coverage, quality, and accessibility of MDG-related social services across leading and lagging regions. This will empower people seeking economic opportunity and reduce congestion costs resulting from migration in search of access to social services in leading areas.

Not surprisingly, the expected impact of public expenditure on development needs to guide Uganda’s policy makers in their decisions on prioritizing and sequencing the various policies competing for the limited resources available. For instance, geographical prioritization of investments in (social and physical) infrastructure is complicated if the trade-offs between economic efficiency and welfare gains are taken into account. On one hand, economic returns suggest that investing in physical- or place-specific economic infrastructure should be prioritized in leading areas to exploit economies of scale and agglomeration, build density, and accelerate growth. As in many other countries, Uganda firms locate where they can benefit from agglomeration economies, suggesting prioritization of investments in infrastructure where these clusters are already forming in the southern-eastern corridor of Uganda. On the other hand, investments in social infrastructure yield positive returns across all regions, emphasizing the need for equitable provisions of social services across geographical space.

This policy focus is not much different from the policy agenda advocated in this GMR; that agenda facilitates progress toward the MDGs through better use of policies that assist the urbanization process given the advantages that urban areas have regarding income and thus poverty and MDG-related outcomes that are linked to better service delivery in urban areas.
sources of employment and income in rural areas (Lanjouw and Lanjouw 2001; Haggblade, Hazell, and Dorosh 2007). The non-farm sector accounts for 25–50 percent of rural employment in South Asian countries. In eight Sub-Saharan African countries, Fox and Sohnesen (2012) estimated that the non-farm sector accounted for 20–33 percent of total rural employment.

On average, returns to labor are higher from nonfarm activities than from farming, and the incidence of poverty is lower among households with access to nonfarm employment than among households wholly dependent on agriculture (for an example, see Foster and Rosenzweig 2004).

The agglomeration economies associated with urbanization strongly affect the location of nonfarm activities. Manufacturing and salaried nonfarm jobs in developing countries usually follow specialization patterns (von Thunen 1966). Salaried and wage jobs, including administrative work (such as clerks and managers), are concentrated within and around large cities and decline precipitously within 3–4 hours travel time from the city (Fafchamps and Shilpi 2003, 2005). The concentration of better paid nonfarm activities near larger cities is confirmed for Bangladesh (Deichmann, Shilpi, and Vakis 2009) and Indonesia (Yamauchi et al. 2011).

Growth of nonfarm activities is often driven by growth in agricultural productivity in the initial stage because of production, consumption, and labor market links between the farm and nonfarm sectors (Haggblade, Hazell, and Dorosh 2007). Smaller towns in the vicinity of rural areas are usually the most popular locations for nonfarm activities. However, nonfarm economic opportunities that can alleviate rural and small town poverty fail to emerge if access to markets in large urban centers do not exist. Deichmann, Shilpi, and Vakis (2009) found that lack of connectivity is doubly damaging for areas with higher agricultural potentials in Bangladesh. It not only depresses growth in agricultural productivity but also discourages growth of better-paying nonfarm activities directly and indirectly (because of agricultural linkages). Other factors that foster nonfarm activity include education (Lanjouw and Lanjouw 2001; World Bank 2007; Haggblade, Hazell, and Reardon 2007; Fox and Sohnesen 2012) and access and reliability of electricity. Lack of reliable electricity is found to be among the topmost constraints to nonfarm activity in rural areas and small towns in Bangladesh, Indonesia, Sri Lanka, Tanzania, and many more countries, according to the World Bank–International Finance Corporation Investment Climate Surveys.

Closing the gender gap in basic education can boost rural women’s empowerment by increasing agricultural incomes. Farm productivity rises when farms are managed by more educated and experienced individuals (Alene and others 2008; Kumar 1994; Moock 1976; Saito, Mekonnen, and Spurling 1994). WDR 2012 indicates that the potential to leverage women’s education to boost productivity on female-managed farms is large. Relative to male farmers, female farmers have lower productivity which can be measured in crop yield gaps that average around 20–30 percent in Benin, Ethiopia, Ghana, Kenya, Malawi, and Nigeria. In Europe and Central Asia and Latin America and the Caribbean, productivity differentials of about 34 percent between female- and male-managed farms prevail.

Land market restrictions deter diversification into nonfarm activities. Do and Iyer (2008) reported that land reforms in Vietnam had a positive and significant effect on long-term investment in agriculture and on the time devoted to nonfarm activities. Ethiopia (Deininger et al. 2003) and Sri Lanka (Emran and Shilpi 2011) are examples of countries where land sales are restricted and where rural employment has not diversified into nonfarm activities.

