# THE TEN AND A HALF MYTHS THAT MAY DISTORT THE URBAN POLICIES OF GOVERNMENTS AND INTERNATIONAL AGENCIES

by David Satterthwaite

*Acknowledgements*

This draws on the work of the Human Settlements Programme at the International Institute for Environment and Development), in particular, on my work with Jorge Hardoy from 1978 until his death in 1993, and on the work of Gordon McGranahan, Diana Mitlin, Cecilia Tacoli, Sheridan Bartlett and, in IIED-America Latina, Ana Hardoy. The sections on the speed of urban change drew much inspiration from a great 'myth-busting' paper by Preston, Samuel H. (1979),"Urban growth in developing countries: a demographic reappraisal", *Population and Development Review*, Vol. 5, No. 2 and also from the work of Deborah Potts (see the references).

## Introduction and summary

Over the last 100 years, the world's urban population has grown more than tenfold and now close to half the world's population lives in urban areas. Many aspects of urban change are unprecedented, including not only the size of the world's urban population but also the number of countries becoming more urbanised and the size and number of very large cities. Many urban changes are dramatic – there are dozens of cities whose populations grew twenty fold in the last 50 years. Rapid urban change has often brought serious environmental problems; there are also serious (and growing) problems of urban poverty.

But there are many positive elements to these urban changes. Within lower-income nations, rapid increases in the proportion of people living in urban areas is usually a result of stronger, more diverse economies. The increase in the proportion of people living in urban centres worldwide over the last 100 years has been fuelled by the expansion in the world's economy, most of which took place in industrial and service enterprises located in urban areas. Since most economic growth continues to be in urban-based enterprises, the trend towards increasingly urban populations is likely to continue.

For many nations, rapid urban change over the last 50 years is associated with the achievement of independence and the removal of colonial controls on people's right to move in response to changing economic opportunities. The concentration of population in urban areas greatly reduces the unit costs of providing good quality water supplies and good quality provision for sanitation, health care, schools and other services. It also provides more possibilities for their full involvement in government. And, perhaps surprisingly, urban areas can also provide many environmental advantages including less resource use, less waste and lower levels of greenhouse gases.

These positive elements of urban change often go unnoticed. And many publications exaggerate the scale and speed of urban change. The most recent censuses (most of them held in 2000 or 2001) show that the world is less urbanized and less dominated by large cities that had been expected. Many of the largest cities had several million people less in 2000 than had been predicted. Many also have more people moving out than in. In many nations, more decentralized patterns of urban development are reducing the dominance of 'mega-cities'. These are at odds with the commonly held view that urban growth in Africa, Asia and Latin America[1] is "explosive", "unprecedented" or "out of control". In addition, it often goes unnoticed that many of the world's fastest growing cities over the last 50 years are in the United States. This does not mean that there are not very serious urban problems in low or middle income nations. Indeed, as described in a later section, the scale and depth of urban poverty is under-estimated. But it does question the assumption that it is urbanization or the speed of urban growth that is the problem.

[1] It would have been convenient to slip into the United Nations terminology of 'developing countries' in this paper but the term needs to be avoided, in part because it is inaccurate (many 'developing' countries did not 'develop' for much of the 1980s and 1990s) and in part because it implies that such countries are inferior to 'developed' countries. Such terminology is also rooted in conceptions of development such as modernization theory that have long been shown to be inaccurate. An alternative would be to term them non-industrialized nations (with Europe, North America, Japan and Australasia as 'industrialized') but this is inaccurate because many 'non-industrialized nations' have a higher proportion of their GDP derived from industry and a higher proportion of their workforce in industry than most of the 'industrialized' nations.

There is an economic logic to the locations where rapid urbanization is taking place since it is mostly in nations or regions that are developing stronger, more robust economies. Cities have great economic importance in most nations, as the locations where much of the national economy is located, most tax revenues are generated and most economic growth has taken place in the last 30 y[2]ears. Well-governed cities and urban systems are an essential part of economic and social development. Well-governed cities are also setting new standards within nations for more democratic, accountable, transparent political systems. Well-governed cities are critical for nations that wish to meet their local and global environmental responsibilities. They are also critical for reducing poverty. This contradicts commonly held views that cities are parasitic and the main contributors to local and global environmental degradation.

This paper identifies twelve myths about urban areas – or to be more precise, ten and a half myths, since three of them are partially true statements in need of qualification to make them useful. These myths underpin and perpetuate ineffective and often inappropriate policies by governments and international agencies. These myths will be presented under five headings:

- **the links between economic change and urban change**, especially the contribution of urban areas to national economies and the relationship between rural and urban areas (are cities 'parasitic'?)
- **the scale of urban change** (including the role of mega-cities), the speed of change (are city populations 'exploding' and cities 'mushrooming'?) and the extent to which the world is or will be predominantly urban ("will all regions of the world will be predominantly urban by 2025"?)
- **rural versus urban areas** (is most poverty in rural areas? is urban development opposed to rural development?)
- **the links between poverty and environmental degradation** (is poverty a major cause of environmental degradation and do large and rapidly growing cities have the worst environmental problems?)
- **what should be done** (do we need "national strategies" and "best-practices" from which to learn?)

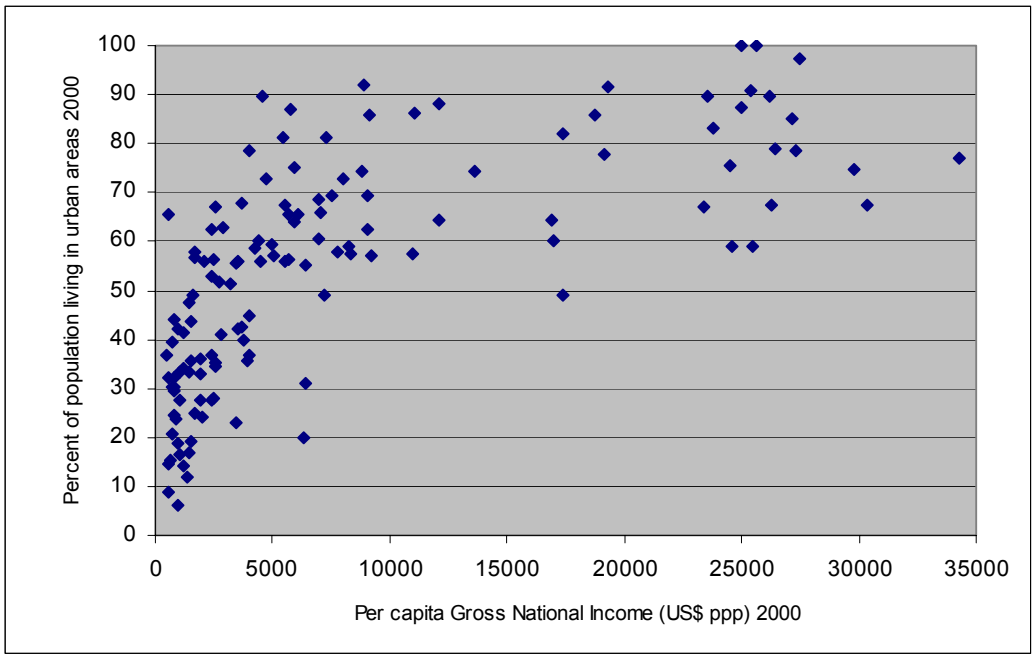
**CONTENTS:**

## THE LINKS BETWEEN ECONOMIC CHANGE AND URBAN CHANGE

### MYTH 1: "Cities are parasitic, growing everywhere without the economy to support them"

In general, the more urbanized a nation, the stronger and more productive its economy. The nations with the greatest economic success over the last few decades are generally the nations that have urbanized most rapidly.[3] Most of those with the smallest increase in their level of urbanization are those with the least economic success. There is a strong association between nations' average per capita incomes and their level of urbanization (see Figure 1) and all the world's wealthier nations have high proportions of their population living in urban areas, because these concentrate most of their economic activities. Cities generally have a significantly higher concentration of their nations' economic activities than of their populations.[4]

Figure 1: The association between nations' per capita incomes and their levels of urbanization




[3] UNCHS (Habitat) (1996*), An Urbanizing World: Global Report on Human Settlements, 1996*, Oxford University Press, Oxford and New York. This examined the association between that rate of growth of GNP and the scale of the increase in the level of urbanization up to 1990. A preliminary look at changes in nations' level of urbanization during the 1990s for those nations for which new census data are available and their economic performance during the 1990s suggests that this association did not change during the 1990s. The comparison between nations in changes in levels of urbanization and changes in GNP is always going to be imprecise because of the differences between nations in the criteria used to define and measure their urban populations (as discussed in myth 5). In addition, within wealthier nations or the wealthier regions within nations, good transport and communications systems can lead to many industrial or service enterprises locating in 'greenfield sites' classified as rural areas and to many people who work in urban areas living in rural areas and commuting or telecommuting. Here, the distinction between rural and urban areas is no longer useful in distinguishing between those who make a living out of agriculture and those who make a living working in industry and services.

[4] World Bank (1991), *Urban Policy and Economic Development: an Agenda for the 1990s*, The World Bank, Washington DC, 87 pages.

The link between economic strength and urbanization can also be seen in the concentration of the world's large cities in its largest economies (see Table 1). In 2000, the world's five largest economies (USA, China, Japan, India and Germany) had nine of the world's 16 largest cities (the so called 'mega-cities' each with 10 million or more inhabitants) and nearly half of all the cities with one million or more inhabitants. By 2000, all but two of the world's 16 mega-cities and more than two thirds of its million-cities were in the 20 largest economies. Similarly, within each of the world's regions, most of the largest cities are concentrated in the largest economies – for instance, Brazil and Mexico in Latin America and China, India, Indonesia and the Republic of Korea in Asia. Note that this association of large cities and large economies does not relate to the average income per person but to the total size of the national economy.

Table 1: The distribution of the world's largest cities among the world's largest economies in 2000[5]

| NATIONS | No of 'million' cities | No of cities with 5-9.99 million inhabitants | No of mega-cities (cities with 10 m. plus Inhabitants) |
|---|---|---|---|
| **The world's five largest economies** | | | |
| USA | 37 | 1 | 2 |
| China | 91 | 3 | 2 |
| Japan | 6 | 0 | 2 |
| India | 32 | 3 | 3 |
| Germany | 13 | 1 | 0 |
| **The next five largest economies** (France, UK, Italy, Brazil and Russian Federation) | 37 | 3 | 2 |
| **The next five largest economies** (Mexico, Canada, Republic of Korea, Indonesia, Australia) | 32 | 1 | 2 |
| **The next five largest economies** (Turkey, Argentina, Netherlands, South Africa, Thailand) | 17 | 2 | 1 |
| **The world's other 187 nations and territories** | 123 | 9 | 2 |
| **TOTAL (for the world)** | 388 | 23 | 16 |

There are certain features of urban areas that might be considered parasitic. For instance, they may concentrate a disproportionate share of public investment in infrastructure and services, so provision for water, sanitation, health care, schools and other key needs are better there – although this is not always the case – see the discussion under myth 7. Cities may be considered parasitic in an ecological sense, as they can impose high environmental costs on their surrounds, drawing resources and dumping wastes. This is not inherent to cities however, but is related to the actions of particular groups in cities and to poor governance. There are many positive links between rural and urban areas, especially between urban demand and the prosperity of farmers (see the discussion under myth 8). Certain groups that can be judged to be exploitative within each national population are usually concentrated in cities – the very rich, including large landowners and owners or shareholders in successful industries or service enterprises, corrupt politicians and civil servants – but it is not the city they live in that is exploitative. Certainly, there is a need for development patterns and governance structures that are less exploitative, that uphold poorer groups' civil and political rights, that build in transparency and accountability to undermine possibilities

[5] Satterthwaite, David (2002), *Coping with Rapid Urban Growth*, Royal Institution of Chartered Surveyors. For population statistics, United Nations (2002*), World Urbanization Prospects; The 2001 Revision; Data Tables and Highlights*, Population Division, Department of Economic and Social Affairs, United Nations Secretariat, ESA/P/WP/173, New York, 181 pages. For the size of nations' economies, World Bank (2001*), Building Institutions for Markets; World Development Report 2002*, Oxford University Press, Oxford and New York, pages 232-233. Note that this was based on each nations' gross national income converted into international dollars using purchasing power parity.

of corruption, that ensure better working conditions and that prevent industries and urban concentrations passing on ecological burdens. But this does not imply a need for anti-urban policies.

