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Urbanisation as a Threat or Opportunity in the Promotion of Human Wellbeing in the 21st Century

David Satterthwaite and Diana Mitlin

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David Satterthwaite and Diana Mitlin

Introduction

It is possible to present a credible picture of urbanisation as one of the greatest threats to human health, wellbeing and development, although this paper will argue that to do so requires focusing on a limited set of cities. There is a stronger evidence base on cities and urbanisation underpinning good health, fulfilment of civil rights, democracy and freedom from deprivation, although with important exceptions. It is possible to present urbanisation as the most serious driver of human-induced climate change (and of most other kinds of ecological damage). But cities also have the potential to be places where high living standards can be delinked from unsustainable ecological footprints and high greenhouse gas (GHG) emissions (and there are some cities that demonstrate this). Of course, a very different set of urban centres get highlighted, depending on which of these points one wants to substantiate. What this paper seeks to do is to highlight both the threats and the opportunities posed by urbanisation.

What we know about urbanisation

The world's urban population has increased nearly five-fold since 1950. Urban centres now include more than half the world's population compared to 29 per cent in 1950 and 15 per cent in 1900. It is within urban centres that most of the world's GDP is generated and most new investments are concentrated. Table 1 summarises the statistics for urban populations and urban trends for different regions from 1950 to 2010 – and projected up to 2030 and 2050.

Many aspects of urban change in recent decades are unprecedented, including not only the world's level of urbanisation and the size of its urban population, but also the number of countries becoming more urbanised and the size and number of very large cities. Of the 449 cities in the world with populations of 750,000 plus in 2010, 52 had populations that had grown more than twenty-fold since 1960, with 116 having populations growing more than tenfold. Table 1 also highlights how rapidly China has urbanised since 1990; 34 of these 116 cities with populations growing more than tenfold since 1960 are in China.

Urban areas in the global South now have close to two-fifths of the world's total population and close to three-quarters of its urban population. The global South also has most of the world's large cities. By 2011, there were 23 'mega-cities' (cities whose population exceeds 10 million) and only five were in high-income nations (two in Japan, two in USA, one in France). Of the remaining 18, four were in China, three in India and two in Brazil.

The increasing concentration of the world's urban population and of its largest cities outside the nations with the highest incomes is a change from the historic pattern where these have been concentrated in the most prosperous nations. Table 1 shows the large decrease in the proportion of the world's urban population in high-income countries and regionally in Europe since 1950 and

Table 1: The distribution of the world's urban population by region, 1950–2010 with projections to 2030 and 2050

Major area, region, country or area	1950	1970	1990	2010	Projected for 2030	Projected for 2050
Urban population (millions of inhabitants)						
World	745	1,352	2,281	3,559	4,984	6,252
More developed regions	442	671	827	957	1,064	1,127
Less developed regions	304	682	1,454	2,601	3,920	5,125
Least developed countries	15	41	107	234	477	860
Sub-Saharan Africa	20	56	139	298	596	1,069
Northern Africa	13	31	64	102	149	196
Asia	245	506	1,032	1,848	2,703	3,310
China	65	142	303	660	958	1,002
India	63	109	223	379	606	875
Europe	281	412	503	537	573	591
Latin America and the Caribbean	69	163	312	465	585	650
Northern America	110	171	212	282	344	396
Oceania	8	14	19	26	34	40
Percentage of the population in urban areas						
World	29.4	36.6	43.0	51.6	59.9	67.2
More developed regions	54.5	66.6	72.3	77.5	82.1	85.9
Less developed regions	17.6	25.3	34.9	46.0	55.8	64.1
Least developed countries	7.4	13.0	21.0	28.1	38.0	49.8
Sub-Saharan Africa	11.2	19.5	28.2	36.3	45.7	56.5
Northern Africa	25.8	37.2	45.6	51.2	57.5	65.3
Asia	17.5	23.7	32.3	44.4	55.5	64.4
China	11.8	17.4	26.4	49.2	68.7	77.3
India	17.0	19.8	25.5	30.9	39.8	51.7
Europe	51.3	62.8	69.8	72.7	77.4	82.2
Latin America and the Caribbean	41.4	57.1	70.3	78.8	83.4	86.6
Northern America	63.9	73.8	75.4	82.0	85.8	88.6
Oceania	62.4	71.2	70.7	70.7	71.4	73.0
Percentage of the world's urban population						
World	100.0	100.0	100.0	100.0	100.0	100.0
More developed regions	59.3	49.6	36.3	26.9	21.4	18.0
Less developed regions	40.7	50.4	63.7	73.1	78.6	82.0
Least developed countries	2.0	3.0	4.7	6.6	9.6	13.8
Sub-Saharan Africa	2.7	4.1	6.1	8.4	11.9	17.1
Northern Africa	1.7	2.3	2.8	2.9	3.0	3.1
Asia	32.9	37.4	45.2	51.9	54.2	52.9
China	8.7	10.5	13.3	18.6	19.2	16.0
India	8.5	8.1	9.8	10.6	12.2	14.0
Europe	37.6	30.5	22.0	15.1	11.5	9.5
Latin America and the Caribbean	9.3	12.1	13.7	13.1	11.7	10.4
Northern America	14.7	12.6	9.3	7.9	6.9	6.3
Oceania	1.1	1.0	0.8	0.7	0.7	0.6

Source: Derived from statistics in United Nations (2012).

the very large increase in low- and middle-income countries (and regionally in Asia with more than half this in China). In 1950, the nations that now make up Europe had nearly two-fifths of the world's urban population; now they have around 15 per cent and they may have less than 10 per cent by 2050.

It is also worth noting the scale of the growth in the urban population in the global South. If we take 1975 as a time when there was a growing concern that rural poverty was being ignored, between 1975 and 2010 the urban population in the global South tripled (growing by 1.8 billion) while the rural population grew by 38 per cent (848 million). By 2010, among the regions in the global South with more than half their population in urban areas were northern and southern Africa, eastern and western Asia and the Caribbean, Central America and South America. In 1970 only Central and South America were in this category.

But these urban statistics tell us nothing about the very large and complex economic, social, political and demographic changes that have underpinned them. These include the growth in the world's population and the multiplication in the size of the world's economy, the shift in economic activities and employment structures from agriculture to industry and services (and within services to information production and exchange), and the virtual disappearance of colonial empires. The changes also include globalisation and the network of cities around the world that are the key centres of production and the key command and control centres (Sassen 2006) – and this network of cities includes many of the world's most rapidly growing cities over the last few decades. There are also limitations in the data available on urban populations – see Box 1

Box 1: Limitations in data about urbanisation

There are at least three serious limitations in the population data about urbanisation. The first is the number of nations that have had too few censuses to provide an accurate picture of urban change over time. Many nations have had three or fewer censuses in the last 60 years, some have only had one or two. For these, many of the statistics on their urban population and level of urbanisation are based on estimates and projections. The United Nations' datasets on urban populations (see United Nations 2012) have long cautioned against interpreting these as if they were from census data, and their reports specify what censuses have been drawn on for each nation – but these reservations are often overlooked. The second limitation is the differences in the ways that national governments define their urban populations; for most nations, the proportion of their population living in urban centres can go up or down by several percentage points, depending on the criteria chosen to define urban centres. In almost all nations, all settlements with 20,000 or more inhabitants are considered urban but there are very large differences in how the population in settlements smaller than this are allocated between rural and urban areas. For many nations, a population threshold is used – for instance urban centres are settlements with 1,000 inhabitants or 2,500 or 5,000. So in the many nations where a significant proportion of the population lives in settlements of between 1,000 and 5,000 inhabitants, whether these are classified as (rural) villages or small urban centres influences urban population statistics. The third limitation in the data is the different ways in which city boundaries are set. For most large cities, there are three or four different boundaries in use – for instance, the built-up area, the administrative boundary, the metropolitan area and the metropolitan region. Population statistics for some cities are based largely on their built-up area and do not include settlements close by from where many inhabitants commute to the city. For others, especially Chinese cities, the boundaries are set much more widely and often include substantial rural populations too. The population of London would increase by several million (and it would be a mega-city) if its boundaries were set in ways similar to major Chinese cities. These limit the accuracy of international comparisons.