Research in India suggests that urbanization is associated with rural nonfarm employment and thereby with rural poverty reduction. Earlier studies showed that urban growth had an impact on urban poverty but no discernible impact on rural poverty (Datt and Ravallion 1996). A recent study found that while rural growth remains vital
for rural poverty reduction, urban economic growth has also been good for rural and hence aggregate poverty reduction since 1991 (Datt and Ravallion 2009; Cali and Menon 2012). Multiple mechanisms can account for this link. The first and obvious channel is the first-round effects of urban growth that induce migration of poor people in rural areas to urban areas. A second channel is that in rural areas population density can increase such that they become classified as urban. If these rural areas had significant concentrations of poor people before reclassification, then rural poverty becomes automatically urban poverty. The incidence of rural poverty in a district decreases by some 2–3 percent with an increase of 200,000 urban residents in the district (Cali and Menon 2012). This effect stems from reclassification, not migration. Numerous other second-round effects are possible when urban growth increases the demand for rural goods or leads to growth in marketing, transport, and agricultural trade or to remittance incomes from urban to rural areas. Diversification out of agriculture in rural areas may also raise agricultural wages as rural labor markets tighten. The World Bank (2011) reports that growth in per capita consumption in urban areas in India is associated with growth in rural nonfarm employment.

Policy makers can leverage nonfarm activities that typically connect rural areas to small towns to reduce poverty in both. For this, they need to focus on the provision of connectivity between rural areas, small towns and large cities, electricity provision in rural areas and small towns, and establishment of an efficient land market. Urbanization, congestion, and slums

Typically, slums emerge in cities when the demand for services outpaces supply. That can happen through natural increases in the urban population, in rural-urban migration, or both. Slums can be a transient home for some, and a permanent one for others. There is no technical definition of a slum, but in 2002, the UN-Habitat Expert Group put forth a description of slums that included several indicators: “a group of individuals living under the same roof in an urban area with at least one of the following four basic shelter deprivations: lack of access to improved water supply; lack of access to improved sanitation; overcrowding (three or more persons per room); and dwellings made of nondurable material.” A fifth indicator is insecurity of tenure, but insufficient data
prevents this dimension from being formally included in estimates of slums.5

In developing countries, where all five indicators are often found together, extreme deprivation occurs. Given that the two poorest regions, Sub-Saharan Africa and South Asia, are the farthest behind on access to safe water and sanitation, it is no surprise that they also house a large proportion of their urban population in slums (figure 2.10). Poorly functioning land and housing markets, lack of urban planning, and exclusionary attitudes toward the urban poor are the main reasons why the urban poor are forced to reside in low-quality housing on insecure land with few or no basic services (Baker 2008). Insecurity of tenure takes on complex forms in situations where slum populations represent a mix of owners, squatters, and renters.

Slum settlements may have differing degrees of marginalization depending on the recognition of their status by the government. Slums may actually serve the urban poor by offering low-cost housing and potential proximity to work. Slum settlements can also be the basis for self-employment and operation of small home-based businesses.

Lack of basic services in cities is often tied to insecure tenure. According to the United Nation’s MDG Report 2012, slum evictions without due legal process are the most visible violation of housing rights confronted by the urban poor. Slum evictions have increased significantly since 2000. For example, in Jakarta in 2003/04 more than 100,000 people were either evicted or threatened with eviction as part of an effort to clear various areas of informal occupation. In Beijing, an estimated 300,000 people lost their homes as a result of preparations for the 2008 Olympic Games (Du Plessis 2005).

While slum and informal settlements may provide an entry point into cities in the short run, they are likely to have negative impacts on the conditions of the urban poor in the medium and long term. A lack of government intention to provide basic services in slum settlements does not necessarily deter urban poor and rural migrants for whom slums are the only entry point into urban areas. It does, however, negatively affect their

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**FIGURE 2.10 Proportion of urban population living in slums, 1990–2010**

![Graph showing the proportion of urban population living in slums from 1990 to 2010.](image)

Source: UN-Habitat 2010.
economic situation if they have no choice but to rely on private and informal providers for provision of basic services at higher cost than those provided by the government to other strata of the society (box 2.5). Eviction from slums can drastically affect the livelihood of the residents by spatially displacing them from the proximity of their livelihoods, creating higher transportation costs. Because slums are also sites of economic production for small business enterprises, slum evictions and demolitions can also destroy livelihoods (Mehra, Maik, and Rudolf 2012; Du Plessis 2005). Given the lack of access to insurance or secure savings, such losses can create dire economic conditions for the urban poor. Slum dwellers often cope with these problems by discontinuing the education of children, especially girls.