It is still common to see "bright lights" theories used to explain rapid urban growth (rural migrants being attracted by cities' bright lights) but more than three decades of careful research shows how most migration flows are rational responses to changing patterns of economic opportunity or social advancement (especially through education) – or simply rational responses to severe deprivation or exploitation. Assumptions are often made that urban poverty grows because poor rural migrants flock to cities and live in squatter settlements, yet most of the inhabitants of many squatter settlements are city-born.[6] They live in squatter settlements because they cannot afford better accommodation, not because they have arrived recently from the countryside. And what goes unnoticed is the dynamism, innovation and investment that so many 'poor' people bring to cities. The 'urban poor' have been responsible for building most new homes and neighbourhoods in most cities in Africa, Asia and Latin America over the last few decades. The scale of their investment in the city as they build and develop their own homes and neighbourhoods (and often small enterprises) is generally far higher than the investments made by governments and international agencies. The total investment per person per year made by most urban governments is the equivalent of less than US$10; it is often less than US$1. The value of the investments made each year by most low income households who have managed to obtain land on which to build is considerably larger than this.[7] The contribution of the informal economy in urban areas to nations' gross national income is is also likely to be greatly underestimated. So too is the importance of well-governed cities for nations' economic success.

The world is less urbanised in 2000 than was expected and one reason why is the slow economic growth (or the economic decline) that many low and middle income nations have experienced since 1980. This helps explain slower population growth rates for many cities in Africa and Latin America. Part of this is related to structural adjustment policies that brought declines in employment, real incomes and urban welfare, and proved to be less successful than hoped in stimulating economic growth.[8]

The changing distribution of large cities around the world reflects changing patterns of economic advantage. Table 2 shows the changing distribution of the world's largest cities by region over the last 200 years. The rapid increase in the number of 'million-cities' in Asia between 1950 and 2000 and Asia's much-increased share of the number of the world's largest cities reflects its much increased share of the world economy during this period.

The fact that what are often termed 'developing countries' now have most of the world's largest cities is often raised as a cause of concern. But historically, these countries have always had many or most of the world's largest cities;[9] what is more unusual is the brief period during which first Europe and then North America came to concentrate

[6] Hardoy, Jorge E. and David Satterthwaite (1989), *Squatter Citizen: Life in the Urban Third World*, Earthscan Publications, London, UK, 388 pages

[7] Hardoy and Satterthwaite 1989, op. cit.

[8] For sub-Saharan Africa, see Potts, Deborah (2001*), Urban Growth and Urban Economies in Eastern and Southern Africa: an Overview*, Paper presented at a workshop on African Urban Economies: Viability, Vitality of Vitiation of Major Cities in East and Southern Africa, Netherlands, 9-11 November, 19 pages plus annex to be published in D. Bryceson and D. Potts (eds), *African Urban Economies: Viability, Vitality or Vitiation of Major Cities in East and Southern Africa;*

[9] Bairoch, Paul (1988), *Cities and Economic Development: From the Dawn of History to the Present*, Mansell, London, 574 pages.

so many of the world's largest cities. During most of the 8,000 years or so of recorded urban history and pre-history, Asia has had a high concentration of the world's urban population and most of its largest cities.[10] In 1800, it had more of the world's largest cities than it has today (see table 2) although its share in the world's largest cities is increasing and is likely to continue increasing, reflecting its increasing share in the world economy. Many of Asia's largest cities today have very long histories as important cities, including Tokyo (and its historic predecessor Edo), Beijing (formerly Peking), Guangzhou (formerly Canton) and Istanbul (formerly Constantinople). By comparison, Calcutta and Mumbai may be relatively new – but they still have urban histories of several hundred years. North Africa has also had several of the world's largest and most important cities for long periods – Cairo, Alexandria, Fez and Tunis (formerly Carthage). Historically, what is today called Latin America has long had most of the largest cities in the Americas – both before and after the European conquests. In 1800, Latin America had three of the world's 100 largest cities and North America had none.

Table 2: The distribution of the world's largest cities by region over time[11]

| Region | 1800 | 1900 | 1950 | 2000 |
|---|---|---|---|---|
| **Number of 'million-cities'** | | | | |
| **World** | 2 | 17 | 85 | 388 |
| **Africa** | 0 | 0 | 2 | 35 |
| **Asia** | 1 | 4 | 31 | 195 |
| **Europe** | 1 | 9 | 29 | 61 |
| **Latin America and the Caribbean** | 0 | 0 | 7 | 50 |
| **Northern America** | 0 | 4 | 14 | 41 |
| **Oceania** | 0 | 0 | 2 | 6 |
| **Regional distribution of the world's largest 100 cities** | | | | |
| **World** | 100 | 100 | 100 | 100 |
| **Africa** | 4 | 2 | 3 | 8 |
| **Asia** | 65 | 22 | 36 | 45 |
| **Europe** | 28 | 53 | 35 | 15 |
| **Latin America and the Caribbean** | 3 | 5 | 8 | 17 |
| **Northern America** | 0 | 16 | 16 | 13 |
| **Oceania** | 0 | 2 | 2 | 2 |
| **Average size of the world's 100 largest cities** | 187,000 | 725,000 | 2.1 m | 6.2m |

Some figures for city populations for 2000 are based on estimates or projections from statistics drawn from censuses held around 1990. There is also a group of countries (mostly in Africa) for which there is no census data since the 1970s or early 1980s, so all figures for their city populations are based on estimates and projections.

[10] See Bairoch 1988 op cit; Chandler, Tertius (1987), *Four Thousand Years of Urban Growth: An Historical Census*, Edwin Mellen Press, Lampeter, UK, 656 pages.

[11] Satterthwaite 2002, op cit; the table is an updated version of a table in Satterthwaite, David (1996), *The Scale and Nature of Urban Change in the South*, IIED Working Paper, IIED, London. For 1950 and 2000, data drawn only from United Nations (2002), *World Urbanization Prospects; The 2001 Revision; Data Tables and Highlights*, Population Division, Department of Economic and Social Affairs, United Nations Secretariat, ESA/P/WP/173, New York, 181 pages. For 1900 and 1800, data came from an IIED database with census data and estimates for city populations drawn from a great range of sources, including Chandler, Tertius and Gerald Fox (1974), *3000 Years of Urban Growth*, Academic Press, New York and London; Chandler, Tertius (1987), *Four Thousand Years of Urban Growth: An Historical Census*, Edwin Mellen Press, Lampeter, UK, 656 pages; and Showers, Victor (1979), World Facts and Figures, John Wiley and Sons, Chichester, 757 pages. For Latin America, it also drew on a review of 194 published censuses.

**MYTH 2 (semi-myth): "Africa's urban population is growing out of control without economic development."**

Africa is often singled out as an example of a region where particularly rapid urban growth is taking place without economic growth. Certainly, Africa has some of the world's fastest growing cities over the last fifty years and many African nations have had very little economic growth in recent decades. But one of the main reasons why urban change has been so rapid in recent decades is that it began from such a small base, as the European colonial powers who controlled virtually all of Africa 50 years ago had kept down urban populations by imposing restrictions on the rights of their national populations to live and work in urban centres. The removal or weakening of the colonial apartheid-like controls on population movements was one of the reasons why urban populations grew so rapidly just before or after the ending of colonial rule.[12] For instance, urban growth dynamics over the last 40 years in South Africa, Namibia and Zimbabwe (formerly Rhodesia) cannot be understood without taking into account the profound impact of controls on people's movement imposed by white minority regimes on the composition and growth of cities.[13] In South Africa, with the lifting of long-applied restrictions on African urbanisation in 1986 and then the ending of the apartheid government, the country became an increasingly popular destination for refugees and migrants from other African nations, which had a profound impact on urban development.[14] In some countries, a considerable part of the migrant flows to cities in the transition between colonial rule and independence or after independence was women and children joining their husbands/partners who were living and working in urban areas – because this had not been permitted under colonial rule.[15]

Another reason for rapid urban population growth was the achievement of political independence. Newly independent governments had to build the institutions of governance that nation-states need and also to expand the higher education system that had been so undeveloped under colonial rule. This obviously boosted growth in the urban centres that were the main political and administrative centres. Many commentators view the rapid growth of sub-Saharan African cities over the last 50 years as a serious problem. But if a large part of this rapid change is related to political independence and the removal of highly discriminatory controls on the right of the population to move freely, it also has positive aspects.

The World Bank and various other commentators have suggested that sub-Saharan Africa is unusual because it has been urbanising rapidly without economic growth.[16] But for many nations in this region, the lack of any recent census or any other accurate information on the size of their urban populations makes it impossible to make such a claim. Many sub-Saharan African nations have had no census for 10-20 years. Most of the association between rapid urbanization and stagnant economies is likely to be the result of inaccurate statistics. With no census data available, levels of urbanization for 2000 are estimated by assuming that rates of change in levels of urbanization from the 1970s or 1980s continued during the 1990s. But the economic and political underpinnings of rapid urbanization in the 1970s were probably not present or much

[12] Potts, Deborah (1995), "Shall we go home? Increasing urban poverty in African cities and migration processes", *The Geographic Journal*, Vol.161, Part 3, November, pp. 245-264.
[13] Potts 1995, op cit; Crankshaw, Owen and Susan Parnell (2002), *Urban Change in South Africa*, Urban Change Working Paper 4, IIED, London.
[14] Crankshaw and Parnell 2002, op cit
[15] Bryceson, Deborah (1983*), Urbanisation and Agrarian Development in Tanzania with special reference to Secondary Cities*, IIED, London.
[16] See Box 6.4, page 130 of World Bank (1999*), Entering the 21st Century: World Development Report 1999/2000*, Oxford University Press, Oxford and New York, 300 pages.

weaker during the 1990s. There are also indications that rates of increase in levels of urbanization have slowed down in much of sub-Saharan Africa and that, contrary to the World Bank's belief, the nations that have urbanised most are generally those with the best economic performance.[17] Sub-Saharan Africa also has very few of the world's largest cities.

Sub-Saharan Africa does have examples of cities growing rapidly without economic growth, because they become the destination of large numbers of people fleeing wars or civil unrest. For instance, millions of people fled to urban areas in Angola, Mozambique and the Sudan during civil wars during the 1980s and 1990s, just as they had done in Zimbabwe during the liberation struggle of the 1970s. Many African cities in nations without civil conflict have their populations boosted by immigrants fleeing civil strife. When peace is established, the links between economic change and urban change return. For instance, in both Mozambique and Zimbabwe, there was significant out-migration from some cities when conflict ended.[18] If the peace holds in Angola, many Angolans living in different cities around Africa will return; many may also return to their farms. If peace and economic stability is established in DR Congo (formerly Zaire), many cities or refugee camps in neighbouring countries will lose population.[19]

[17] See Potts, Deborah (2001*), Urban Growth and Urban Economies in Eastern and Southern Africa: an Overview*, Paper presented at a workshop on African Urban Economies: Viability, Vitality of Vitiation of Major Cities in East and Southern Africa, Netherlands, 9-11 November, 19 pages plus annex to be published in D. Bryceson and D. Potts (eds), *African Urban Economies: Viability, Vitality or Vitiation of Major Cities in East and Southern Africa;* also Potts 1995, op cit.