To have detailed statistics on how urban populations change for any nation over several decades does not mean that we understand the underpinnings of such change. The spatial distribution of urban populations reflects where private investment and political power are concentrated. We learn about the social, economic and political underpinnings of urbanisation from a few detailed historically rooted analyses of urban change in particular nations and these remind us how complicated and varied such change is; they consistently emphasise the influence of economic trends on urban dynamics. Also, how much those dynamics can vary within a nation (and over time) and the complex mix of local, regional and international economic, social and political influences on urbanisation – along with the influences brought by demographic changes (see Hasan and Raza 2002; Martine and McGranahan 2010; UNCHS 1996). Reading these should also encourage more caution in international comparisons of urbanisation that are so often dogged by inadequate knowledge of the countries being compared and inadequate appreciation of the deficiencies in the statistics used for comparison (or their lack of comparability).

In most cities, there are constant changes in patterns of in- and out-migration, reflecting mostly changing patterns of economic opportunity and labour markets. Within major cities, there are usually large differences between districts or local government areas in patterns of in- and out-migration; there may be some common patterns here as in the tendency for central areas of large cities to have lower population growth rates or even population declines and with areas of rapid population growth concentrated in particular areas – often through the expansion of informal settlements. Even in nations that are urbanising rapidly, there is usually great diversity between urban centres in their population growth rates. China has among the world's most rapid increase in its level of urbanisation in recent decades and many of the world's fastest-growing cities yet it also has many cities that have declining populations.

Aggregate urban statistics may suggest rapid urban change, but an analysis of population growth rates for all urban centres in a nation usually shows a large proportion that are not growing rapidly. Those that grow rapidly get noticed; those that do not get overlooked. Over 20 years ago we highlighted how the attention to mega-cities overlooked the fact that these actually concentrated only a small proportion of the world's population and that many mega-cities had more people moving out than in (Hardoy and Satterthwaite 1989). This is still the case. Looking at the world's 20 largest cities in 2010, 11 had population growth rates below 1.5 per cent per year for 2005–2010, with five having population growth rates below 1 per cent. None had population growth rates above 4 per cent per year. The proportion of the world's population living in mega-cities has grown from 2.7 per cent in 1990 to 4 per cent in 2000 and 5.1 per cent in 2010.

One reason for this is that most mega-cities are being challenged by a new generation of smaller cities that compete with them for new investment – for instance, in Mexico, Brazil, China and India; this may reflect some of the dis-economies of inadequately managed agglomeration. There are interesting parallels to this in the USA as new large cities in the south came to draw new investment away from the long-established large cities in the northeast. In Brazil, cities such as Curitiba and Porto Alegre have attracted new investments away from the mega-cities of São Paulo and Rio de Janeiro. In India, cities such as Hyderabad, Bangalore, Surat and Pune have attracted new investment away from long-established large cities such as Kolkata, Mumbai and Chennai. However, some of these new cities will themselves become mega-cities.

Urbanisation and economic change

Although urbanisation is so often seen as 'a problem', especially where it overwhelms government capacities to manage it, what needs stressing is that, globally, there is an economic logic underpinning urbanisation and the growth of most large cities. In almost all nations, the increase in their level of urbanisation tracks the increase in the proportion of GDP generated by

industry and services and the increase in the proportion of the workforce in industry and services (Satterthwaite, McGranahan and Tacoli 2010). It is generally the nations with the best economic performance that have urbanised most over the last 30 years. Most new capital investments and most new employment opportunities are concentrated in urban areas – or, more accurately, in particular urban areas (to which there are also generally the largest migration flows). The world's largest cities are heavily concentrated in the world's largest economies – even if not all of these are among the economies with the highest per capita incomes. For instance, China is the world's second largest economy and India the fourth largest and these two nations have a high concentration of the world's largest cities. In 2010, the world's five largest economies had 43 per cent of the world's cities with more than a million inhabitants, close to half the cities with 5–9.9 million and half the cities with ten plus million inhabitants.

In addition, all the world's wealthiest nations are predominantly urban[1] and virtually all the low- and middle-income nations that have urbanised most over the last few decades have had long periods of rapid economic growth and large shifts in the structure of their economy and employment from agriculture, forestry and fishing to industry and services. There are nations or regions within nations where there have been rapid migration flows to urban areas (or particular cities) that are not in response to economic growth – including some related to civil strife or civil wars (which result in people fleeing to urban centres and/or refugee camps that become urban centres) or to rural impoverishment or disasters. But this does not alter the fact that most urbanisation is linked to economic growth.[2] Political change has also produced major changes in levels of urbanisation – perhaps most dramatically when controls imposed on rural dwellers' right to move to or work in urban areas are removed – for instance in China or with independence for many African nations. If the political changes in China in the late 1970s and early 1980s and its subsequent economic success and integration in the world economy had not taken place, the list of the world's largest cities and the scale of the world's urban population would have been quite different today.

Projections for a nation's urban population or a city's population to 2030 or beyond must be viewed with caution. The world's level of urbanisation in 2030 will be much influenced by the economic performance of the larger-population low- and middle-income nations between now and then. Changes in a city's population between now and 2030 will be much influenced by its economic performance. Few economists would dare to predict how well the economy of a nation or a city will perform up to 2030 or beyond. Many of the UN population projections for the world's largest cities made in the 1970s and 1980s for 2000 proved to be spectacularly wrong (see Satterthwaite 2007, 2010).

Issues raised

Three key environment and development issues are raised by an increasingly urbanised world. The first is the extent to which living and working in urban areas is associated with good health, lack of deprivation and, beyond this, wellbeing. The second is the extent of urbanisation's association with unsustainable levels of resource use or degradation (such as loss of soil, forests, biodiversity) and increased GHG emissions. The third issue is the opportunities that urbanisation presents for reducing poverty and why these have so often not been acted on.

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[1]   Furthermore, most rural areas in these nations have been 'urbanised' in terms of employment structures as most of the rural population do not work in agriculture, forestry or fishing, with many commuting to urban jobs or to industry and service enterprises that locate in rural areas or telecommuting.

[2]   It is important to distinguish between growth in urban populations and growth in levels of urbanisation. Nations' urban populations can be growing rapidly from natural increase even as the level of urbanisation increases slowly or not at all.

Urbanisation and poverty

If we review aggregate data for nations on health and on key health determinants, globally there is an association between better health and higher levels of urbanisation – for instance, in regard to higher life expectancies, lower infant and child mortality rates and the extent to which populations are served with water piped to their homes and good-quality sanitation. There is also generally an association between higher levels of urbanisation and stronger democracies, especially stronger democratic institutions at the local level. There are important exceptions as will be discussed below – but they are exceptions. Mega-cities or other large cities may appear chaotic but most have life expectancies and provision for piped water, sanitation, schools and healthcare that are above their national average (although aggregate statistics for each mega-city can hide a significant proportion of their population living in very poor conditions). Some of world's fastest-growing cities over the last 50 years also have among the best standards of living within their nation (Hardoy, Mitlin and Satterthwaite 2001, Satterthwaite 2007). This is what would be expected if there is a strong association between level of urbanisation and per capita income, and between increases in the level of urbanisation and economic growth.

But the extent of the association between better health and higher levels of urbanisation depends heavily on the quality, competence and accountability of urban governments, and on their access to resources. At the risk of generalising about what is very diverse, within low- and some middle-income nations, there is often an urban advantage (over rural areas) in living conditions where there are competent, accountable urban governments and an urban disadvantage where there are not. This is especially the case for low-income groups which may make up 50 or more per cent of the urban population.