More significantly, the lack of legal recognition of slum settlements translates into poor access to basic services, especially water and sanitation, for those living in slums. For example, more than 50 percent of the slum population in South Asia and 40 percent in Sub-Saharan Africa lack access to sanitation services (UN-Habitat 2010). In the slums of Nairobi, there is one toilet for every 500 people on average. (There are, however, some encouraging though rare examples to redress the lack of toilets, including an initiative in Agra, India, described in box 2.6). Governments are reluctant to provide basic services to slum settlements with insecure tenure, for fear such actions will encourage further urban poor settlement on unoccupied lands and invite rural migrants to migrate to cities in expectation of better services (Durand-Lasserve 2006). According to the World Population Policies Report (UN 2011), in 1976, 44 percent of developing countries reported having implemented policies to restrict or retard rural-urban migration; by 2011, that proportion had increased to 72 percent. Further, the inability of migrants to prove urban residence via water or electricity bills or formal rental leases in slums, along with their informal employment, makes their situation even more precarious. In some countries, proof of urban residence is needed to

**BOX 2.5 Costs of coping with lack of water service**

In Bangladesh, in the absence of state-provided services, a parallel network of service providers known as mastaans provides the needed services for high fees, with patronage from politicians and law enforcement agencies. Based on interviews with government agencies and nongovernmental organizations, a World Bank (2007) report noted that the mastaans exploited slum residents not only by demanding high rates for the provision of basic services but also by using physical force and threats of eviction when pay-offs were not made.

Such instances are not limited to Bangladesh. Water sold at water kiosks in informal settlements in Eldoret, Kenya, costs more than five times what residents in the formal urban areas of Eldoret pay the municipal council for water (Kimani-Murage and Ngindu 2007). Karuiki and Schwartz (2005) analyzed data from 47 countries (93 locations) and found that the average water prices charged by private vendors compared with the public network were four and a half times higher for point sources (ranging from a simple connection to a standpost or kiosk and tap to a borehole with tank, pipe and tap) that are most commonly found in peri-urban or unplanned settlements with unclear tenure.

These higher costs of access to water associated with the use of informal providers not only increase expenditures of slum households but may also increase costs related to ill health. In Indonesia, the use of low-priced drinking water of lesser quality from informal providers by slum families was associated with considerably higher infant and under-five mortality as well as child morbidity (Semba et al. 2009). The lack of safe water provision in urban slums has far-reaching implications and threatens the progress of MDGs related to poverty eradication and child health.
access basic services. A qualitative study of the Kyrgyz Republic found that without proof of urban registration status, rural migrants faced difficulty accessing treatment at health clinics, and many no longer seek health services assuming that they will not be treated (Nasritdinov 2007).

Substandard housing or illegal and inadequate building structures are another housing-related marker of slums. Overcrowding
and high density worsen service delivery when the one tap or toilet supplied to a dwelling has to be shared by many. Overcrowding is associated with a low space per person, high occupancy rates, cohabitation by different families, and a high number of single-room units. Many slum dwelling units have five or more persons sharing one room used for cooking, sleeping, and living.

Slums dwellings may be built in hazardous locations or on land unsuitable for settlement, such as floodplains, in proximity to industrial plants with toxic emissions or waste disposal sites, or in areas subject to landslides. The layout of the settlement may be hazardous because of a lack of access ways and high densities of dilapidated structures. Lack of basic services is manifested by visible, open sewers, a lack of pathways, uncontrolled dumping of waste, and polluted environments.

Slums and child morbidity and mortality go hand in hand. A slum household can be one or two times more at risk when it is extremely deprived than when it is affected by only one deprivation. For example, in Ouagadougou, the proportion of children with diarrhea in slum areas is 20 percent, whereas those children living with three shelter deprivations are two times more exposed (37 percent) and those with four shelter deprivations are two and a half times more at risk. Likewise in Harare, the capital of Zimbabwe, children in slum households suffering from two shelter deprivations are five times more exposed to diarrhea than children in slum households with only one shelter deprivation (UN-Habitat 2008).

A Nairobi Urban Health and Demographic Surveillance Site study indicates that slum children bear the biggest burden of poor environmental sanitation and housing conditions and poor quality health services. Data from this study show that diarrhea and pneumonia are the leading causes of death among children under five and that the mortality burden among these children is four times higher than in the rest of the population (Kyobutungi et al. 2008). High mortality levels are not surprising given that children in slums have exceptionally low levels of vaccination—only 44 percent are fully immunized (Mutua and Kimani-Murage 2011). These slum children were also found to have exceptionally high levels of malnutrition and a high prevalence of infectious diseases, with little access to curative health care (Ndugwa and Zulu 2008).

In overcrowded and underserviced urban slums, the lack of basic sanitation and safe water is an acute problem for women and girls. Migration from rural to urban areas can increase women’s opportunities to access better reproductive health care, education, and livelihoods, but these benefits need to be weighed against the negative consequences of the possibility of living in a slum (Mora 2008). Many wait until dark to relieve themselves, often confronting harassment and even sexual assault when defecating in public. Because women carry a heavier burden of household chores (including cleaning, washing, and caring for children), the lack of water and sanitation provision in slums affects them disproportionately more than men (Tacoli and Mabala 2012).