[18] Potts 2001, op. cit

[19] Mann, Gillian (2002), ""Wakimbizi, wakimbizi": Congolese refugee boys' and girls' perspectives on life in Dar es Salaam, Tanzania", *Environment and Urbanization*, Vol. 14, No. 2.

**MYTH 3: "The future is predominantly urban"**

This is not so much a myth as an assumption that can be questioned. The world will only become predominantly urban if the economic changes that underpin urbanization take place. For 40 years, there has been an assumption that the world's population will become ever more urbanized. Projections are routinely made up to the year 2025 or 2030, showing the level of urbanization in each nation and the size to which the world's largest cities will grow. This in turn generates statements like 'the world has to accommodate two billion more urban dwellers by the year 2025'. But the future size of any city depends on its economic performance and as will be described in the next section, many of the world's largest cities are having difficulties attracting new investments. Any nation's level of urbanization depends on its economic performance. Africa will only become increasingly urban if most of its more populous nations have greater economic success than they had during the 1990s.

Few economists would dare to predict the level of economic growth in each nation up to 2025 or 2030. But for all low and middle income nations, their level of urbanization in 2025 will be much influenced by their economic performance. One hopes that low-income nations in Africa, Asia and Latin America are much more urbanized in 2025 than they are today because this would be the result of them achieving stronger economies.

The world's future level of urbanization will also be much influenced by the economic performance of the most populous nations that currently have low levels of urbanization. It would only need India to have high economic growth rates for the next 10-15 years and for China to maintain the very rapid economic growth rates it has achieved over the last 15-20 years for the world to become significantly more urban than anticipated.

In addition, perhaps too much is made of the world's level of urbanization since this is in part a matter of definition. The world could acquire several hundred million more urban dwellers overnight if India or China were to change their definitions of "urban centres" to those used by nations such as Peru and Sweden[20] and this in turn would mean that most poverty in India (and in Asia) was in urban areas.

[20] At least up to its 1990 census, urban areas in Sweden were built-up areas with at least 200 inhabitants and usually not more than 200 metres between houses; for Peru, urban centres were populated centres with 100 or more dwellings grouped contiguously and administrative centres of districts (United Nations (1998), *World Urbanisation Prospects: the 1996 Revision*, Population Division, Department of Economic and Social Affairs, United Nations ST/ESA/SER.A/170, 190 pages). Using these definitions in China or India would make both countries predominantly urban.

## THE SCALE, SPEED AND LOCATION OF URBAN CHANGE

It is often stated that urban growth in Africa, Asia and Latin America is explosive, unprecedented and out of control. For instance, "...it is in the Third World that the urban explosion is taking place"[21] and the "...health and well-being of literally hundreds of millions of men, and especially women and children, are threatened by an urban population explosion in the developing countries of Asia, Africa and Latin America."[22] These are typical of the kinds of general comments made about urban change in Africa, Asia and Latin America. A paper in Foreign Affairs in 1996 was entitled "The exploding cities of the developing world"[23]. An article in *Newsweek* in 1994 talked about Asian mega cities running riot, driven by explosive economic and population growth.[24] It is also often assumed that not only is rapid urbanization taking place all over Africa, Asia and Latin America but that it will continue. For instance "Unrestrained rural-to-urban migration has caused rapid urban growth in all countries in the developing world and is expected to continue."[25] Most of this is untrue or at best partially true. The predictions are unlikely to come true.

### MYTH 4: "Mega-cities are growing rapidly and will dominate the urban future"

The latest census data show that there are far fewer mega-cities than had been expected and that they contain a small proportion of the world's population. Most proved to have several million inhabitants less than had been expected in 2000. Many of them are growing slowly with more people moving out than in;[26] some are losing population. In addition, more decentralized patterns of urban development are apparent in many nations, which suggests that fewer mega-cities will develop and that most of those that do will be smaller.

Mega-cities are generally defined as cities with ten million or more inhabitants. By concentrating such large numbers of enterprises and people, they do present particularly challenging difficulties both for ensuring that their populations' needs are met and for good environmental management (including keeping down air pollution and limiting ecological impacts on their region).
But:

- There are relatively few of them; by 2000, there were 16 mega-cities. This is much less than had been anticipated;
- These 16 mega-cities had less than 4 percent of the world's population;
- They were heavily concentrated in the world's largest economies (as discussed earlier);

[21] Davidson, Joan, Dorothy Myers and Manab Chakraborty (1992), *No Time to Waste: Poverty and the Global Environment*, OXFAM, Oxford, page 109.
[22] WHO, WHO Press Release WHO/47, 17th November 1989
[23] Linden, Eugene (1996), "The exploding cities of the developing world", *Foreign Affairs*, Vol. 75, No. 1, January/February, pages 52-65.
[24] *Newsweek* May 9 1994, page 37
[25] Linares, Carlos A. (1994), *Urban Environmental Challenges*, WRI Issues in Development, World Resources Institute, Washington DC, page 1.
[26] They continue to grow because their rate of natural increase is larger than the rate of net out-migration

- Most were much smaller in 2000 than had been anticipated. For instance, Mexico City had 18 million people in 2000[27] - not the 31 million people predicted 25 years ago.[28] Calcutta had around 13 million by 2000, not the 40-50 million predicted during the 1970s.[29] Sao Paulo, Rio de Janeiro, Seoul, Chennai (formerly Madras) and Cairo are among the many other large cities that, by 2000, had several million inhabitants fewer than had been predicted;
- Most have life expectancies and provision for piped water, sanitation, schools and health care that are well above their national average – even if the aggregate statistics for each mega-city hide significant proportions of their population who are living in very poor conditions;
- Their populations are often over-stated because the figures given for their populations are for the population in large metropolitan areas or planning regions which include many rural settlements and separate urban centres. For instance, population figures for most of China's large cities are not for the city but for the 'municipality' that is much larger than the city. This confusion between local government area and city area explains why the city of Chongqing sometimes appears as the world's largest city with a population of 30 million. But this is the population in Chongqing municipality which covers 82,400 square kilometres (about the size of Austria or of all of the Netherlands and Denmark combined); the city population is around 6 million.

If London wanted to 'boost' its population, it could easily re-establish itself among the world's largest cities by following the example of the largest Chinese cities and having more extensive boundaries. This could be achieved if the Greater London Authority was able to convince the national government that a new London municipality be created, incorporating neighbouring counties such as Surrey, Kent, Essex, Hertfordshire, Buckinghamshire and Berkshire – although one suspects there would be a certain reluctance on the part of most people living in these counties to such a change.

Many of the world's most economically successful regions have urban forms that are not dominated by a large central city, with new enterprises developing in a network of smaller cities and greenfield sites – for instance in Silicon Valley and Orange County in California and Bavaria in Germany[30] and in the network of cities in Southeast Brazil that have attracted much new investment away from Sao Paulo.

In all high-income nations and many middle and low income nations, smaller cities have a growing capacity to attract a significant proportion of new investment away from the largest cities. In the many nations that have had effective decentralisations, urban authorities in smaller cities have more resources and capacity to compete for new investment.[31] This suggests that successful economies may produce more decentralized patterns of urban development in the future with less development

[27] Garza, Gustavo (2002*), Urbanisation of Mexico during the Twentieth Century*, Urban Change Working Paper 7, IIED, London.
[28] United Nations (1975), *Trends and Prospects in the Population of Urban Agglomerations, as assessed in 1973-75*, Population Division, Department of International Economic and Social Affairs, ESA/P/WP.58, New York.
[29] Brown, Lester (1974), *In the Human Interest*, W. W. Norton and Co., New York.
[30] Castells, Manuel and Peter Hall (1994), *Technopoles of the World: The Making of 21st Century Industrial Complexes*, Routledge, London and New York, 275 pages.
[31] Although most nations have had some form of decentralization over the last 10-15 years, the extent to which decentralization helps to underpin more decentralized patterns of urban growth depends on the extent of this decentralization, including the extent to which resources and capacity to raise revenues and invest in infrastructure have been decentralized from national or provincial/state authorities to urban authorities.

concentrated in very large cities. Advanced telecommunications systems have helped underpin more decentralised patterns of production which, in turn, means more decentralised patterns of urban development. The exceptions are the large cities that can adapt or that are successful at retaining a role as command and control centres for global corporations and the producer services they require.[32]

What we do not know is whether the trend towards more decentralised urban patterns will manifest itself through huge sprawling urbanised regions or through networks of connected compact cities with well-managed surrounds. In part, this also depends on what urban policies are implemented. It also remains to be seen whether the smaller cities that have attracted new investments away from Mexico City, Sao Paulo, Beijing, Shanghai, New York and Calcutta become very large cities or in turn lose out to another generation of successful smaller cities.[33]

[32] Sassen, Saskia (1994), *Cities in a World Economy*, Pine Forge Press, Thousand Oaks, London, New Delhi, 157 pages.
[33] See Bourne, L.S. (1995), *Urban Growth and Population Redistribution in North America: A Diverse and Unequal Landscape*, Major Report 32, Centre for Urban and Community Studies, University of Toronto, Toronto, 41 pages for a discussion of this in relation to the United States.

**MYTH 5: "More than half the world's population live in cities"**

The latest census data shows that the world was less urbanized in 2000 than had been expected. The date at which the world's urban population grows to exceed that of its rural population has been delayed; this transition had been expected in the late 1990s but is now predicted to happen around 2007. The world's urban population in 2000 had 270 million people fewer than had been predicted twenty years previously.[34] As a later section describes in more detail, many nations had much slower urban population growth rates than anticipated during the 1980s and 1990s, in part because of serious economic problems. For most nations, urban population growth rates also dropped due to falling fertility rates. For some, it was also because of rising mortality rates. By the late 1990s, this included large and growing levels of mortality from HIV/AIDS. This is particularly apparent in certain sub-Saharan African nations with high levels of infection and the absence of drugs to control it. This problem is reshaping urban trends in many nations.[35]

The world's urban population may soon come to outnumber its rural population but this is not the same as half the world population living in cities because the proportion of people in cities is considerably below the proportion living in urban centres. There are thousands of settlements in Africa, Asia and Latin America (and also North America and Europe) that are classified by their national governments as urban centres but which lack the economic, administrative or political status that would normally be considered as criteria for classification as a city.[36]

Perhaps too much is made of the fact that soon, more than half the world's population will live in urban areas. The figures for the proportion of the world's population living in urban areas are strongly influenced by how 'urban centres' are defined in the large-population nations. If India chose to use Sweden's definition for urban centres, most of India's population would become urban and the world would already have more than half its population living in urban areas (see Box 1).

[34] See United Nations (1982), *Estimates and Projections of Urban, Rural and City Populations, 1950-2025; The 1980 Assessment,* Department of International Economic and Social Affairs, ST/ESA/SER.R/45, New York, compared to 2001 Assessment (United Nations 2002, op. cit.)

[35] Potts, Deborah (2001*), Urban Growth and Urban Economies in Eastern and Southern Africa: an Overview*, Paper presented at a workshop on African Urban Economies: Viability, Vitality of Vitiation of Major Cities in East and Southern Africa, Netherlands, 9-11 November, 19 pages plus annex to be published in D. Bryceson and D. Potts (eds), *African Urban Economies: Viability, Vitality or Vitiation of Major Cities in East and Southern Africa.*

[36] There is no agreed international definition as to what is a 'city' although the term city implies more than a small urban centre with a few thousand inhabitants.