Even if most new investment and employment opportunities over the last few decades have been concentrated in urban areas, there has still been a rapid growth in the number of low-income urban dwellers. Most of the benefits of economic growth in terms of higher incomes have gone to non-poor groups (Mitlin and Satterthwaite 2012). Certainly, the scale of urban poverty today is much larger than it was in the mid-1970s – and the proportion of the world's population with inadequate incomes who live and work in urban areas has certainly increased. But we do not know by how much because of the inadequacies in the international measurement of poverty. The dollar-a-day poverty line is much the most widely used measure of poverty for international comparisons. Unfortunately, it is very unrealistic even when adjusted for purchasing power parity because it makes so little allowance for non-food needs. In cities, access to almost all non-food needs is monetised; a review of studies on expenditures by low-income households showed that in the more successful cities, these costs are relatively high, especially where government provision is poor (Mitlin and Satterthwaite 2012). Housing usually has to be paid for (rents often taking a high proportion of income). Water has to be purchased from vendors, kiosks or tankers because there is no piped provision to households. Access to toilets is also limited, sometimes expensive and almost universally of poor quality. Education and healthcare are also often expensive, especially where there is no public provision for these; for many low-income groups, so too are transport costs as they live in peripheral settlements because rents are lower or squatting is possible there. Apply the dollar-a-day poverty line and, in many urban locations, poverty almost disappears since it is so unrealistically low in relation to the costs of non-food needs. According to World Bank dollar-a-day poverty line statistics (Ravallion, Chen and Sangraula 2007), by 2002 there was virtually no urban poverty in China, the Middle East, North Africa, East Europe or Central Asia and very low levels of urban poverty in Latin America. Poverty lines that reflect the real cost of avoiding deprivation show much higher levels of poverty – even in China (Solinger 2006) and even more so when the 100 million plus urban residents who have not managed to get registered as urban residents are considered. Studies in urban areas in

Zambia (Chibuye 2011), Cairo (Sabry 2010) and Buenos Aires (Hardoy and Almansi 2011) show the multiple substantive deprivations faced by households in informal settlements whose incomes are well above the dollar-a-day poverty line.

In most low-income and many middle-income nations, levels of child mortality and undernutrition are still very high among urban populations. For instance, it is common for more than a fifth of all urban children to be stunted – see Table 2 (at the end of this paper). The proportions are much higher for their low-income urban populations. In India, within the least wealthy quartile of the urban population, more than half of children are stunted (Agarwal 2011). Within the urban population of many low-income nations, it is common for under-five mortality rates to exceed 100 per 1,000 live births. Again, the rates among low-income urban populations are likely to be much higher. For instance, the under-five mortality rate in the informal settlements in Nairobi that house half the city's population was 151 per 1,000 live births in 2000 – around twice the average for urban areas in Kenya and nearly three times the average for Nairobi (APHRC 2002).

There is very little data on illness and injury among urban populations but certain studies show the health burdens faced by low-income urban dwellers and their devastating impacts. A study in informal settlements in Dhaka showed the extent to which ill health caused deterioration in households' financial status. In any month, 30–40 per cent of households reported days lost due to illness and this led to reductions in income and increased expenditures; often more loans taken out, assets sold and some adults resorting to begging (Pryer 2003). Among rickshaw pullers in Dhaka, all of whom live in informal settlements, much the most common cause of crisis was health-related (Begum and Sen 2005). Two-fifths of the rickshaw pullers interviewed had been ill in the month prior to the interview. Each episode of illness on average cost six days income (combining cost of treatment and work days lost). More than half of pullers have no savings and no assets, one-fifth are unable to secure three meals a day, half cannot generate any surplus from income and a similar proportion has outstanding debt.

Is it urbanisation or poor governance that is the problem?

It is not urbanisation that produces the ill health and premature death summarised above but the failure to develop the systems of (mostly local) governments and governance that urban populations need. What are today the highest-income nations all had long periods when they urbanised without good health and what today would be termed development; this can be seen in the very low life expectancies and very high infant and child mortality rates in their urban centres in the second half of the nineteenth century and the early decades of the twentieth century (Bairoch 1988). London and New York were as poorly governed as cities such as Nairobi or Kinshasa are today. At this time, there was often an urban penalty – that is, life expectancies and infant and child mortality rates higher in urban areas than rural areas. But over time, city and municipal governments developed with more competence and capacity to address the most serious health threats and also with more accountability (for instance through universal franchises and elected city governments). Progress was slow and full of political conflicts but it depended in large part on lower-income populations organising and becoming effective at making collective demands. Part of it was also underpinned by the acceptance of non-poor groups of the need to improve water, sanitation and solid waste collection to avoid epidemics (especially cholera) and the disruption these brought to city economies (Rosenberg 1962). The value of competent, accountable local governments acting in the public good became obvious – and the advantages that private enterprises secured from such action (both for reducing their direct costs and improving the quality and reliability of their workforce) also became evident. What removed the urban penalty was the developing competence and capacity of elected local governments, and the willingness of elected national governments to support this.

In cities in high-income nations and some in middle-income nations, there are at least five areas where the state came to act in the public good.

1. Universal provision of services that are a public right regardless of a person's income (schools, street cleaning, emergency services, policing/rule of law, suffrage, measures for disaster risk reduction) although these are paid for by taxes.

2. Universal provision of services that are paid for but affordable for most (healthcare, public transport, water piped to the home, sewer connections for each building, solid waste collection, electricity).

3. Universal provision of standard infrastructure – storm and surface drainage systems, paved roads and paths, street lighting, piped water.

4. Appropriate standards for environmental health and safety in homes and workplaces, traffic management and consumer protection with institutions able to ensure compliance.

5. Social insurance (such as pensions) and social assistance (such as safety nets) for those who are unemployed or unable to work.

Most of these are provided by local (city or municipal) governments or local offices of higher levels of government or overseen by them. There are also mechanisms and institutional channels that can be used by those who are denied any of the above. Perhaps the most important lesson from high-income nations is the importance of citizen pressure and civil society organisation within each nation and locality in getting the political, legislative and institutional changes that produced these.

In the global South, there are many nations where only a small proportion of their urban population benefit from the five areas listed above. Many such nations are predominantly rural – although most have urban populations that are growing rapidly. To get a sense of the contrasts in the extent to which the urban population is healthy and has basic infrastructure and services, there are four indicators available for the urban populations of a relatively large number of countries: under-five mortality rates, percentage of children stunted (height for age below 2 standard deviations), proportion of the urban population with water piped to their premises, and proportion of urban population served by electricity. The data on water piped to the premises come from UNICEF and WHO 2012 and is for 2010; the data on the other indicators come from demographic and health surveys held since 2003. The accuracy of this comparison between nations is limited by the fact that the year for the data for three of these indicators varies (from 2003 to 2010), and governments use different criteria to define and measure their urban populations (see Box 1). There are also worries about the accuracy of some such statistics – for instance did the household surveys that produced them include informal settlements? Since these settlements are often not included on official maps and have no official addresses and those doing the surveys fear entering such settlements, probably not; some of these figures seem high compared to data from such informal settlements. In addition, to have water piped to one's premises does not mean that the supply is necessarily regular or of good quality.

If we consider which nations have urban populations with very high under-five mortality rates (over 100 per 1,000 live births), a large proportion of children stunted (20–35 per cent), at least 60 per cent without water piped to their premises and at least 40 per cent lacking electricity, Mali, Niger, Zambia, Liberia, Congo DR, Benin, Uganda, Sierra Leone and Malawi fall into this category. It is likely that Chad, Burkina Faso and Mozambique would also be in this category – but there are no data on child stunting for their urban populations. Nigeria would be in this category except for a relatively high proportion of its urban population with electricity. Tanzania only avoids being in this category by having an under-five mortality rate at 95 per 1,000 live births

and thus just below the threshold. Most of these nations are among the least urbanised nations – and none had more than half their population in urban areas.