This disproportionate burden on women has important implications for attaining the MDGs. A recent study of 5,033 migrant women living in makeshift slum settlements in India found a strong relationship between reproductive tract infections and lack of access to proper sanitation (Singh, Kandpal, and Roy 2011). A lack of gender-balanced approaches to sanitation also has significant impact on MDGs related to the education of adolescent girls. Poor sanitation is a leading determinant of adolescent girl dropouts (MoE Kenya 2011; FAWE 2006; Obonyo 2003). A UNICEF study in urban Bangladesh found that a simple school sanitation intervention to provide separate facilities for boys and girls helped boost girls’ school attendance 11 percent a year, on average, from 1992 to 1999 (UNICEF 2003a). Similar results were found in Mozambique (UNICEF 2003b).

Slums often surface on the periphery of a city, but the problems are the same as those in the city center. As Satterthwaite (2007)
observes, settlements are formed on the urban periphery of many cities including megacities like Buenos Aires, Delhi, Manila, Mumbai, Phnom Penh, Santiago, and Seoul, when evicted inhabitants were forced out to these areas by local government slum clearance schemes. The social and environmental consequences include the segregation of low-income groups in the worst located and often most dangerous areas as well as a lack of access to water, sanitation, health services, and educational facilities. That is particularly the case for recent rural-urban migrants who may not be able to afford rentals within a slum, and have to squat on sites that may not be fit for habitation. Unfortunately, these sites are also prone to significant environmental risks.

Heath, Parker, and Weatherhead (2012) used Rapid Climate Adaptation Assessment methods to assess how changes to the climate interact with existing vulnerabilities in peri-urban and informal areas in a manner that is likely to affect safe water and sanitation supplies for the urban poor. The model was tested in Naivasha (Kenya); Antananarivo (Madagascar), and Lusaka (Zambia) in the eleven communities studied, eight were found to be vulnerable to flooding and four to water shortages, with especially severe negative effects for the peripheral sites prone to flooding. For example, in the peri-urban slum settlement of Kanyama on the outskirts of Lusaka, the 2009/10 flood lasted for three months, causing water kiosks and buildings to collapse, contaminating water supplies (particularly the shallow wells used in the areas unserved by the kiosks), and affecting livelihoods, education, and health. Satterthwaite (2007) argues that in several cities, extreme overcrowding in informal settlements (including the unserviced ones on urban peripheries) is viewed as a result of serious housing shortages and acute shortages of infrastructure and services in particular areas. Yet large amounts of land in cities are often left vacant or only partially developed; planning for low-income housing with proper basic services and infrastructure could result in lower costs than those incurred in upgrading existing dense settlements, resettling slum dwellers, and undertaking slum clearance projects.

In a few countries disillusioned with government’s lack of interest in their plight, slum dwellers are taking the initiative to make their voices heard. Two examples are insightful and encouraging. In Agra, India, a community-driven initiative has made toilets an entry point for catalyzing housing, slum, and city development (box 2.5). In Uganda, where more that 60 percent of the country’s urban population lives in slum communities, the purported benefits of urban agglomeration are not being felt. Rather than waiting passively for better service provision, Uganda’s slum dwellers have adopted a proactive strategy that is harnessing the potential of collective action to drive a shared agenda for better service delivery in slums (box 2.7).

**Policy challenges and implications**

The MDGs are about meeting the basic needs of all citizens in developing countries. The two facets of urbanization that matter the most for attainment of the MDGs in general and poverty reduction in particular are managing the factors that affect urban population growth and expand the boundaries of urban areas; and understanding the spatial location of poverty. Because these facets vary significantly between countries, country specificity should not be ignored in the design of any country policies aimed at attaining the MDGs.

The key relevant factors identified in this report that can inform policy makers and others addressing these challenging facets are:

- The natural increase in the urban population accounts for approximately 60 percent of urban population growth in all countries. Urban population growth is also affected by the reclassification of rural boundaries. Migration is a third factor in urban population growth. The weight of each of these factors in affecting urbanization depends on country circumstances.
• All else being equal, rural-urban migration can lead to a reduction in rural poverty, but migration is not uniform across regions or countries. It is highest in Latin America and East Asia and lowest in South Asia; Sub-Saharan Africa falls somewhere in between. Governments play an important role in urban poverty reduction when they facilitate migration. Whether rural-urban migration increases or reduces urban poverty depends on whether migrants contribute to the positive or negative aspects of urbanization.