**BOX 1: The different definitions used for 'urban centres'**

The urbanisation level for any nation is the proportion of the national population living in urban centres. So it is influenced by how the national government defines an 'urban centre'. For instance, most of India's rural population lives in villages with between 500 and 5,000 inhabitants and if these were classified as 'urban' (as they would be by some national urban definitions), India would suddenly have a predominantly urban population rather than a predominantly rural population. Each nation uses its own criteria for defining urban centres (or for distinguishing them from other settlements). In virtually all nations, official definitions ensure that urban centres include all settlements with 20,000 or more inhabitants. However, governments differ in the size of smaller settlements they include as urban centres – some that include all settlements with a few hundred inhabitants as urban; some that only include settlements with 20,000 or more inhabitants. This limits the accuracy of international comparisons, because in most nations, a large part of the populations lives in settlements that fall into this range. By its 1996 census, 17.5% of Egypt's population lived in settlements with between 10,000 and 20,000 inhabitants which had many urban characteristics, including significant non-agricultural economies and occupational structures. They were not classified as urban areas – although they would have been in most other nations. If they were considered urban it would make Egypt much more "urbanised" and would bring major changes to urban growth rates.[37] If the Indian or Chinese government chose to change the criteria used in their censuses to define urban centres, this could increase or decrease the world's level of urbanisation by several percentage points. And there are good reasons for thinking that the current criteria used in China considerably understate the size of its urban population.[38] Revisions by, for instance, the Nigerian or Brazilian census authorities could significantly alter Africa's or South America's level of urbanisation. In some nations, revisions in their urban definitions are partly responsible for changes in their urban growth rates and levels of urbanisation.[39] What all this adds up to is that the world' s level of urbanisation is best understood not as a precise figure (47.7% in 2001) but as a figure somewhere between 40% and 55%, depending on the criteria used to define urban centres.

It would be interesting to explore the reasons for the outliers in Figure 1 – for instance why Thailand, Namibia, Slovenia and Finland appear relatively unurbanized for their levels of per capita income while Armenia, Congo Republic, Jordan, Venezuela and Lebanon appear more urbanized than expected. But this may be more to do with differences in the urban definitions than differences in the relationship between urbanization and economic development.

[37] Denis, Eric and Asef Bayat (2002*), Egypt; Twenty Years of Urban Transformations*, Urban Change Working Paper 5, IIED, London.
[38] UNCHS (1996*), An Urbanizing World: Global Report on Human Settlements, 1996*, Oxford University Press, Oxford and New York.
[39] See Afsar, Rita (2002), *Urban Change in Bangladesh*, Urban Change Working Paper 1, IIED, London.

**MYTH 6: "The speed of urban change in poorer nations is unprecedented with new cities mushrooming everywhere and with Africa, Asia and Latin America having the fastest growing cities"**

The scale of urban change over the last fifty years is unprecedented. But the speed of urban change in low and middle income nations is not unprecedented. There are many historical precedents of nations with faster increases in their levels of urbanization than most of those taking place in recent decades in low and middle income nations. Many high income nations underwent periods when they had greater increases in their level of urbanization over a 30 year period than that experienced by most low and middle income nations. For instance, the level of urbanization in Japan increased from 24 percent in 1930 to 64 percent in 1960; that in the UK went from 37.1 percent to 60.6 percent between 1850 and 1880.[40] The change in the level of urbanization in low and middle income nations between 1950 and 1975 was comparable to that in Europe and North America between 1875 and 1900.[41] The rates of net rural to urban migration required to achieve these increases may have been greater in Europe and North America in the late 19th century than in low and middle income nations from 1950-1975 in view of the fact that the rates of natural increase in rural areas were probably higher than those in urban areas at that time.[42]

In addition, some of the most rapid increases in levels of urbanization in recent decades have not been in Africa, Asia and Latin America but in Europe. Very few countries in Africa, Asia and Latin America have had increases in their levels of urbanization that compare with that in Lithuania between 1959 and 1989 (from 39 percent to 68 percent) or Belarus (from 31 to 66 percent urban in these same years) or Finland or Norway between 1960 and 1990.[43] Although sub-Saharan Africa is generally considered to be a region experiencing very rapid urbanization, several African nations have among the smallest increases in their levels of urbanization in recent decades (including Rwanda, Zambia and Somalia). However, as noted earlier, some caution is needed in making generalizations for sub-Saharan Africa because there is no recent census data for many nations.

**Perhaps surprisingly, new cities are not mushrooming everywhere.** Most of the largest urban centres in Europe, Latin America, Asia and North Africa today have been important urban centres for centuries. Of the 388 cities in the world that had more than a million inhabitants by 2000, more than three fifths were already urban centres 200 years ago, while more than a quarter have been urban centres for at least 500 years.[44] It is perhaps surprising that North America and sub-Saharan Africa stand out as having most 'new cities' among the world's largest cities today. These are cities that now have more than a million inhabitants but had not been founded or did not exist as urban centres by 1800

[40] Bairoch, Paul (1988), *Cities and Economic Development: From the Dawn of History to the Present*, Mansell, London, 574 pages

[41] Preston, Samuel H. (1979), "Urban growth in developing countries: a demographic reappraisal", *Population and Development Review*, Vol. 5, No. 2, pp. 195-215.

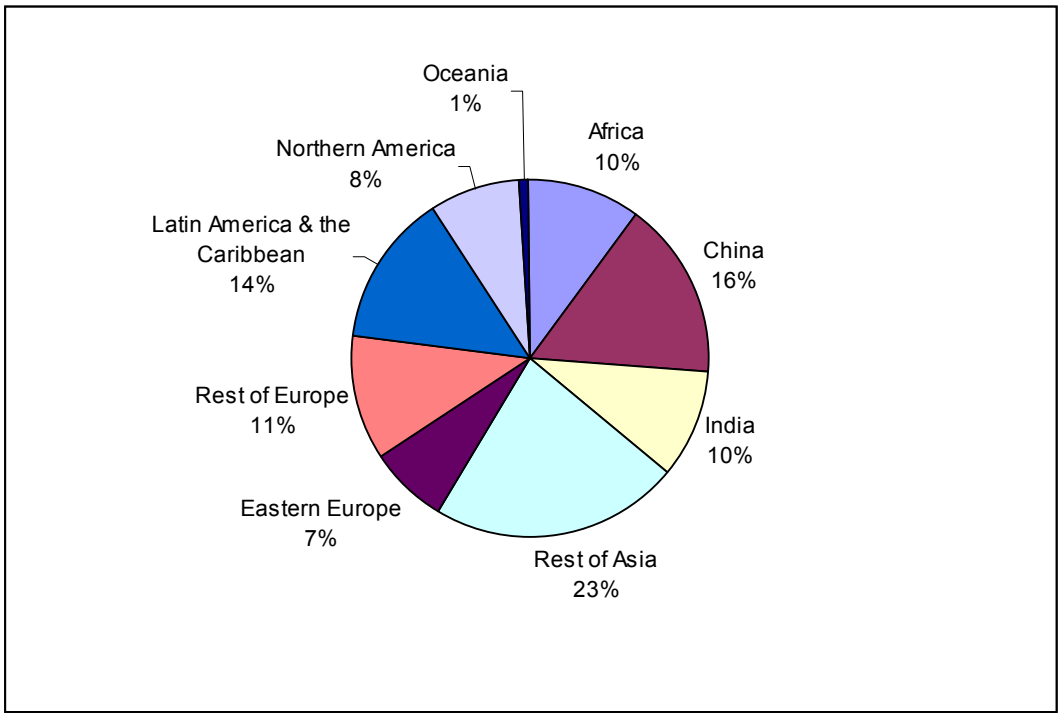
[42] Davis, Kingsley (1973), "Cities and mortality",, International Population Conference, International Union for the Scientific Study of Population (IUSSP), Vol.3, pp. 259-282.

[43] UNCHS (Habitat) (1996*), An Urbanizing World: Global Report on Human Settlements, 1996*, Oxford University Press, Oxford and New York.

[44] These statistics almost certainly considerably understate the extent to which the world's largest cities today have long been important urban centres. This is related to the incompleteness of historic records for city populations, despite the efforts of scholars such as Tertius Chandler and Paul Bairoch to fill this gap.

**Not all the fastest growing cities are in low and middle income nations**: It is often assumed that the world's most rapidly growing cities are concentrated in Latin America, Asia and Africa. But several cities in the United States were among the world's most rapidly growing large cities between 1950 and 2000. Nairobi, Kenya's capital, is often held up as an example of a particularly rapidly growing city – but both Miami and Phoenix in the United States had larger populations than Nairobi in 2000, although all three were small settlements in 1900. The population of Los Angeles was around one tenth that of Calcutta in 1900, yet in 2000 it had about the same number of people in its metropolitan area.

**Figure 2: The distribution of the world's urban population in 2000**



## RURAL VERSUS URBAN AREAS

### MYTH 7 (semi-myth): "Most poverty is in rural areas"

This is not a myth globally since most poverty is still in rural areas. For most African and many Asian nations, most poverty is in rural areas. But it is no longer so in Latin America (or Europe and North America). Nor does the fact that there is more poverty in rural areas mean that urban poverty should be ignored – and an increasing proportion of those who suffer absolute poverty worldwide live in urban areas.

During the late 1960s and early 1970s, there was a recognition among international agencies that most of their projects were bringing little or no benefit to poor rural dwellers. At this time, three quarters of the population of low and middle income nations were in rural areas. Quite rightly, new priorities were set which gave agriculture and rural livelihoods more importance. However, this also resulted in an 'anti-urban' sentiment which meant that urban poverty was ignored or was assumed to be insignificant. In addition, the key role that well-governed urban centres had in supporting more prosperous economies (see above) was ignored. This continues to the present, even though the urban population in Africa, Asia and Latin America has grown by 200 percent since 1970 while the rural population has grown by only 44 percent.

The scale of the urban population within low and middle income nations is often forgotten. For instance, Africa is still assumed to be overwhelmingly rural but two in five Africans now live in urban areas. Africa now has a larger urban population than North America. It has twice as many children living in urban areas as North America and a large proportion of these children live in very poor conditions in homes lacking provision for water, sanitation and drainage with families who lack the means to provide them with sufficient food. Two fifths of Asia's population is urban and a large proportion suffers severe deprivation. In no way does this imply the need for a lower priority to poverty reduction in rural areas. But it does imply a need for more consideration of how urban poverty can be tackled and – as importantly – how the quality of governments in urban areas can be improved to ensure that increased levels of urbanization are not associated with increased levels of urban poverty. In addition, as discussed in the next section, successful agricultural development and urban development often go together.

Urban populations are widely considered by development specialists to be better off than rural populations – healthier, better housed, better educated and with access to a wider range of services and opportunities. Aggregate statistics comparing 'rural' and 'urban' populations support this. Indeed, rural-urban differences in incomes or in access to secondary schools help to explain the long-term trend towards more urban societies, as rural dwellers move to urban areas in response to better opportunities or chances of survival. But aggregate statistics can be misleading. The fact that most middle and upper income groups live in urban areas helps ensure that average urban incomes are higher than average rural incomes and that the proportion of people with services is higher in urban areas; it does not mean that the poorest 30-50 percent of the urban population are more likely to avoid malnutrition or get access to basic services than the poorer rural population. Urban dwellers living within 50 metres of a hospital or 100 metres of a water pipe often have as little chance of using these as rural dwellers who are 20 kilometres from hospitals or water mains; proximity does not mean access.