Most of these nations also have among the lowest per capita gross national income (GNI) in 2010 – for Liberia, Mozambique, Sierra Leone, Congo DR, Niger and Malawi below $1,000; among these, the nation with the highest per capita GNI was Nigeria at $2,170. Some of these nations have under-five mortality rates for their urban populations of much more than 100 (Mali 158, Sierra Leone 167) and some have provision for electricity much lower than the chosen threshold (see Table 2).

For all these nations, available data suggest that most of their urban populations also lacked adequate sanitation and storm and surface drainage. There are no statistics for urban sanitation that measure who has sanitation to a standard that greatly reduces risks of faecal-oral diseases. But for dense cities, it is difficult to achieve high standards for sanitation without sewers. There are no sewers in most urban areas in these nations and many others in sub-Saharan Africa and Asia. The following cities have no sewers or have sewers that reach a very small proportion of the population – Addis Ababa, Bamako, Benin, Brazzaville, Dar es Salaam, Douala, Ibadan, Kaduna, Kinshasa, Kumasi, Lagos; Lubumbashi, Mbuji-Mayi, Port Harcourt and Yaoundé.[3] All these cities have more than a million inhabitants and many have several million. It is possible to have good-quality sanitation in some urban contexts without sewers (although it requires a significant investment). Most of the cities named have large proportions of their population living in dense informal settlements that do not have provision or room for septic tanks or good-quality, easily serviced pit latrines. These households also lack the income required for such investment, and many rent rooms from landlords and hence could not invest more even if they had the income.

If we were to consider nations where performance on these four indicators is significantly better – among their urban populations, under-five mortality rates below 50 per 1,000 live births, fewer than 10 per cent of children stunted, more than 80 per cent with water piped to their premises and more than 90 per cent with electricity, then Dominican Republic, Jordan, El Salvador and Colombia fall into this category. Nicaragua nearly does – but 10.1 per cent of urban children are stunted. Perhaps also Morocco (but no data were available on child stunting among its urban population). Cambodia, Egypt and Guatemala would be in this category except for child stunting that is above the 10 per cent threshold. None of these nations has per capita GNIs below $2,000 and some are as high as $9,000. This group of nations is generally more urban; Cambodia is the exception here. Jordan, Colombia and Dominican Republic are more than two-thirds urban.

If the thresholds for the four indicators were set much higher – under-five mortality rates below 10 per 1,000 live births, fewer than 5 per cent of children stunted and 99–100 per cent with water piped to their premises and electricity – then all high-income nations would be in this category. And all are predominantly urbanised.

It may be that the most serious developmental problems associated with urban areas are where urbanisation levels are low because the economy is too weak to sustain an increasingly urbanised economy. But also where there is no competence or capacity among urban governments. Figure 1 shows the percentage of the urban population with water piped to their premises plotted against average national per capita income. The proportion of the urban population with water piped to their premises is higher, the higher the country's per capita income. Above a per capita income of $5,500, in almost all nations, 80–100 per cent of the urban population had water piped to their premises. But there are very large differences in the proportion of the urban population so served for nations with per capita incomes between $2,000

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3   A useful new source of data on the inadequacies in provision for water and sanitation in cities of sub-Saharan Africa is at www.iwawaterwiki.org/xwiki/bin/view/Articles/AfricanCitiesSanitationStatus.

and $5,500, which suggests the significance of political determinants, in addition to income levels. Many of the Latin American nations with per capita incomes in this range have 90 or more per cent of their urban population with water piped to their premises. Among the nations with per capita incomes of between $2,000 and $5,500 with half or less of their urban population so served are India, Sudan, Mongolia, Angola and Indonesia.

Figure 1: Percentage of the urban population with piped water to their premises in 2010 against per capita Gross National Income (purchasing power parity) in 2010
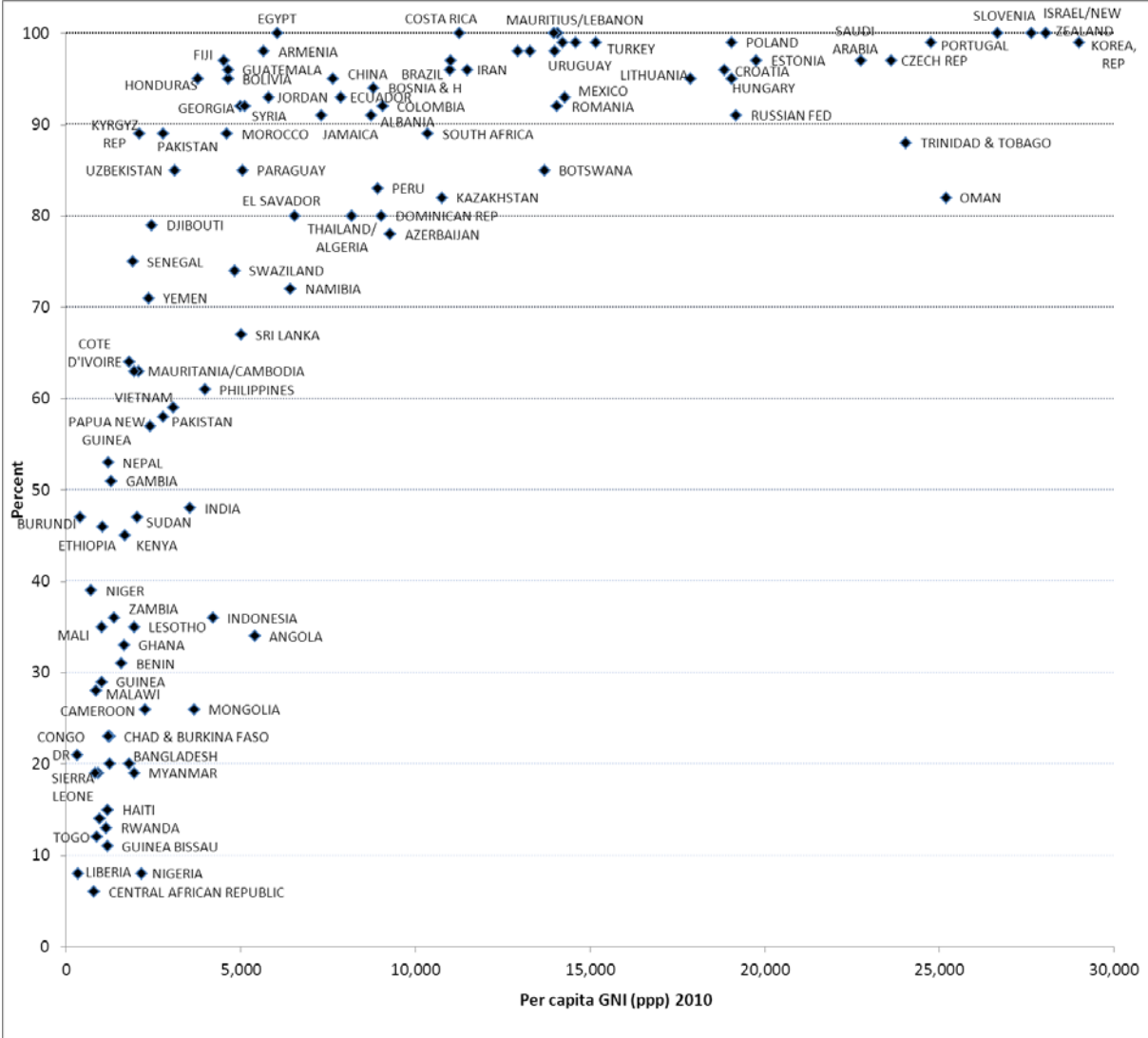
Source: Mitlin and Satterthwaite (2012); the water supply statistics are from UNICEF and WHO (2012); the per capita GNI statistics from World Development Indicators.