• Poverty is not spatially bipolar but distributed along a spectrum. Rural areas are the poorest; megacities and large cities are the

**BOX 2.7  Agglomeration of collective capacity among Uganda’s slum dweller communities**

In the slum dweller communities of Uganda, where over 60 percent of the urban population lives, the purported benefits of urban agglomeration are not being felt and many urban areas are characterized by rising unemployment and inadequate access to basic services. Rather than waiting passively for the benefits of urban agglomeration, Uganda’s slum dwellers have adopted a proactive strategy that is harnessing the potential of collective action. The strategy is one that has evolved within the Shack/Slum Dwellers International (SDI) network. It involves the clustering, or federating, of community saving groups into urban poor federations. The National Slum Dwellers Federation of Uganda (NSDFU) is one of 33 federations in the SDI network. Founded in 2002, the NSDFU today comprises almost 500 savings groups and approximately 38,000 members. Savings are used to bring people together, build their capacity to act as a collective, and build organizational capacity and trust.

When savings groups begin, they often focus solely on livelihood issues and income generation. But with time and greater exposure to SDI rituals such as enumeration and peer-to-peer exchange, communities formulate an urban agenda that looks beyond group members and toward transforming the settlements in which they live. This is when benefits to service delivery begin to accrue as part of a collective upgrading agenda. The spatial proximity of urban savings groups allows for the agglomeration of collective capacity necessary to create a critical mass of urban poor to hold public officials accountable and to collaborate with municipalities and leverage their savings. This critical mass is required to make community participation more than a platitude and aid more effective, and it is uniquely possible in the urban setting.

The positive externalities of this agglomeration of collective capacity are not hard to see. The NSDFU is the key community mobilizer in the government of Uganda’s Transforming Settlements of the Urban Poor in Uganda (TSUPU) program. The NSDFU has capitalized on the opportunities of this Cities Alliance–funded program to expand from Jinja and Kampala to Arua, Kabale, Mbale, and Mbarara. Within this national program, the NSDFU has demonstrated that organized communities can improve urban governance by organizing citizens to demand accountability; improve urban planning by generating information on slum populations; improve living conditions for members and nonmembers alike through slum upgrading projects; and improve the environment by upholding their responsibilities to keep cities clean and maintain public services. Over the past 10 years, the NSDFU has constructed sanitation units and community halls in slums throughout the country. Last year the NSDFU began extending clean water and improving drainage, while in Jinja it has begun construction of a low-cost housing project. In almost every case, projects were built upon land provided by municipal councils, demonstrating true partnership.

The increasing returns to scale for the agglomeration of collective capacity are also evident. The more the federation grows, the easier it becomes to negotiate with government, mobilize members and savings, leverage funds, and implement projects. Because the NSDFU is part of SDI, the returns to scale also benefit tremendously from the growth of the global urban poor movement.

_Source_: Skye Dobson, Uganda Program Officer, Shack/Slum Dwellers International.
richest, and smaller towns of varied sizes and slums in larger cities lie in between. The implications of the spatial location of poverty along a spectrum are nontrivial. The challenge for the MDGs is to design poverty-reducing and service delivery strategies that take into account the spectrum along which poverty is located.

• In a large number of countries, the majority of the urban population resides in the larger cities, as for example in India and Vietnam, but the majority of the urban poor lives in smaller towns that are often as poor as rural areas. Ignoring the growth of urban poverty in smaller towns can undermine efforts to reduce overall urban poverty as well as overall poverty.

• The spatial distribution of poverty in Sub-Saharan Africa is distinct from that of other regions. This region’s poor are disproportionately concentrated in rural areas. Most of the small proportion located in urban areas live in the largest city, usually the capital. Population density in Sub-Saharan Africa is sparse, making it difficult and costly to deliver network-based services that benefit from scale economies.

• Rural poverty is distinct from urban poverty, but there is a strong interdependence between rural and urban economies. Three-fourths of the poor worldwide still reside in rural areas, making the role of rural poverty-reducing policies central to any policy approaches aimed at attaining the MDGs.

• The necessary ingredients for strong and sustainable links between rural areas and smaller towns are a rich rural hinterland that can supply urban areas and that has access to urban markets where rural households can trade. In short, rural-urban migration can be an equalizer with the potential to bridge rural-urban disparities in incomes and access to basic services, alleviating rural poverty, as illustrated in Tanzania. Rural growth also has a positive impact on urban poverty reduction. Policies that spur this process include an increase in rural productivity through the introduction of new farm technologies and investment in the human capital development of rural residents; removal of land market distortions; improved connectivity with urban markets; and a fostering of nonfarm activity and rural-urban migration.

• At least seven of the MDGs are related directly to the delivery of basic services, and the poverty–city size gradient is a strong marker of access to services. Invariably, rural areas are the worst off and smaller towns and slums have poorer access to basic amenities than do larger cities. Problems in service delivery are related to both quantity and quality.