Certainly in India there is more poverty in rural areas than in urban areas. But forty percent of India's urban population of nearly 300 million people are classified as poor. More than half of poor urban children are underweight and/or stunted; a high proportion are severely undernourished – 23 percent in weight-for-age and 30 percent in height-for-age. More than 80 percent of poor children in urban areas have anaemia. Half of the urban poor have no access to tap water and a high proportion have no toilets they can use so have to defecate in the open.[45]

Statistics on infant or child mortality rates are often used to show an 'urban advantage'. But care is needed in interpreting these because of large differentials between different urban areas and different districts in urban centres. Those living in tenements or squatter settlements in the largest cities may have infant or child mortality rates as high as those suffered by poor rural dwellers. Infant or child mortality rates can vary by a factor of 20 or more between different parts of a city. And in many nations, infant or child mortality rates in urban areas remain very high. For instance, many low-income countries still have urban child mortality rates of between 100 and 200 per 1000 live births – including Chad (190 in 1996), Malawi (194 in 1992), Mali (172 in 1995), Mozambique (169 in 1997), Zambia (174 in 1996) and Haiti (135 in 1994). In some nations where data from surveys were available for different years, child mortality rates in urban areas were found to have increased – for instance in Madagascar when comparing 1992 to 1997, for Mali when comparing 1987 and 1995, for Zambia when comparing 1992 and 1996 and for Zimbabwe when comparing 1988 and 1992. Many middle income nations still have urban child mortality rates of 50 to 100.[46]

**Why levels of service provision in urban areas are over-stated:**[47] Urban populations are often said to enjoy large advantages over rural populations in access to water and sanitation. Yet it is common for half or more of a city's population to be unserved by water taps in their home or yard and for more than three quarters to have inadequate provision for sanitation. Less than 10 percent of the population in most African cities have provision for sanitation that is safe and convenient. Many cities and most smaller urban centres have no sewers or any other means of public provision for sanitation. Probably as many as one hundred million urban dwellers in low and middle income nations have no toilet facilities they can use (or afford) and have to defecate on open land or into scrap paper or plastic bags.[48]

Why, then, do official statistics suggest that provision for water and sanitation is so much better in urban areas than in rural areas.[49] One returns to issues of definition. Assessments as to who in the world has 'improved' provision for water and sanitation use the same definition for urban and rural areas. But having a water tap within 100 metres is not the same in a rural settlement with 100 persons per tap and a squatter settlement with 5,000 people per tap. Having access to a pit latrine is not the same in a rural setting where it is used by one family and can be sited to avoid contaminating water sources, and urban settings where 50 households share it and where there is so much faecal matter that is very difficult to protect water sources from contamination.

[45] UNICEF (2001), *The Young Child from Urban Poor Communities in India*, UNICEF India Country Office.
[46] These figures are drawn from an analysis by Mark Montgomery (Population Council) of 86 Demographic and Health Surveys held in 53 different nations between 1986 and 1998.
[47] This draws from Hardoy, Jorge E., Diana Mitlin and David Satterthwaite (2001), *Environmental Problems in an Urbanizing World: Finding Solutions for Cities in Africa, Asia and Latin America*, Earthscan Publications, London, 470 pages.
[48] UN-Habitat, *The State of Water and Sanitation in Cities (*provisional title), Earthscan Publications, due for publication in 2003.
[49] See WHO and UNICEF (2000), *Global Water Supply and Sanitation Assessment, 2000 Report*, World Health Organization, UNICEF and Water Supply and Sanitation Collaborative Council, 80 pages.

Many urban communities have so little space per person that there is no room to fit toilets into each person's home.

At present, the fact that most of the urban population of Africa, Asia and Latin America have access to 'improved' water and sanitation is only true because the standards for 'improved' provision are set so low. If 'adequate' water supply meant a water tap within or next to each home with a safe and regular supply, most of the urban population of Africa and Asia and a large part of the urban population in Latin America would not meet the standard. If the standard for sanitation was "easy access to a good quality toilet and handwashing facilities with provision for the safe disposal of excreta", most of the urban population of Africa and Asia would lack it.

**Why levels of urban poverty are under-estimated:** The ways in which governments and international agencies define poverty obviously influences how many 'poor people' there are and how poor they are. Most governments and international agencies use definitions of poverty that are unrealistic or inappropriate for urban populations for two reasons:

1. They use income-based poverty lines which set the poverty line too low in relation to the cost of living in urban areas, especially in regard to the cost of non-food essentials such as the cost of transport to and from work, housing, access to water and sanitation, fuel, health care and keeping children in school.

2. Most official poverty definitions give little or no attention to non-income aspects of poverty such as very poor quality, insecure housing, lack of access to water, sanitation, health care and schools, absence of the rule of law and undemocratic, unrepresentative political systems which allow poorer groups no voice or influence. It is ironic that governments and international agencies talk about the proportion of urban dwellers 'living in poverty' but no account is taken of living conditions when defining and measuring poverty.

Most nations have a single income-based poverty line that is used in rural and urban areas. This implies that the income needed to avoid poverty is the same everywhere (whether in large cities, smaller urban centres or rural areas). But the cost of living (or of many basic needs or the cost of avoiding poverty) is much higher in large cities. Income-based poverty lines are usually tied to the cost of a minimum food basket with 15 to 30 percent added for 'non-food' essentials. This implies that the cost of non-food essentials is not very high. But many empirical studies have shown the high costs paid by particular urban groups (or those living in particular settlements) for:

- *Public transport* (for getting to and from work and essential services). Expenditures are often particularly high for poorer groups living on the periphery of the city (they live there because its the only place they can find land sites on which they can build housing). Or they appear low because poorer groups walk very large distances to and from work because public transport is too expensive.[50] Many low-income households keep expenditures on transport low by living in central locations – but to do so, they put up with very poor conditions. In Bombay/Mumbai, one of the key reasons why so many people live in very small shacks constructed on pavements is that this allows them to walk to the places

[50] See for instance Huq, A.T., M. Zahurul and Borhan Uddin (1996), "Transport and the urban poor" in Nazrul Islam (ed.) *The Urban Poor in Bangladesh*, Centre for Urban Studies, Dhaka, 123 pages for various cities in Bangladesh, and Barter, Paul A. (1999), "Transport and urban poverty in Asia. A brief introduction to the key issues", *Regional Development Dialogue*, Vol. 20., No. 1 (Spring), pages 143-163. for central Bombay/Mumbai and Jakarta

where they can earn their income. Most cities have overcrowded central districts (with tenements or cheap boarding houses) because of the large numbers that cannot afford the transport costs of living in less central but less overcrowded districts.[51]

- *Schools* (school fees and associated costs, including getting to and from school). Even where entry to schools is free, other costs such as uniforms, school meals or exam fees make it expensive for poor urban households to keep their children at school.[52] Low-income groups may also bear the cost of sending their children to 'private' schools because they cannot get places in government schools. In Orangi, Karachi's largest informal settlement (with close to a million inhabitants), a high proportion of the population sent their children to private schools because there were so few government schools.[53]

- *Housing* (for rent or, if living in a self-built house, because of the cost of the land site for the house and the cost of building materials). Many tenant-households spend more than a quarter of their income on rent.[54] Households who rent rooms or who live in illegal settlements often pay particularly high prices for water and other services.[55]

- *For access to water - and in some instances to sanitation and garbage collection.* For many urban households who have no piped water supplies, payments to water vendors often represent 10 percent and sometimes 20 percent or more of household income.[56] Many urban households also have to pay for garbage collection and for access to latrines. The cost of each family member using a public latrine just once a day can represent a 5-10 percent of total household income.[57]

[51] Hardoy, Jorge E. and David Satterthwaite (1989), *Squatter Citizen: Life in the Urban Third World*, Earthscan Publications, London, UK, 388 pages

[52] See Kanji, Nazneen (1995), 'Gender, poverty and structural adjustment in Harare, Zimbabwe', *Environment and Urbanization*, Vol.7, No.1, April, pp. 37-55.

[53] Orangi Pilot Project (1995), NGO Profile: Orangi Pilot Project, *Environment and Urbanization*, Vol.7, No.2, October, pp. 227-236

[54] See for instance Barbosa, Ronnie, Yves Cabannes, and Lucia Moraes (1997), "Tenant Today, Posseiro Tomorrow" *Environment and Urbanization* Vol 9, No 2, pages 17-41; UNCHS (1993), *Support Measures to Promote Rental Housing for Low Income Groups,* United Nations Centre for Human Settlements, Nairobi. HS/294/93E, and Richmond, Pattie (1997) 'From tenants to owners: experiences with a revolving fund for social housing', *Environment and Urbanization* Vol 9, No 2, pages 119-139.

[55] See for instance Rakodi, Carole and Penny Withers (1995), 'Housing aspirations and affordability in Harare and Gweru, a contribution to housing policy formation in Zimbabwe', *Cities*, Vol 12 No 3, pages 185-201.

[56] See for instance Cairncross, Sandy (1990), 'Water supply and the urban poor', in Jorge E. Hardoy, Sandy Cairncross and David Satterthwaite (Editors), *The Poor Die Young: Housing and Health in Third World Cities*, Earthscan Publications, London, pages 109-126; Devas, Nick and David Korboe (2000), 'City governance and poverty: the case of Kumasi', *Environment and Urbanization*, Vol 12, No 1, pages 123-135; Ghosh, A., S.S. Ahmad and Shipra Maitra (1994*), Basic Services for Urban Poor: A Study of Baroda, Bhilwara, Sambalpur and Siliguri*, Urban Studies Series No. 3, Institute of Social Sciences and Concept Publishing Company: New Delhi, 305 pages; and Aegisson, Gunnar (2001), *Building Civil Society: Starting with the Basics*, One World Action, London, 32 pages.

[57] See for instance the case of Kumasi described in Devas, Nick and David Korboe (2000), 'City governance and poverty: the case of Kumasi', *Environment and Urbanization*, Vol 12, No 1, pages 123-135; Burra, Sundar and Sheela Patel (2002), *Community toilets in Pune and other Indian Cities*, PLA Notes; Special Issue on Participatory Governance, IIED, London.

- *Perhaps for food if food is more expensive* (especially for urban households who have no possibility of growing any food and/or raising livestock).[58]

- *On health-care*, especially if no public or NGO provision is available and private services have to be purchased. For instance, a study in a 'slum' area in Khulna, Bangladesh, highlighted the very large economic burden caused by poor health associated with poor quality housing – and how the economic cost in terms of income lost from days off work and from medical expenses was greater than the cost of improving the infrastructure to eliminate the health problems.[59] Various studies in cities have shown the high proportion of total household income spent on health care.[60] The expenditures on health care by low income groups is often not an indicator of the income they need for health care as they cannot afford to pay for the treatment they need or to purchase the most appropriate medicines.

- *For energy* (including fuel for cooking and heating water and, where needed, space heating and electricity).[61]

- *For child-care* (where all adult members have to work and child-care is needed but there are no low-cost or no-cost solutions - although often this difficulty is solved through reciprocity at community level. It is also a difficulty often solved through leaving young children unattended at home (even locked into homes) or leaving siblings in charge of the very young, with all the attendant risk this brings.

Many low-income urban households have other costs that go unrecognised by those who define income-based poverty lines, including payments to community-based organizations, and the payment of fines (for instance for illegal street vending). The cost of funerals can be particularly onerous in areas where there is high child mortality or high adult mortality (for instance where the incidence of AIDS is particularly high).Various studies have shown how many of the urban poor spend a significant proportion of their income on debt repayments.[62]

---

[58] The cost of food staples may be higher in urban than in rural areas; World Bank (1999), *Entering the 21st Century: World Development Report 1999/2000*, Oxford University Press, Oxford and New York, 300 pages.