One of the most famous books on health is *Where There is No Doctor* (Werner 1992). This guides individuals on how to respond to serious illnesses or injuries if there is no healthcare service they can access. But what can low-income urban dwellers do 'where there is no government' in regard to basic service provision – where there is no water piped to their home, no connection to sewers, no electricity, no storm and surface drains, no collection of household wastes, no public healthcare or emergency services and often even no schools? Usually no or

only intermittent policing. No public space for recreation or children's play. No secure tenure. No safety nets. Many of their settlements are not recorded in city surveys or registered on city maps. Access to water is only through its purchase from vendors or kiosks at high prices; a widely used alternative is shallow wells that are often contaminated. Access to sanitation is often either to public toilets (often expensive, with long queues and poorly maintained), to defecation in the open or resort to 'flying toilets' or poorly constructed pit latrines. Just how dire this situation is, is hidden by the inadequacy of basic data. For instance, households are often classified as having access to piped water when they can only get this from water kiosks that are expensive, have limited opening hours, are sometimes a considerable distance away and often have queues. Or they may have piped water but the water is of poor quality and only flows for a few hours each day or each week.

Most commentaries on global urban change include a concern that sub-Saharan Africa is urbanising rapidly (or even at unprecedented rates) and this is why urbanisation has overwhelmed local government capacity. All the nations with the worst performance in the four indicators in Table 2 are in sub-Saharan Africa. Does this mean that they are urbanising without economic growth and without better provision for their urban population? But some care is needed on this issue because the lack of census data for many nations means we do not know whether they are urbanising. The careful review of data for the region by Deborah Potts suggests that much of the region has not been urbanising rapidly in the last decade or two (see Potts 2009). UN statistics also suggest that sub-Saharan Africa was not urbanising as rapidly as had been previously stated or expected. The rate of increase in the level of urbanisation was much more rapid in Asia than in sub-Saharan Africa for 1990 to 2000 and for 2000 to 2010 (United Nations 2012).

Rapid population growth is sometimes put forward as the reason for very poor living conditions in cities in sub-Saharan Africa. But cities in this region do not have unprecedented population growth rates – and actually many of the cities with the fastest population growth rates over the last 100 years are in North America (Satterthwaite 2010). It may be that many cities in sub-Saharan Africa have had higher than average population growth rates relative to economic growth because of high rates of natural increase. This can be suggested as a reason why the deficits in provision for infrastructure and services are so high, although the failure of national governments and international agencies to support local government capacities to manage urban growth seems a more valid explanation. Many cities in Asia and Latin America that have grown faster than most sub-Saharan African cities have managed better in ensuring provision for infrastructure and services.

It is possible to focus on particular cities or city districts where there is no local governance that serves the public good and use these as the basis for suggesting a very bleak urban future – as in Mike Davis's book *A Planet of Slums* (Davis 2006). There are also many cities where the development of competent accountable local governments seems politically impossible, especially in areas with civil conflict (Beall, Goodfellow and Rodgers 2011). There is the evidence summarised already in regard to the devastating levels of premature death and avoidable illness and injury. There are also the case studies of particular cities or city districts that show very high levels of civil conflict and violence (see Esser 2004; Moser 2004; Rodgers 2004). These might be taken to suggest an urban future associated with poverty, violence and civil strife. But it is misleading to present these as if they are the norm. As described below, there are alternative experiences that demonstrate how new forms of urban governance are addressing these problems. Given the scale of deprivation faced by so much of the urban population in low-income and many middle-income nations, perhaps the puzzle is that there is not far more violence and civil conflict. A critical factor may be the relatively low levels of inequality in at least some urban

centres. Fajnzylber, Lederman and Loayza (2002) suggest that while there is a relationship between violent crime and inequality, there is not with the level of urbanisation.

There is a literature on urbanisation as a cause of ecological degradation that underpins conflict and civil wars although this was never really sustained by strong empirical evidence (there was often a confusion between environmental health risks and ecological degradation). There is also a literature on how cities provide concentrations of disenfranchised and marginalised youth that are then used and manipulated for political violence and civil conflict. But clearly the quality of local governance matters here in that where there are opportunities for youth and measures to support their political inclusion, they make major contributions to city economies (Mabala 2011).

Cities and ecological crises

Successful cities tend to draw on increasingly distant sources for food, raw materials and water. Their populations and enterprises also import most goods that are energy-, pollution-, land-, waste- and water-intensive. This means that they are not affected by the ecological costs generated by the production of these goods. The concept of cities' ecological footprints (Rees 1992) helped clarify this – as this calculated the productive land area that a city (or a nation) draws on from 'distant elsewheres' for the food and resources used by its enterprises, institutions and residents and for absorbing the GHG emissions generated. The concept makes clear the very large ecological footprint that large and wealthy cities have and how there is no longer the biological capacity within the earth to allow other cities to expand their ecological footprints (Wackernagel, Kitzes, Moran, Goldfinger and Thomas 2006). Other measures have also sought to make clear the ecological implications of high consumption levels – for instance the measuring of virtual water (the water needed to produce the goods consumed) or food miles or energy or material flows that support cities.

Cities are often viewed as among the most intractable problems in regard to GHG emissions, especially in a world that is urbanising. Cities are often said to be responsible for 75–80 per cent of all GHG emissions, although drawing on IPCC figures, it is likely that around 40 per cent of global emissions come from within urban boundaries (Satterthwaite 2008). However, it is not urban centres that are responsible for anthropogenic GHG emissions but particular activities, enterprises, institutions and consumption patterns in both rural and urban areas. There are also the difficulties in where GHG emissions get assigned. Does fuel loaded into aircraft in international airports get assigned to the city where the aircraft are located? For those who commute by car into cities, does their fuel use get allocated to their home or their workplace? Do the emissions used in the fabrication, transport and sale of goods get allocated to where those goods were made or where they are consumed? It has become common to compare GHG emissions between cities – but the level of emissions for any city is influenced by whether these include the emissions generated by making the goods that are sold and used elsewhere (see Dhakal 2004). For London, a shift from production-based to consumption-based accounting for GHG emissions increases the average Londoner's responsibility for GHG emissions from 6 to 12 tonnes of CO_2e (equivalent) a year (Bioregional and London Sustainable Development Commission 2010).

At present, the only data available for GHG emissions for a range of urban centres are for emissions generated within their boundaries. These show that very successful cities with high living standards have emissions per person that vary by a factor of ten. So in Figure 2, Porto Alegre, Oslo, Stockholm and Barcelona, all with very high living standards, have much lower emissions per person than most cities in North America and Australia.

The figures shown must be used with caution in that some of the differences will come from different GHG estimation methodologies (Hoornweg, Sugar and Trejos Gomez 2011). Rotterdam's very high level of emissions per person is probably because it counts the fuel for ships supplied in its large international harbour. Some of the cities with the lowest emissions per person are also cities with climates for which there is little or no need for space heating and cooling. The low-scoring wealthy cities are not there because of city commitments to reducing emissions but because of ways they developed (for instance compact patterns encouraging more trips to be made by walking, bicycling or public transport) and whether the electricity they use comes from hydropower, nuclear power, or fossil-fuelled power stations. Some may reflect city and national government commitments to energy-efficient buildings – and the low figures for successful Brazilian cities may owe this in part to the use of ethanol for motor vehicles.