• To shrink persisting gender differentials in educational attainment and earnings, discrete policies need to improve girls’ access to education when poverty, ethnicity, or location (rural, small town) excludes them. WDR 2012 notes that economic development is not enough to shrink all gender disparities. It recommends that corrective policies focused on persistent gender gaps are essential. A priority is reducing the gender gaps in human capital, specifically those regarding female mortality and education. Conditional cash transfers to encourage girls to attend school have been successful in increasing primary school enrollments in various countries.

• Other policies that have a disproportionately positive impact on women’s economic empowerment are ones that improve rural livelihoods by increasing female farmers’ access to markets. Policies that increase rural women’s access to water reduce the time they spend in fetching water and free up the time they can spend in income-generating work that increases their economic empowerment. There is also a clear need for policy that prioritizes not only the provision of sanitation in slums on the whole, but mainstreams gendered needs in the design of sanitation policies.

The implications of urbanization for the provision of MDG-related services to all individuals in developing countries are complex and need to be considered in a framework that appropriately recognizes the factors described here. Governments have two main policy levers with which to achieve the
MDGs: the suite of macroeconomic policy instruments that spur agglomeration economies and job creation; and public investment in MDG-related services.

The first-best solution is to facilitate access to all MDG-related services for all poor through expert management of the urbanization process. This implies either accelerating investments in the factors that fuel the urbanization process (the subject of chapter 3) and attract the poor to cities; or equalizing service delivery wherever the poor are located—that is, in rural areas and small towns as well as slums. The implications are different, however, in highly urbanized countries such as in Latin America, where, compared with other regions, rural areas offer greater income-earning opportunities. Indeed, recent experience in Latin America shows that when agricultural production (via higher prices, higher productivity, and the like) allows rural workers to obtain decent incomes, the propensity to migrate fades. However, because rural-urban poverty differentials remain large, Latin America continues to register one of the highest migration rates.

Not surprisingly, the first-best solution is unviable for several reasons: Resource and capacity constraints must be overcome. Not all of the rural poor who want to move to urban areas can migrate to cities at once, and even if they could, congestion effects would likely worsen urban poverty and undermine the urbanization process. Even if ideal cities were created, not all of the rural poor would be willing to forgo their rural assets and migrate. Finally, it is unrealistic to presume that the rural poor who do want to migrate would be able to find productive jobs if they did not arrive endowed with at least some basic human capital.

The second-best approach is to prioritize the type of services provided, their delivery location, and their timing. Three types of policies could be leveraged:

- In areas where migration is significant and poverty is more bipolar, boosting the urbanization process in large cities through better delivery of MDG-related services and provision of incentives for job creation would make large cities more attractive and would motivate rural-urban migration. Migrants would enjoy the benefits of urban living and would presumably step out of poverty and toward greater prosperity. For this to happen, poor migrants need human capital—that is, they need to be healthy and have a basic education. Thus public investment in primary education and health care should be directed to the poor both in small towns and in rural areas.

- In countries where migration is limited and reclassification and natural population growth dominate the expansion of urban boundaries, where population density is high, and where the poverty–city size gradient is dominant, the poverty differentials between poorly served areas and larger cities are unlikely to shrink sufficiently to foster the attainment of the MDGs. In these situations, policies that encourage migration will help. Progress toward the MDGs would be accelerated by delivering services wherever the poor are concentrated, otherwise both rural and urban poverty will remain grounded wherever it is.

- In situations where poor people are concentrated in small towns, policies should focus on improving connectivity with other urban centers. Poverty in small towns is often high, and the quantity and quality of services in these places differ little from those in rural areas and lag behind those in more mature urban settlements. In these cases, measures to better connect the activities in small towns with the economies of larger cities become paramount.

In all three cases, investment in portable services (education and health care) would optimally be provided wherever the poor are. But in countries with high migration and low population density in rural areas, delivery of nonportable infrastructure services in larger cities would be more cost-effective and more supportive of urbanization and industrialization and could be prioritized as such. Countries in Sub-Saharan Africa would typically fall in this group.
Finally, a reduction in the number of slum dwellers is a dedicated MDG and needs a dedicated approach. To address the unique challenges associated with slums, policy solutions must:

- Tie land tenure policies for slums to those of the city as a whole, particularly in terms of land pricing, connectivity of residential and commercial urban space, and, above all, the appropriate balance between economic and population density. A “silu” approach will lead to a lose-lose solution for cities and their slums.

- Take advantage of slums’ proximity to the city so that the unit costs of extending access to basic health and education services to slum dwellers are relatively low.

- Expand the supply of public toilets and water to slum dwellers in creative ways (such as putting water fountains in public places) in the short term, recognizing that permanent solutions to water and sanitation provision is tied to the land issue.