[59] Pryer, Jane (1993) 'The impact of adult ill-health on household income and nutrition in Khulna, Bangladesh', *Environment and Urbanization* Vol. 5, No. 2, October, pages 35-49.

[60] Bigsten, A. and Steve Kayizzi-Mugerwa (1992), 'Adoption and distress in the urban economy: a study of Kampala households', *World Development*, Vol. 20, No. 10, pages 1423-1441; Ghosh, A., S.S. Ahmad and Shipra Maitra (1994*), Basic Services for Urban Poor: A Study of Baroda, Bhilwara, Sambalpur and Siliguri*, Urban Studies Series No. 3, Institute of Social Sciences and Concept Publishing Company, New Delhi, 305 pages.

[61] See Bigsten and Kayizzi-Mugerwa 1992 and Ghosh, Ahmad and Maitra 1994 above; also Dinye, Romanus D. (1995), ' A gender sensitive situation analysis of the urban poor, a case study in Kumasi, Ghana', *Trialog* Vol. 44, pages 34-37.

[61] The lowest income households in Dhaka were found to be spending 10 percent of their income on fuel - Islam, Nazrul, Nurul Huda, Francis B. Narayan and Pradumna B. Rana (eds.) (1997*), Addressing the Urban Poverty Agenda in Bangladesh, Critical issues and the 1995 Survey Findings*, The University Press Limited, 323 pages. Other studies showing the costs of energy being a significant proportion of expenditures for low income groups include Government of Mozambique, Ministry of Planning and Finance, Eduardo Mondlane University and the International Food Policy Research Institute (IFPRI) (1998*), Understanding Poverty and Well-being in Mozambique: The First National Assessment (1996-97*), Grootaert, Christiaan (1996), *Analysing Poverty and Policy Reform: The Experience of Côte d'Ivoire*, Avebury, Alderhot, 198 pages; and Ghosh, A., S.S. Ahmad and Shipra Maitra (1994*), Basic Services for Urban Poor: A Study of Baroda, Bhilwara, Sambalpur and Siliguri*, Urban Studies Series No. 3, Institute of Social Sciences and Concept Publishing Company: New Delhi, 305 pages

[62] See for instance CARE/Bangladesh (1998), *Urban Livelihood Security Assessment in Bangladesh, Volume 1: Main Report*, edited by Phil Sutter and Chris Perine, 80 pages; Amis, Philip and Sashi Kumar (2000), 'Urban economic growth, infrastructure and poverty in India: lessons from Visakhapatnam', *Environment and Urbanization*, Vol 12 No 1, pages 185-197; and Kwon, Soon-Won (1998), "National

If poverty lines were based on the real cost of avoiding poverty in each urban area, the proportion of urban dwellers with below poverty-line incomes would increase dramatically. Yet even with inappropriate poverty lines, it is common for between a third and half of a nation's urban population to have incomes below the official poverty line; and in many cases more than half.[63]

The many studies showing the high costs paid by low income dwellers for non-food essentials in particular cities suggest that the World Bank's international poverty line of US$1 per person per day is completely inappropriate. This poverty line implies that the income needed to avoid poverty is not only the same in all locations within a country but also the same across countries (when adjusted for purchasing power parity). Its use results in under-estimates of the scale of urban poverty since the income needed to avoid poverty is much higher than US$1 a day in most large and/or relatively prosperous cities. In some cities, US$1 a day would not cover the cost of a households' income-earners going to and from work. Or of the rent they have to pay for their shack or room in a tenement. For some low income communities, it would hardly cover the cost of water. And if the US$ 1 per day poverty line is valid in nations stretching from the poorest Asian and African nations to middle income nations such as Mexico and Brazil, then it should also be valid for high income nations. But how far would US$1 per person per day go in New York or London in paying for accommodation, food, health care, etc.

Most international agencies are still reluctant to recognize that many aspects of urban poverty are different from those of rural poverty; the same criteria cannot be used to define and measure them – see Box 2. The World Bank's 2001 *World Development Report* on "Attacking Poverty" refused to recognize this, despite the fact that the Bank has a larger and longer experience in urban development than most agencies and many staff knowledgeable on urban issues. None of the 'urban' characteristics in Box 2 are exclusively urban - for instance many poor rural dwellers are at risk of eviction and face serious occupational health and safety risks (from farm equipment and agricultural chemicals). Many urban areas do not have all the characteristics noted in the box. As discussed below, many households draw income from both rural and urban livelihoods. But Box 2 is a reminder that urban contexts are generally different from rural contexts and need different approaches if 'development' is to strengthen the economies of lower income nations and improve conditions for their lower income groups.

---

profile of poverty", in *Combating Poverty: the Korean Experience*, United Nations Development Programme (UNDP), Seoul.

[63] Jonsson, Åsa and David Satterthwaite (2001), *The limitations of income based-poverty lines*, Paper prepared for the Panel on Urban Population Dynamics, Committee on Population, National Research Council/National Academy of Sciences, Washington DC; Tabatabai, Hamid with Manal Fouad (1993*), The Incidence of Poverty in Developing Countries; an ILO Compendium of Data*, A World Employment Programme Study, International Labour Office, Geneva, 105 pages.

**Box 2: Characteristics of urban areas which generally distinguish them from rural areas in low and middle-income nations**[64]

***Greater health risks*** in urban areas if provision for infrastructure, services and waste management is absent – because of higher concentrations of people, enterprises, vehicles, and their wastes BUT ***greater capacity for management of health problems and reduced health risks*** when there is competent local government – because of economies of scale/proximity in provision of basic infrastructure and services, and higher capacity to pay by households and enterprises.

***A different range of occupational health and safety risks*** – e.g. exposure to industrial chemicals and wastes, dust, dangerous machinery, excessive heat. Particular groups facing high risks e.g. waste-pickers.

***Greater vulnerability to 'natural' disasters*** for many urban dwellers because the only land to which they can get access for housing is at high risk from floods, landslides, earthquakes.....

***Greater reliance on cash income*** for food, fuel, water, housing (or land on which it can be built), access to sanitation, building materials, transport and waste disposal – especially in the larger or more economically successful cities. Less reliance on access to natural resources for subsistence/livelihoods.

***Greater vulnerability to price rises or falls in income*** (as more necessities have to be paid for); less possibility of subsistence production or foraging to compensate.

***Greater reliance on housing as an economic resource***; in terms of location (poor groups often live on dangerous sites because it provides better or cheaper access to income-earning opportunities); as an asset (for owners, even if ownership is uncertain); as an income earner (renting rooms, space for household enterprise).

***Greater reliance on illegal solutions***; a higher proportion of households live on illegally occupied land, or illegal subdivisions, tapping piped water and electricity networks illegally. There is also a greater risk of eviction from one's home. The scale of forced evictions and the extent to which forced eviction is common for low-income urban dwellers is often not appreciated. A review of 40 eviction cases between 1980 and 1993 found that eight involved more than 100,000 persons; the largest was the 720,000 people evicted in Seoul, South Korea in preparation for the Olympic Games.[65] This was not a one time event; from 1960 and 1990, 5 million people were evicted from their homes in Seoul, many several times, often from sites provided after previous evictions.[66]

***More diverse, and more transient populations*** in many cities or particular city districts, which can weaken the basis for co-operative action, especially in areas with cheap rental accommodation BUT ***greater scope for joint action***, community mobilization and negotiation with government for infrastructure and services, especially within democratic structures.

***Different forms of gender discrimination*** and of children's roles in household economies. There may be less bias against girls' entry to schools and single women/widows working.

***Greater potential impact of 'good' local government*** because of economies of scale/ proximity in provision of infrastructure and basic services, and higher capacity to pay BUT ***greater potential impact of 'bad' government*** on access to employment, land and basic services through rules, regulations and institutional structures, with large potentials to impoverish if misapplied e.g. large scale evictions, harassment of hawkers and squatters, corruption, contravention of people's civil and political rights.

[64] Jonsson, Åsa and David Satterthwaite (2001), *The limitations of income based-poverty lines*, Paper prepared for the Panel on Urban Population Dynamics, Committee on Population, National Research Council/National Academy of Sciences, Washington DC.

[65] Audefroy, Joël (1994), "Eviction trends worldwide - and the role of local authorities in implementing the right to housing", *Environment and Urbanization*, Vol. 6, No. 1, April, pp. 8-24.

[66] ACHR/Asian Coalition for Housing Rights, (1989), "Evictions in Seoul, South Korea", *Environment and Urbanization*, Vol. 1, No. 1, April, pp. 89-94.

**MYTH 8: "Urban development is opposed to rural development"**

It is often assumed that urban development is opposed to rural development. Among the staff of international agencies, there are 'rural' proponents and 'urban' proponents. In most agencies, the rural proponents greatly outnumber the urban proponents and some agencies refuse to work in urban areas. In part, this reflects the fact that most poverty in low and many middle income nations is in rural areas, as noted above. But in part, it reflects an assumption that urban development is somehow detrimental to rural development. Yet much of the demand that produces rural incomes (for agricultural and forest goods) comes from urban populations and urban enterprises. Many of the higher-paying jobs in rural areas (including off-farm work) come from urban demand (for instance from tourists) or sub-contracting from urban enterprises. Successful farmers also depend on urban-based facilities and services – markets, banks, processing plants, cold-storage facilities, supply and repair of machinery and agricultural inputs..... Rural populations often depend on their local urban centre for access to hospitals, secondary schools, post-offices and most consumer goods and services – also to many of their civil and political rights (the right to vote, to police protection, to legal services.....). Many low-income households have rural and urban components to their livelihoods – for instance for rural households, one or more family member living and working in an urban centre and sending back remittances or for urban households, links with family or friends in rural areas to ensure a cheap supply of staple foods. Urban households often have children from rural families to stay while they attend secondary school. Urban households may send their young children to stay with grandparents or other family members in rural areas, especially when suffering serious economic problems.

The multiple links between rural and urban economies means that prosperous agriculture often supports rapid urban development – as can be seen in the many cities that are successful because they are in areas with high value crops. Many cities developed rapidly because of the production of coffee, tea, fruit and wine-grapes, mulberry-silk worms, and high value vegetables, herbs or medicinal plants nearby. However, the scale of the links between agricultural production and local urban development is much influenced by the land-owing structure. Very inequitable land owning structures or large plantations can mean little stimulus to local urban development as relatively few local people get good incomes (as plantation workers or agricultural labourers) and most economic linkages are with larger cities (or outside the nation). By contrast, more equitable land owning structures with lots of relatively small and prosperous farms (only a few hectares is needed for good incomes from growing high value crops) stimulates local urban centres. This can lead to many new urban enterprises developing to increase value-added – such as jams, juices or wines from local fruits (one popular brand of fruit-juice in Argentina is even named after the urban centre that is a key service centre for farmers) [67] or silk clothes from silk-mulberry.[68] If ways were found to allow farmers in low and middle income nations to get fairer prices and more access to the richest consumers (in Europe and North America) this would

[67] Manzanal, Mabel and Cesar Vapnarsky (1986), "The development of the Upper Valley of Rio Negro and its periphery within the Comahue Region, Argentina", in Jorge E. Hardoy and David Satterthwaite (Editors), *Small and Intermediate Urban Centres; their role in Regional and, and National Development in the Third World*, Hodder and Stoughton (UK) and Westview (USA).