It is not urban dwellers or particular cities that are driving increasing GHG emissions but high consumption patterns from urban and rural households. Wealthy rural dwellers tend to have higher consumption patterns than city dwellers with the same income level. But what is an urban issue is when, where and how cities can offer a very high quality of life with average per capita emissions of 2–4 tonnes, not 12–30 tonnes. For the successful expanding cities in the global

Figure 2: Greenhouse gas emissions per person per year for selected cities (in tonnes of CO_2 equivalent)
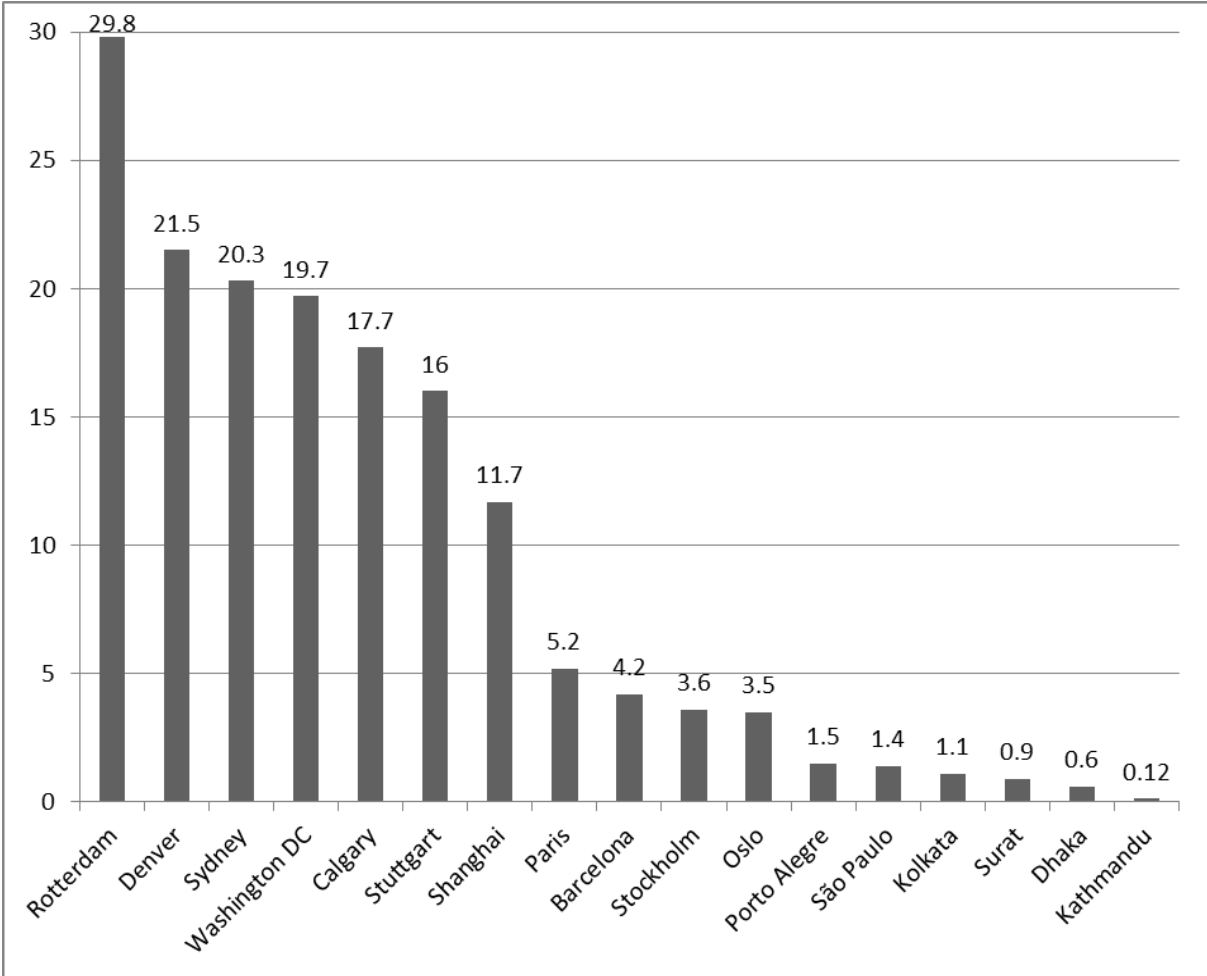
Source: Hoornweg *et al.* (2011).

South, how their transport and residential developments house and serve their middle- and upper-income groups has large implications for future GHG emissions; for instance are they housed in well built energy-efficient accommodation with efficient appliances and well served by public transport or living in energy-inefficient homes in low-density suburbs with high private automobile use?

Opportunities and innovations associated with urbanisation

The clustering of people, enterprises, transport systems and their wastes provides many potential advantages for a healthy city because of returns to agglomeration (including economies of scale and of proximity). It is cheaper per person or household to provide piped treated water, sewers, drains, healthcare, emergency services, schools, policing – and to ensure health and safety standards are met in homes and workplaces. This clustering of population and enterprises also provides many potential advantages for reducing cities' ecological footprints – for instance, in more energy-efficient buildings, in recycling or reusing waste heat or solid or liquid wastes and in reducing the need for private automobile use.

But this same clustering has many disadvantages in the absence of this infrastructure, services and appropriate regulations and their implementation (and in the absence of a government structure able to ensure their provision). Concentrate people, and most infectious and parasitic diseases are more easily spread. Concentrate people and production, and this concentrates their solid, liquid and gaseous wastes. So cities have potential advantages for health but it takes competent local governments to ensure their realisation. This does not mean that government must provide all infrastructure and services – but it does have to provide the institutional framework to ensure provision.

If we review examples of where deprivations in urban areas have been substantially reduced for low-income groups, two paths can be identified. Although they are differentiated here, they are not separate processes and, in many cities, there is evidence of both paths. The first is through more accountable and competent city and municipal governments; the second is through changes driven by representative organisations formed by low-income groups that local governments come to accept and then to support. We are not saying that the solution lies purely at the local level. National (and often provincial) government support in resourced systems of decentralised management is critical. Our point is that effective and accountable delivery is managed best at the city scale.

Examples of the first path have been most evident in many Latin American nations over the last three decades or so. What drove this was democratisation (in many nations from dictatorships) and decentralisation, much of it driven by citizen and civil society pressure. This meant that urban governments got more power and resources (often including stronger local revenue-raising possibilities) and structures that were more accountable and transparent – for instance as mayors and city councils came to be elected. In Brazil, this was backed by the setting up of a new ministry of cities. These political changes help explain why the proportion of the urban population with good-quality provision for water (water piped into people's homes) and connection to sewers and drains increased in recent decades; it is now common for Latin American cities to have close to universal provision for these. They also help explain the wave of innovation in city governments in this region in more participatory and accountable governance. This included a new generation of elected mayors that came from outside the dominant political parties and who brought new ideas and a new commitment to reducing inequalities in infrastructure and service provision (see Almansi 2009; Dávila 2009). Among the examples of these changes is participatory budgeting. First developed in Brazil, this has been applied in over 250 urban centres around the world (Cabannes 2004). This gives more scope for citizen groups and community-based

representatives to influence priorities for local government expenditures; it also implies a local government budgeting system that is more transparent and available to public scrutiny. Some cities made special provision within participatory budgeting for groups that have particular difficulties getting their priorities heard (for instance, committees for women or children and youth). Participatory budgeting has generally meant more funding going to lower-income areas of a city and an increase in expenditure in social provision (for instance, drainage, education and healthcare).

Democratisation and decentralisation also help explain why city and municipal governments in this region came to give far more attention to 'slum' and 'squatter' upgrading. This is a profound change in the relations between the residents of these settlements and governments, as these residents are seen as having the right to government-funded infrastructure and services. In the 1970s and early 1980s, the state's response to informal settlements was far more often to bulldoze them or ignore them (Hardoy and Satterthwaite 1989).

Given the interest in wellbeing as a desired outcome of development, it is worth considering upgrading through a wellbeing lens. Many upgrading programmes have only very basic improvements in provision – for instance some standpipes for water (often at the edge of the settlement to reduce costs), some paved roads and street lighting. These are a minimum response to the demands of the inhabitants and not a recognition of their citizen rights and entitlements (see Chatterjee 2008). Costs are kept low, what is provided is still grossly inadequate, the residents have no say in what is done and these improvements do not include any measures to provide secure tenure or incorporate the residents into the wider city.