- Make use of the fact that in most cases, slum dwellers are willing to pay a small fee to access basic services.
Annex 2A.1  Equalization of health service delivery and its expected impacts on the MDGs: A simulation exercise

Closing the rural-urban MDG and service gaps may represent a major challenge for many countries, especially if these gaps are large and the unit costs of services for rural populations are higher than for their urban compatriots. In the simulation exercise presented in this annex, the broader economic consequences of closing health gaps in low-income countries are explored by adapting MAMS, a CGE model for country strategy analysis, to address rural-urban aspects of MDGs. The database used was designed to capture characteristics typical of low-income countries, including their MDG outcomes, sectoral shares in value-added.

The base simulation assumes an annual growth rate of 5.6 percent, following the trend of low-income countries since 2000; and “business as usual” in government policies and spending, including borrowing that is consistent with debt sustainability. In the comparator simulations, for the period 2014–30, it is assumed that the government gradually scales up its health services, either by closing the gap in the levels of per capita health services reaching rural and urban residents, or by closing the rural-urban gap in the under-five mortality rate (U5MR), the outcome indicator of interest here. These efforts are undertaken using alternative sources for required additional financing (foreign grant aid, domestic borrowing, taxes, and reduced spending on infrastructure).

Under the base scenario, the major macroeconomic indicators (GDP, government and private consumption, and investment) all grow at annual rates of around 5 percent; in per capita terms, household consumption grows at an annual rate of around 3.1 percent, with a slightly more rapid rate for rural households (3.2 versus 3.0 percent). As shown in figure 2A.1, significant progress is realized for both poverty and the U5MR, while the rural-urban gaps narrow but still remain substantial.

In the first simulation (denoted $mdg4u$+$fg$), the government gradually raises per capita rural health services to the urban level while maintaining a growth rate for urban services that is sufficient to maintain the same reduction in the urban U5MR as under the base; in other words, the improvement in the rural population does not come at the expense of the health outcome of the urban population; additional foreign grant aid provides needed financing. As shown in figure 2A.2, this set of actions reduces the 2030 rural U5MR by slightly more than 5 points, closing roughly half of the rural-urban gap. Both rural and urban poverty rates are virtually unchanged.

At the macro level, growth in government consumption increases by 0.6 percentage points (Figure 2A.3), accompanied by a similar increase for government investment, with the increases directed to the health sector and financed by foreign grant aid; by 2030,
foreign grant aid would increase by 1.2 percent of GDP, to 5.1 percent (Figure 2A.4). If the financing gap instead were met by concessional foreign borrowing, then the foreign debt of the government would reach 43 percent of GDP in 2030 compared with 32 percent for the base scenario.

Instead of relying on foreign resources, the government may create the fiscal space needed for this increase in health spending by turning to domestic resources, including borrowing or higher taxes (scenarios denoted as \(mdg4u+db\), and \(mdg4u+tx\), respectively). While the outcomes are very similar or the same in terms of the rural and urban U5MRs, these scenarios lead to higher urban and rural poverty rates (see figure 2A.2), accompanied by slower growth in private consumption; for the borrowing scenario, the poverty reduction and consumption outcomes are more negative, and GDP and absorption growth rates also decline, because the private sector is deprived of investment funding (see figure 2A.3). For both scenarios, the macro slowdown reflects the opportunity costs of reallocating resources to government health spending: less funding for domestic private investment and capital accumulation (\(mdg4u+db\)), or reduced real disposable income for households, leading to losses spread over private consumption, investment, and capital stock growth (\(mdg4u+tx\)).

Under the preceding scenarios, the rural U5MR remains above the urban level, indicating that lack of government health services is only one factor behind the gap between rural and urban health outcomes. Alternatively, the government may decide to be more ambitious and gradually raise government health services in rural areas to such an extent that by 2030 the U5MR of the rural population will have declined to the urban U5MR level in 2030 simulated under the base scenario; that is, the government would try to make up for the other gaps suffered by the rural population by providing them with additional targeted health services while, at the same time, maintaining the same per capita real health spending for the urban population as under the base scenario. On the margin, the increase in real services per capita (or per avoided death) is higher under this scenario, reflecting the need to reach more disadvantaged population groups and to turn to more costly interventions, in effect reversing the initial discrimination against the rural population in health service provision. If foreign grants provide the marginal financing (\(mdg4r+fg\)), then in 2030, these will have to increase by 5.6 percent of GDP.
compared to the base, to 9.7 percent of GDP. Compared with the base outcome in 2030, the intended reduction in the rural U5MR is realized, together with small reductions in the urban U5MR and poverty in both rural and urban areas (see figure 2A.2). A strong growth increase is recorded for government consumption, along with more modest increases for private consumption, GDP, and absorption, the latter enlarged by the increase in grant aid (see figure 2A.3).