[68] Bhooshan, B.S. (1986), "Bangalore, Mandya and Mysore Districts", in Jorge E. Hardoy and David Satterthwaite (Editors), *Small and Intermediate Urban Centres: their Role in Regional and National Development in the Third World*, John Wiley (UK) and Westview (USA), pp 131-184; Benjamin, Solomon (2000), "Governance, economic settings and poverty in Bangalore", *Environment and Urbanization*, Vol 12 No 1, pages 35-56.

stimulate much urban as well as rural development. This would be even more so if there weren't so many barriers around the world's richest consumer markets to the products derived from agricultural goods.

Many rural areas around cities do suffer from urban wastes dumped there or from loss of resources (for instance the pre-emption of water for urban consumers, the loss of agricultural land to reservoirs for hydro-electric dams with most of the electricity produced used in urban areas).[69] Many fisheries are destroyed or damaged by liquid wastes arising from urban areas – depriving very large numbers of people of their livelihoods. Urban areas often expand over rich agricultural land. But this 'rural loss' is not so much a result of urban development as a consequence of the inadequacies in local governance structures. It is hardly a 'rural' versus 'urban' issue if the air pollution causing acid rain in the countryside is also causing very serious health problems for urban populations, if the city enterprises dumping polluting wastes are also polluting city water supplies (and often exposing their workforce to very dangerous working conditions) and if most of the urban population suffer very inadequate provision for water.

It is often assumed that there is urban bias in development investments. But most urban centres – the smaller and less politically powerful ones – are generally as starved of public investments, services and subsidies as most rural areas. There may be 'large city' bias. But as noted above, looking at the levels of premature death, illness and injury among low income groups in most large cities and the lack of public provision for their needs suggests that this is not so. Perhaps 'urban bias' should be more accurately relabelled 'middle and upper income groups in a few large cities' bias.

[69] This section draws from Hardoy, Jorge E., Diana Mitlin and David Satterthwaite (2001), *Environmental Problems in an Urbanizing World: Finding Solutions for Cities in Africa, Asia and Latin America*, Earthscan Publications, London, 470 pages.

## THE LINKS BETWEEN POVERTY AND ENVIRONMENTAL DEGRADATION

### MYTH 9 : Poverty is a major cause of environmental degradation

Many international reports claim that poverty is a major cause of environmental degradation, including the World Commission on Environment and Development's report, *Our Common Future*[70] and UNEP's Geo 2000.[71] There is very little evidence that this is actually the case on a global scale either in rural areas[72] or in urban areas. In urban areas, it is overwhelmingly the consumption patterns of non-poor groups (especially high income groups) and the production and distribution systems that serve them that are responsible for most environmental degradation. The urban poor contribute very little to environmental degradation because they use so few resources and generate so few wastes.

There is a strong association between environmental health problems and urban poverty and the confusion between 'environmental health risk' and 'environmental degradation' may explain why urban poverty is thought to contribute to environmental degradation. But the two should not be confused. Most environmental health risks pose no threats to environmental degradation.

Environmental degradation is usually understood in terms of high use of scarce non-renewable resources, damage or destruction of key renewable resources (such as soils and forests) and the generation of wastes that are not easily assimilated or broken down by natural processes. So lets consider the role of urban poverty in each of these.

- **In regard to non-renewable resource use**, most of the houses in which low-income groups live (and often build for themselves) use recycled or reclaimed materials and little use of cement and other materials with a high energy input. Low income households have too few capital goods to represent much of a draw on the world's finite reserves of metals and other non-renewable resources. Most low income groups in urban areas rely on public transport (or they walk or bicycle) which means low average figures for oil consumption per person. On average, they have low levels of electricity consumption on average, not only because those who are connected use less but also because a high proportion of low income households have no electricity

[70] World Commission on Environment and Development, (1987), *Our Common Future*, Oxford University Press.

[71] Clarke, Robin (editor) (1999), *Global Environment Outlook 2000*, Earthscan Publications, London, 398 pages.

[72] The text in this section considers this in regard to the contribution of the urban poor to environmental degradation. It is also difficult to see how rural poverty is a major contributor to soil degradation, deforestation and over-use of freshwater worldwide in that most rural poverty is a result of rural people having so little access to land, forests and freshwater. Poor rural people's production and consumption patterns also mean that their average contribution to greenhouse gas emissions per person are very low. Perhaps rural poverty contributes to environmental degradation on the very small proportion of the world's forests, soils and water to which the poor have access (so it is not a major contributor to global environmental degration but a serious contributor to environmental degradation in particular places) but even this is often not apparent. For a discussion of the limited contributions of poor rural populations, see Satterthwaite, David (1998), "Cities and sustainable development: what progress since Our Common Future?", in Softing, Guri Bang, George Benneh, Kjetil Hindar, Larse Walloe and Anders Wijkman, *The Brundtland Commission's Report - 10 years*, Scandinavian University Press, Oslo, pages 27-39; Hartmann, Betsy (1998), "Population, environment and security: a new trinity", *Environment and Urbanization*, Vol.10, No.2, pages 113-127; IIED, ODI, MRAG AND WCMC(1999), *The Present Position - The Challenge in regard to protection and better management of the environment*, Background paper for the Department for International Development, IIED, London, 75 pages plus additional annexes.

supply. So they are responsible for very little of the fossil fuel use that arises from oil, coal or gas fuelled power stations (and most electricity is derived from such power stations).

- **In regard to the use of renewable resources**, low-income urban dwellers have much lower levels of consumption than middle and upper income groups. They use much less freshwater, although this is more due to inconvenient and/or expensive supplies than need or choice. They occupy much less land per person than middle and upper income groups – in extreme cases, the poorest 30-50 percent of a city's population live on only 3-5 percent of the city's land area.[73] Low income groups consume less food and generally have diets that are less energy and land intensive than higher income groups. There are cases of low income populations depleting renewable resources - for instance where low income settlements have developed around reservoirs into which they dump wastes or where low income settlements have developed on slopes which, when cleared for housing, contribute to serious soil erosion (and the clogging of drains) - but these are problems caused more by the failure of urban authorities to ensure lower income groups can find safer residential sites. In many low income countries, many urban dwellers use fuel wood or charcoal for cooking (and where needed heating) and this may contribute to deforestation - although these fears have often proved to be without foundation.[74]

- **In regard to waste generation**, low-income groups generate much less per person than middle and upper income groups and the urban poor generally have an ecologically positive role as they are the main reclaimers, re-users and recyclers of wastes from industries, workshops and wealthier households. It is likely to be middle and upper income groups who consume most of the goods whose fabrication generates most toxic or otherwise hazardous wastes or persistent chemicals whose rising concentration within the environment has worrying ecological and health implications. There are small-scale urban enterprises (including illegal or informal enterprises) which cause serious local environmental problems - for instance contaminating local water sources - but their contribution to city-wide pollution problems relative to other groups is usually small. In addition, one cannot ascribe the pollution caused by small scale enterprises to the urban poor when many such enterprises are owned by middle or upper income groups.

- **In regard to greenhouse gas emissions**, on average, low-income groups generate much lower levels per person than middle and upper income groups as their total use of fossil fuels, of electricity derived from fossil fuelled power stations and of goods or services with high fossil-fuel inputs in their fabrication and use is so much lower. The only exception may be for some low income households in urban areas where there is a need for space heating for parts of the year and they use biomass fuels or coal in inefficient stoves or fires. Such households may have above average per capita contributions to carbon dioxide emissions (and also to urban air pollution) but these are exceptional cases.

Box 3 discusses a new index for assessing each person's contribution to ecological unsustainability.

[73] Alder, Graham (1995), "Tackling poverty in Nairobi's informal settlements: developing an institutional strategy", *Environment and Urbanization*, Vol.7, No.2, October, pages 85-107.
[74] See for instance Leach, Gerald and Robin Mearns (1989*), Beyond the Woodfuel Crisis - People, Land and Trees in Africa*, Earthscan Publications, London, 309 pages.

**Box 3: The Trump Index**

An index is needed to assess the contribution of different people and different lifestyles to ecological unsustainability. The consumption pattern of one individual with a high consumption lifestyle could be used as a benchmark – for instance the consumption pattern of Donald Trump. One wonders how the use of non-renewable resources and generation of ecologically damaging wastes that arise from his lifestyle over the last ten years would compare with those of low-income urban dwellers in (for instance) India over the same period. One Trump's contribution to ecological unsustainability being comparable to that of many millions of low-income Indian urban dwellers?

If data were available to construct an accurate Trump index, it would greatly reinforce the point that it is the high consumption lifestyles of most high income and many middle income groups and the production systems that serve (and stimulate) their demands that threatens ecological sustainability. It is not each persons' level of resource use and waste generation that defines their contribution to ecological unsustainability but the level of use of particular resources and the level of generation of particular wastes. The Trump Index would need to take this into account. For instance, for food consumption, it is not so much the quantity of food eaten that needs to be considered but the ecological costs of producing and delivering it - including the amount of land and the quantity of energy and ecologically damaging chemicals used to do so. The lentils grown and eaten by a low-income farmer in India or the maize grown by an urban household in Africa have a tiny impact compared to beef from feedlot raised cattle. For resource use in general, an accurate index of contributions to ecological unsustainability would need to measure the extent to which each person's consumption was products from eco-systems that were being degraded or threatened by over-exploitation or products whose fabrication had serious ecological implications. For waste generation, it would need to reflect the large differences in the ecological impact of different wastes - for instance taking due note of those wastes which contribute most to ecological damage or disruption of global systems. Many low-income households in Africa, Asia and Latin America would hardly figure at all on waste generation as they generate so little waste (in part because of low consumption levels, in part because of high levels of re-use or recycling) and most of the waste they do generate is biodegradable.

One particular myth on the relationship between environment and poverty is that "The global water crisis with increasing number of places facing serious water stress, is one reason why provision for water and sanitation is so bad."[75] But urban populations in low and middle income countries facing water stress are generally better served with water and sanitation than in countries not facing water stress.[76] Many cities with the worst provision for water and sanitation have no water shortages; it is the lack of investment in water and sanitation and the inadequacies in local government that explain why provision is so poor. In addition, the amount of water needed to ensure every urban dweller has enough is a very small proportion of total water use.[77]

As is almost always the case, there are important exceptions to these generalizations. Many cities face serious water shortages – but the literature on urban problems often focuses on cases and then implies that they are representative of all cities. The fact that many Algerian cities and some South African cities are facing serious water shortages does not mean that this is so for all urban centres in Africa. Any general discussion of urban problems is complicated by the great diversity of circumstances among the 50,000 or so urban centres around the world. Accurate generalisations are not easily found. Problems of cities facing water scarcity needs attention. But what is perhaps more remarkable than 'water-scarce' cities is the number of cities that have increased their population more than fifty fold in the last century (and their draw on

[75] Hinrichsen, D., B. Robey and U.D. Upadhyay (1998), *Solutions for a Water-Short World*, Johns Hopkins School of Public Health, Population Information Program, Baltimore.

[76] The analysis was done by my colleague Gordon McGranahan and will be published in UN-Habitat, *The State of Water and Sanitation in Cities (*provisional title), Earthscan Publications, due for publication in 2003.

[77] UN-Habitat, *The State of Water and Sanitation in Cities (*provisional title), Earthscan Publications, due for publication in 2003.

freshwater resources much more than fifty fold) and still have not run out of water. Even some of the world's largest cities still meet their water needs from local sources – perhaps not surprisingly because many important cities developed beside large rivers because these provided cheap readily available water supplies and were important for inter-city and international transport. Again, this document is not claiming that major cities in low and middle income nations have no water problems. In most such cities, groundwater is being depleted and both ground and surface waters polluted. But the reasons are not so much to do with lack of water as with poor governance.