In much of Latin America, what might be termed comprehensive upgrading is much more common. Here the residents of informal settlements get official (and conventional) connections to piped water supplies, sewers and electricity. Roads are paved and generally provision for healthcare and schools improve. The residents may have access to low-interest loans to upgrade their homes. Here the settlement gets incorporated into the city so the residents get legal addresses and often tenure of their plot and conventional arrangements with utilities. This provides a more comprehensive response to the multiple dimensions of urban poverty and changes how city government and utilities view the residents. Unit costs for this are much higher and usually subsidised. This kind of upgrading is increasingly seen as a conventional part of what city or municipal governments do. However, this whole process is usually organised and managed by government agencies with little scope for the residents to influence what is done. As one person from an informal settlement in Guatemala City commented about the upgrading programme, 'it put a roof over my poverty' (Diaz, Grant, del Cid Vargas and Sajbin Velásquez 2001). Comprehensive upgrading of this kind conforms to two of the three dimensions of wellbeing (McGregor and Sumner 2010) – improvements in material conditions and changes in relations with the rest of the city and its different institutions and utilities. It does not conform to the third dimension – residents able to pursue and achieve goals that are important to them individually and collectively.

One example of an upgrading programme that seeks to achieve all three aspects is the community-directed upgrading in Thailand supported by the Community Organizations Development Institute (Boonyabancha 2005, 2009). It arose in part from an awareness that many residents were not benefiting from economic growth. A national government agency, the Community Organizations Development Institute, provides support to savings groups formed by residents of informal settlements to secure tenure (negotiating with the landowner), upgrade their neighbourhoods and get connections to conventional trunk infrastructure. This programme exemplifies the symbiotic relationship between innovative government approaches and the agency of the urban poor. Organised networked community groups from informal settlements

have a major part in decision-making. As financial support for the approach has grown, the roles taken on by community networks have also expanded, for example in the management of loan finance and negotiating additional resources from local governments.

The second path by which deprivations in urban areas have been reduced is from changes in local governments (and governance) driven by the organisations formed by urban poor groups. These include very specific local examples: a group of waste pickers negotiating a contract with the local government so they become part of the formal waste management system (Fergutz, Dias and Mitlin 2011); a savings group formed by homeless women who negotiate a plot of land on which they design and build homes (Manda, Nkhoma and Mitlin 2011); partnerships formed between the police and resident committees in informal settlements to provide policing there (Roy, Jockin and Javed 2004). These have gone further where there are larger membership organisations or federations of urban poor groups that want to work with local government, and where there are responsive local governments. In this path too, there has to be a recognition within local government that those living in informal settlements and working in the informal economy are legitimate (and important) parts of the city and have rights to infrastructure, services and local government agencies who are accountable to them.

Today, there are national federations or networks of 'slum'/shack/urban poor dwellers in at least 13 nations, with city federations in six more and grassroots groups with the potential to develop into federations in many more nations.[4] All have savings groups as the foundation of the federations, with most savers and savings managers being women. Many savings groups are engaged in initiatives – negotiating land and building houses, upgrading their settlement, building community toilets, and so on. All are working to survey and map the informal settlements in which they live because these get left out of city surveys and maps (Patel and Baptist 2012). As they organise and undertake surveys, mapping and enumerations, this provides the residents of each settlement with the basis for discussing and planning improvements and the information base for negotiating inclusion as local governments recognise the value and validity of the documentation they provide. The different federations also learn from each other and support each other in their negotiations with the state. This has been facilitated by the federations forming their own umbrella organisation, Slum/Shack Dwellers International (SDI) that helps them visit, support and learn from each other and helps new city and national federations develop.

One of the most common ways through which the federations seek to show government agencies and politicians their capacities is through precedent-setting projects. When federation members take politicians and civil servants to see the 200 or 300 houses they have built (as in Zimbabwe and Malawi) or the many community toilets that they designed, built and are managing (as in India) – with detailed costings – it has very different impacts from more conventional lobbying such as demanding housing. The precedent-setting projects help change the attitudes of politicians and civil servants to the federations; in effect, for the first time building a productive relationship with local government (and in many instances with national government).

Thus, the federations develop solutions that work for their members and then get the approval and where possible the support of local governments to allow them to act on a larger scale. So the censuses and surveys of informal settlements they undertake can produce the data and maps needed for planning and installing infrastructure and for the residents to develop upgrading plans. When federations do these surveys and maps covering all informal settlements in a city, it allows them to work at the level of the city and work for city-wide solutions. Mapping risk and vulnerability for the whole city also identifies communities most at risk (see Livengood and Kunte 2012).

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[4]   For more details, see www.sdinet.org.

In many nations, these federation strategies have led to co-production as the federations and local governments work together in improving housing, infrastructure and services (Mitlin 2008). Here, the federations have influence in decision-making and federation groups are directly involved in implementation of state policy. It often includes local governments providing financial support (and resources such as land) to development strategies defined and undertaken by the federations. It might be considered second-rate compared to state provision but it is often more appropriate to the informality of everyday life that formalised strategies cannot support and it also makes limited state funding go further. Alternatives put forward by the residents in informal settlements to a state that has limited capacity and funding work better for them. Moreover, as the initial literature on co-production elaborates, even in towns and cities in the US, state provision is more effective if planned and delivered with the communities that are intended to benefit.

One other example of federation–government partnerships in co-production is the setting up of 'police *panchayats*' in informal settlements in Pune and Mumbai (Roy *et al.* 2004). In most informal settlements, there is little or no police presence and no police station. Discussions with those who live in informal settlements highlight how the police are often reluctant to act on any complaint brought to them by a resident of an informal settlement and often reluctant to go into informal settlements. The police in Pune and Mumbai (India) have a partnership with two federations who work together (the National Slum Dwellers Federation and *Mahila Milan*) to provide police services in informal settlements. Each police *panchayat* is made up of ten representatives from the settlement (seven women, three men) and a local police officer. The community also makes available a room in each settlement for the police so there is a police presence in their settlement and the inhabitants know the police officer that is responsible for policing in their settlement. The members of the police *panchayats* help patrol the settlement to maintain law and order. They also seek to resolve disputes before they escalate into violence or other crimes. There are over 60 police *panchayats* active in Mumbai and police officers and representatives of grassroots federations from Tanzania, Kenya and Zimbabwe have visited them.

The international network of slum/shack dweller federations and its secretariat (SDI) also has importance in supporting national federations to extend the range of their initiatives and help new federations develop. Federations often take senior civil servants or politicians with them when they visit other federations to show how these have developed successful partnerships with governments. For instance, many federations have brought politicians or civil servants to Namibia to see how the government accepted lower standards for housing plots (and community-provided infrastructure) that reduced costs, or to India to see the community policing.

Two international initiatives have sought to support scaling up of such community-driven processes. Both are supportive of wellbeing in that they bring improvements in material conditions, encourage changes in relations between those living in informal settlements and the wider city and support grassroots organisations to set priorities and take charge. Both have received substantial support from the Bill and Melinda Gates Foundation. The first is the Urban Poor Fund International that supports the work of the slum/shack dweller federations and is managed by SDI. Between 2001 (when it was set up) and 2010, this channelled around US$7 million to over 100 grassroots initiatives in 17 nations. It produced a new way of financing community-led development as it was the federations that brought proposals to it and decided collectively on what got funded. So for once, there was an international fund that was not only accountable to the organisations of the urban poor but whose funding priorities were set by them. This Fund also demonstrates how its support could be used to encourage and leverage support from local and national governments which then multiply the scale of what can be done. In 2011, the Fund provided a further US$4.4 million to support the initiatives of SDI-affiliated federations

with a range of activities including informal settlement upgrading, land acquisition, water provision, sanitation (particularly toilet blocks) and housing improvements.