It is difficult to reallocate this amount of resources to government health spending without negative repercussions. If the government relies on higher taxes ($mdg4r+tx$), the increases in which reach 7.6 percent of GDP in 2030 compared with the base, these repercussions are felt in the form of a slightly higher urban U5MR and higher poverty rates, especially in rural areas (see figure 2A.2), as well as in slower growth for private consumption (see Figure 2A.3). The reason behind a relatively strong rural poverty increase (for this and some of the preceding scenarios) is that government services, which were scaled up, are relatively intensive in the use of the more educated labor supplied by urban households, whereas private spending, which was scaled down, disproportionately reduces the demand for land and less educated labor, factors that provide a relatively large share of the incomes of the rural population.7

From a different angle, given inefficiencies in the government health sector in many low-income countries, it is possible to reduce the need for extra financing by raising efficiency. For a set of scenarios that raise the rural U5MR to the urban level by 2030, figure 2A.5 maps out combinations of average per capita foreign grant increases (in constant 2009 dollars) for 2014–30 and additional annual growth in government health service efficiency (covering efficiency of new investments, as well as of labor and capital use but excluding material inputs such as medicines). In the absence of a gain in efficiency, the grant increase in an average year is around $26 per capita (at 2009 prices; from the scenario $mdg4r+fg$). The need for additional grant aid would be eliminated if efficiency grew by an additional 6.2 percent a year. While such rapid gains may be infeasible, additional growth of at least 1–2 percent a year may be within the realm of possibility.8 Interestingly, the gains in reduced aid per additional percentage point of efficiency growth are diminishing—that is due to real exchange rate effects: at high levels, grant aid leads to strong marginal appreciation, with strongly reduced domestic purchasing power as the result.

**Figure 2A.4** Additional foreign grants to finance health spending

Source: Lofgren 2013.

**Figure 2A.5** Trade-offs between more grant aid and domestic efficiency gains

Source: Lofgren 2013.
In sum, these simulations explore the consequences of providing and financing government health services to reduce the U5MR of the rural population. The results suggest that if, by either mobilizing required resources or raising its own efficiency in the health sector, or both, a government manages to raise the level of real health services reaching the rural population, then it is possible to reduce the rural U5MR considerably. If the bulk of resources come in the form of foreign grants or efficiency gains, then progress in the form of a lower U5MR can come with broader repercussions that have a positive impact on other development indicators, including poverty reduction. But if most additional resources have to be mobilized from domestic sources, then progress on reducing U5MR would threaten to come at the expense of less progress in poverty reduction and other indicators, illustrating the difficult trade-offs facing low-income countries and their governments.

Notes

1. Because the estimates are derived from census information and because the definitions of “urban” used in the Chinese censuses have been changing, this finding should be interpreted with caution. Estimates for Indonesia indicate that the contribution of natural increase to urban growth declined steadily, from nearly 70 percent in the 1960s to 32 percent in the 1990s (UN 2011).

2. Ferré, Ferreira, and Lanjouw (2012) suggest that while “urban bias” was a much discussed concern during the 1970s and 1980s, following Lipton (1977), the idea of a “metropolitan bias” has not been widely emphasized in the poverty measurement literature. This is likely due, at least in part, to scant availability of data on living standards across finely defined city-size categories.

3. It should be noted that estimation of a complex concept such as “slum” will always be somewhat arbitrary and definition driven. By using a consistent definition in the same places at different points in time, genuine changes may be observed—particularly when broad averages are “drilled down” to examine the underlying changes in real conditions in individual cities.

4. The original target to improve the lives of at least 100 million slum dwellers by 2020 was based on an estimation of close to 100 million slum dwellers in the world. Upon measurement of the slum population using the internationally agreed upon UN-Habitat definition of slums following the UN Expert Group Meeting of October 2002, it was learned that the global estimate of the slum population was in fact close to 1 billion (924 million). As a result, even though the slum target has been globally achieved, and in fact significantly surpassed 10 years ahead of schedule, there is little room for complacency given the existing magnitude of populations currently living in slums.

5. In April 2011, however, the UN Habitat Governing Council adopted a resolution to improve the measurement of tenure security and to generate globally comparable estimates. Observations using this method are being implemented in 25 cities around the world.

6. As a result of more rapid private consumption growth for mdg4u+fg than for the other scenarios, the health objectives can be achieved with a slightly smaller acceleration in government health spending and government consumption growth for mdg4u+fg.

7. Additional simulations showed that the domestic resources that could be mobilized through increased government borrowing were insufficient to finance the health policy of the last two scenarios (mdg4u+fg and mdg4r+tx).

8. For example, on the basis of surveys in six low- and middle-income countries, Chaudhury et al. (2006) found that, on average, primary health workers were absent 35 percent of the time. Other things being equal, a moderate gradual reduction in their absenteeism to 17.5 percent of their time by 2030 would correspond to an annual increase in their productivity by around 1.5 percent a year.

References

Evidence from Western Kenya.” World Development. 36 (7): 1247–1260.