The second initiative is more recent – the Asian Coalition for Community Action set up in 2009 by the Asian Coalition for Housing Rights (ACHR 2010; Boonyabancha and Mitlin 2012). This provides grants and loans direct to community organisations to catalyse and support the initiatives they choose as well as support for city-wide upgrading and partnerships between community organisations and local governments. By January 2012, with US$6 million it had helped fund initiatives in 708 settlements in 153 cities in 19 nations. In each city, small grants and loans support a range of community-led initiatives – for instance roads and walkways, drains, community centres and parks/playgrounds, toilets, water supply and waste management improvements. As these are being implemented by community organisations in many different settlements in each city, they encourage city-wide networks to form where members share skills with each other and learn to negotiate with their local governments. Further support is available as local governments engage and then come to support this, including the formation of jointly managed community development funds.

When a few communities living in informal settlements in a city start saving, undertake surveys and networking and implement their first small improvement projects, these may not bring much change. But when these are being conceived and carried out by communities all over a city, the local authorities start noticing and often begin accepting these and then collaborating in small ways. This initiative also supports the setting up of joint city development committees that allow the community organisations to work as equals with their local governments and other urban partners. Most of the cities where the ACCA Programme (Asian Coalition for Community Action) is operating have some kind of committee that formalises this city–community partnership. In several cities in Cambodia, Indonesia, Nepal, Philippines, Vietnam, Sri Lanka, Fiji, Thailand and Lao PDR, local governments have provided some infrastructure (such as paved access roads, drains, sewers, electric and water connections) and many have provided communities with technical help, building materials and the loan of heavy construction equipment (Boonyabancha and Mitlin 2012).

How can international support actually support the local and the pro-poor?

Only through more competent and accountable local governments that serve the public good and provide more opportunities and voice for their low-income populations can urban problems be addressed at scale. But an important underpinning of this is urban poor groups who organise and make collective demands on local governments, and whose actions help convince local politicians and civil servants that they need to change. This is constrained by politicians and civil servants who still see those who live in informal settlements and work in the informal economy as the cause of city problems rather than as key underpinnings of the city economy. For prosperous cities, it also depends on whether a growing middle-class population makes demands that serve only its interests or the interests of the city, including those of citizens living in informal settlements.

More inclusive forms of local government can also address what today seem like intractable problems – including providing both opportunity and voice to youth so it draws in their energy and innovation. Meeting 'the needs of the present' can include attention to urban forms that combine high living standards with lower GHG emissions (although most urban centres in low-income nations have very low emissions per person). But needed actions here are unlikely unless there are real commitments among high-income nations to dramatically reduce their emissions.

Perhaps the critical issue for national governments, international agencies or philanthropic organisations in regard to making cities centres of opportunity and wellbeing for their low-income populations is how to identify and support the local processes that move in this direction. The two key players in this are local governments and grassroots organisations (and, where they exist, federations) and the local NGOs with whom they choose to work. We know too the importance of civil society pressure for getting needed city reforms that can also influence national policies to reduce poverty. Deneulin and McGregor (2010) note the importance of institutional arrangements for negotiating socially coherent wellbeing outcomes and strategies; for urban centres in low- and middle-income nations, these have to include institutional arrangements that support the representative organisations formed by those in informal settlements both in what they choose to do and prioritise and in changing their relations with local governments and other urban groups.

But it is very difficult for international agencies or philanthropic organisations to operate at such local levels and work direct with grassroots organisations and local governments – and ensure good use is made of their support (with full reporting on its use). What is needed for good change to happen at scale is their support for the intermediary institutions that really know how to work with and support grassroots organisations and their engagement with local government. This is recognised by the two internationally funded initiatives noted earlier – the Urban Poor Fund International and ACCA. Both recognise the need to set up and support city funds (for the slum/shack dweller federations these are also where their savings can be lodged) and national funds that are fully accountable to urban poor groups and to external funders. If only 1 per cent of official development assistance could learn how to support representative organisations of the urban poor to work with their local governments, the proportion of the world for whom urban areas are centres of wellbeing and opportunity would increase dramatically.

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Table 2: Indicators of urban child health and of provision for piped water and for electricity

	For these nations' urban populations				Urbanisation level (2010)	Per capita GNI ppp current (US$) (2010)
	Under-5 mortality rate	% children stunted	% with water piped to premises	% with electricity		
Chad	179.4		23	16	21.7	1,220
Sierra Leone	166.8	24.5	19	13	38.9	830
Mali	158.2	23.5	35	47	34.3	1,030
Mozambique	143.2		19	25	31.0	930
Niger	139.2	27.2	39	47	17.6	720
Liberia	138	22.2	8	7	47.8	340
Burkina Faso	136.4		23	52	25.7	1,250
Guinea	133		29	64	35.0	1,020
Zambia	132.2	32.9	36	48	38.7	1,380
Congo Democratic Republic	121.7	24.2	21	37	33.7	320
Nigeria	121.4	27.3	8	85	49.0	2,240
Cameroon	119.3		26	77	51.5	2,270
Benin	115.7	32.2	31	57	44.3	1,590
Uganda	115.4	21.7	20	43	15.2	1,250
Malawi	113.4	35.4	28	30	15.5	860
Swaziland	107.4	16.6	74	63	21.3	5,600
Ethiopia	98		46	80	17	1,040
Congo Brazzaville	108		36	40	63	3,190
Tanzania	94.5	25	22	39	26.3	1,440
Rwanda	87.1		13	25	18.8	1,150
Lesotho	86.2	22.2	63	26	26.8	1,970
Pakistan	78.4		58	98	35.9	2,790
Haiti	78	15.6	15	69	52.0	1,180
Ghana	74.7	16	33	77	51.2	1,620
Kenya	74.5	23.8	45	50	23.6	1,640
Zimbabwe	77		82	79	38.1	
Senegal	67.4		75	80	42.3	1,910
Madagascar	63.1		14	53	32	960
Bangladesh	62.9	26.6	20	77	27.9	1,810
India	60.6	31.1	48	93	30.9	3,400
Namibia	59.7	20.6	72	78	37.8	6,420

Table 2:cont.

	For these nations' urban populations				Urbanisation level (2010)	Per capita GNI ppp current (US$) (2010)
	Under-5 mortality rate	% children stunted	% with water piped to premises	% with electricity		
Bolivia	54.9	11.6	95	94	66.4	4,640
Azerbaijan	52.2	11	78	100	53.4	9,280
Nepal	47.1	21.4	53	90	16.7	1,210
Morocco	38.1		89	95	56.7	4,600
Indonesia	37.8		36	98	49.9	4,200
Dominican Republic	36.9	6.6	80	99	69.1	9,030
Nicaragua	34.6	10.1	89	95	57.3	2,790
Guatemala	33.7	27.3	96	94	49.3	4,650
Jordan	31.9	11.5	93	99	82.5	5,800
Cambodia	28.7	21.1	63	67	19.8	2,080
Egypt	28.7	23	100	100	43.4	6,060
Philippines	27.7		61	92	48.6	3,980
Armenia	26.4		98	100	64.1	5,660
Colombia	20.6	7.9	92	99	75.0	9,060
El Salvador	18.5	8.8	80	97	64.3	6,550
Albania	12.5	20.6	91		52.3	8,520

Sources: Under-five mortality rates, percentage of children stunted and percentage with electricity from the Demographic and Health Surveys and accessed at http://statcompiler.com/; water piped to premises from UNICEF and WHO (2012); per capita GNI (ppp) from World Development Indicators; level of urbanisation from United Nations (2012). Nations included are those for which there are data for at least three of the first four indicators and with the data being between 2003 and 2010.