**MYTH 10: Large and rapidly growing cities have the worst environmental problems**

Large cities rarely have the worst urban environments. In terms of environmental health, they usually have better standards than most other urban centres in their nation (and most rural areas). Well governed cities have among the world's best quality of life. There are obvious reasons for why this is so. By concentrating people, enterprises and their wastes - and increasingly motor vehicles - cities can be (and often are) very hazardous places to live and work. As the World Health Organization recognizes, many of the world's most dangerous and life-threatening environments are in urban areas.[78] It is often assumed that cities' environmental problems are made worse by the number of people and their high concentration. But this same concentration provides many potential opportunities:

■ ECONOMIES OF SCALE AND PROXIMITY FOR INFRASTRUCTURE AND SERVICES: The concentration of population and enterprises in urban areas greatly reduces the unit costs of providing each building with piped water, good sanitation, drains, all-weather roads and footpaths and electricity. This concentration greatly reduces unit costs for many services such as garbage collection, public transport, health care and the provision of schools, pre-school centres and child development centres. It reduces the cost of providing emergency services - for instance fire-fighting and emergency medical services whose rapid response to acute illness or injury can greatly reduce the health burden for the people affected. But even in tenement areas and informal settlements with high population densities, the densities are rarely too high to pose problems for the cost-effective provision of infrastructure and services, especially if provision for these had been made in advance of the settlement's development.[79] What is often more expensive and time consuming is installing infrastructure and services in densely populated illegal or informal settlements, after they have developed. These often grew without sufficient space left for access roads, public space and community facilities and without a site plan which makes it easier and cheaper to install piped water, drains and other infrastructure. But this high cost is not because of high population densities but because provision for infrastructure and services of adequate standard for such population densities was not made prior to the settlement's development. Even so, there are many examples of community-directed programmes that installed good quality infrastructure and services within existing high density settlements at relatively low cost.[80] In addition, many 'informal settlements' are planned by their inhabitants to ensure there is space for infrastructure and to prevent their settlement being seen as a 'shanty town'.

[78] WHO (1999), "Creating healthy cities in the 21st Century", Chapter 6 in David Satterthwaite (editor), *The Earthscan Reader on Sustainable Cities*, Earthscan Publications, London, 472 pages.

[79] Many squatter settlements are densely populated, but in part this is due to the fact that so few of the buildings are more than one storey high. In terms of the number of residents per hectare, they often have a lower density than many high quality residential areas in European cities with 3-5 storey terraced housing. If squatters can obtain legal tenure, it is often possible to develop their shelters into two or three storey dwellings (which can greatly reduce overcrowding within the housing stock) while also making it easier to find the space to improve access roads or paths.

[80] Hardoy, Jorge E., Diana Mitlin and David Satterthwaite (2001), *Environmental Problems in an Urbanizing World: Finding Solutions for Cities in Africa, Asia and Latin America*, Earthscan Publications, London, 470 pages.

**Box 4: Environmental economies of urbanization**

In general, the costs per household of installing most forms of infrastructure and supplying most kinds of service fall with increasing population density - i.e. economies of proximity. For instance, the cost of installing pipes for water, sewers and drains and for building roads is cheaper because less pipe (and less digging to install it) or less road is needed per house served. For many forms of infrastructure and services, unit costs fall as larger populations are served - for instance, for water treatment plants, schools and many medical services. Providing more specialized medical and educational services, including those for particularly vulnerable or disadvantaged groups, can also become cheaper per person served with larger population concentrations. Higher capital expenditures per person for infrastructure and service provision in urban areas is more a reflection of higher quality provision than higher costs; this only becomes a public expenditure bias towards urban areas if the beneficiaries do not pay the full cost. However, increasing population density can also require that higher standards have to be provided - for instance, well designed and maintained pit latrines can often provide hygienic and convenient forms of sanitation in rural settlements and in urban areas where population densities are not too high - but more expensive systems are usually needed in higher density or larger urban settlements. The costs of infrastructure and services may also rise with city size, if the costs of acquiring land for their provision is a significant part of the total cost. So too will labour costs, if the costs of housing, transport and other necessities rise with city size (which they often do). The need for more complex and sophisticated pollution controls may also rise with increasing population size. For instance, effluents from sewers and storm drains from a small urban centre usually do not need as complex and expensive a treatment system as those from larger cities. There are also the costs to the public authorities of formulating and implementing environmental legislation which may rise with city size.[81]

In discussing the 'economies' of scale, proximity and agglomeration, it is important to be clear in regard to who benefits (and who does not). Private enterprises benefit from many economies of scale, proximity and agglomeration in urban areas; indeed, one major reason why they choose to concentrate in urban areas is because it lowers their production costs (including infrastructure and finance and access to cheaper and more diverse services and labour). But part of this may arise from the fact that they negotiate highly subsidized infrastructure and services or other subsidies. Part of their cost reductions often arise from their capacity to pay below subsistence wages or to externalize costs - to the detriment of their workforce (with sub-standard occupational health and safety standards) or wider populations (through inadequate pollution control and waste management).

■ REDUCING RISKS FROM NATURAL DISASTERS: Economies of scale or proximity exist for many of the measures that reduce risks from most natural disasters - for instance in the per capita cost of measures to lessen the risks (e.g. better watershed management or drainage reducing the scale of floods), reduce the risks when they occur (e.g. buildings better able to withstand floods or earthquakes and early-warning systems to allow special measures to be taken) and respond rapidly and effectively when a disaster is imminent or happens.[82] There is generally a greater capacity among city dwellers to help pay for such measures, if they are made aware of the risks and all efforts are made to keep down costs. However, in the absence of good practice, cities can be particularly hazardous as large (usually low income) settlements develop in hazardous sites (e.g. on flood plains or slopes at risk from landslide) because no other sites are available to them and as the needed prevention, mitigation and response measures are not taken.

■ WATER RE-USE OR RECYCLING: The close proximity of so many water consumers within cities gives greater scope for recycling or directly reusing waste waters. The techniques for greatly reducing the use of freshwater in city homes and

[81] Linn, Johannes F. (1982), "The costs of urbanization in developing countries", *Economic Development and Cultural Change*, Vol 30, No. 3, pp. 625-648.
[82] International Federation of Red Cross and Red Crescent Societies (1998), *World Disasters Report 1998*, Oxford University Press, Oxford.

enterprises are well-known, where freshwater resources are scarce.[83] However, it is agriculture, not cities, that dominates the use of freshwater in most nations.[84] Many nations also have a long urban tradition of making efficient use of rainwater or of storing it for use during dry seasons or periods which contemporary patterns of water management have ignored.[85]

■ LAND: Cities concentrate populations in ways that usually reduce the demand for land relative to population. Although valuable agricultural land is being lost to urban expansion, in most nations, the area taken up by cities and towns is less than one per cent of their total surface area. The world's current urban population of around 3 billion people would fit into an area of 200,000 square kilometres - roughly the size of Senegal or Oman - at densities similar to those of high class, much valued inner city residential areas in European cities (for instance Chelsea in London).[86] Some of the world's most desirable (and expensive) residential areas have high densities - including densities that suburban developers and municipal authorities regard as 'too high' even though many such 'high density' areas also have good provision for parks, a diverse employment structure and good cultural facilities. The fact that cities also concentrate demand for fresh fruit, vegetables, fish and dairy products also provides considerable potential for their production in the area around a city - especially if their promotion is integrated with a city-wide and region-wide plan to protect watersheds, control urban sprawl, encourage urban or peri-urban agriculture and ensure adequate provision for open space.[87] In many cities, this would support existing practices as a significant proportion of the food consumed by city inhabitants is grown within city boundaries or in areas immediately adjacent to the built up areas - often with city wastes also used to fertilize or condition the soil.

■ REDUCED AUTOMOBILE USE: Cities have great potential for limiting the use of motor vehicles, which also means reducing the fossil fuel consumption, greenhouse gas emissions and air pollution that their use implies. This might sound contradictory, since most of the world's largest cities have serious problems with congestion and motor-vehicle generated air pollution. But cities ensure that many more trips can be made through walking or bicycling. They also reduce travel distances - which is one of the reasons why cities developed. They make possible a much greater use of public transport and make a high quality service economically feasible. Thus, although cities tend to be associated with a high level of private automobile use, cities and urban systems also represent the greatest potential for allowing their inhabitants quick and cheap access to a great range of locations, without the need to use private automobiles.

■ POLLUTION CONTROL AND MANAGEMENT: Industrial concentration in cities lowers the cost of enforcing regulations on environmental and occupational health and

[83] The Water Program (1991), *Water Efficiency: A Resource for Utility Managers, Community Planners and other Decision Makers,* Rocky Mountain Institute, Snowmass, 114 pages.
[84] See Table 22.1, pages 330-331 in World Resources Institute (1990), *World Resources 1990-91: a Guide to the Global Environment*, Oxford University Press, Oxford, 383 pages.
[85] See for instance Agarwal, Anil and Sunita Narain (1997), *Dying Wisdom: Rise, Fall and Potential of India's Traditional Water-harvesting Systems*, Centre for Science and Environment, New Delhi, 404 pages.
[86] The example of Chelsea was chosen because it combines very high quality housing, very little of which is in high rises (and most of which is pre-20th century) with a diverse economic base, large amounts of open space and among the best educational and cultural facilities in London. With a population density of around 120 persons per hectare for the whole district (and with three to four times this density in some of its more desirable residential districts), it is an example of how relatively high density need not imply overcrowding or poor quality living environments.
[87] Smit, Jac, Annu Ratta and Joe Nasr (1996), *Urban Agriculture: Food, Jobs and Sustainable Cities*, Publication Series for Habitat II, Volume One, UNDP, New York, 302 pages.

pollution control. It lowers the cost of many specialized services and waste-handling facilities - including those that reduce waste levels or which recover materials from waste streams for re-use or recycling.

■ FUNDING ENVIRONMENTAL MANAGEMENT: The concentration of households and enterprises in cities makes it easier for public authorities to collect taxes and charges for public services while in prosperous cities, there is a larger revenue base, a larger demand and a larger capacity to pay for services.

■ GOVERNANCE: The concentration of people in cities can make easier their full involvement in electing governments at local and city level and in taking an active part in decisions and actions within their own district or neighbourhood.

■ GREENHOUSE GAS EMISSIONS: In most nations, a high (and growing) proportion of their greenhouse gas emissions are released within cities. If the scale of such emissions needs to be reduced to limit climate change and its deleterious consequences, some of the most cost-effective means will be found in its cities.

The lack of effective city and municipal governance explains the serious environmental problems evident in so many cities – serious environmental health problems, serious problems of environmental degradation. These environmental problems are not inherent to cities. Indeed, for most people, cities provide the best possibility of combining high standards of living and quality of life with less resource-intensive, pollution-intensive consumption patterns. There is also considerable potential for employment generation in most of the measures to ensure more healthy, resource-conserving, waste minimizing cities.[88] There is also convincing evidence that robust economies and a high quality of life can be de-linked from growing resource use, pollution and waste.[89]

■ RAPIDLY GROWING CITIES: The environmental problems that often accompany rapid urban growth are not inherent to cities or to rapid urban expansion. Some cities that have grown rapidly in the last 50 years have avoided most of the problems noted above. For instance, Curitiba and Porto Alegre in Brazil are among the world's most rapidly growing cities in recent decades yet have high quality living environments and innovative environmental policies. One of these is Curitiba's much admired public transport system, based on express busways and feeder buses,[90] which has encouraged comparable systems in many other cities. Citizens in Porto Alegre enjoy a life expectancy and many indicators of environmental quality that are comparable to those in West European cities – and also a city government that is well known for its commitment to supporting citizen participation, greater government accountability and good public health and environmental management.[91]

[88] Hardoy, Jorge E., Diana Mitlin and David Satterthwaite (2001), *Environmental Problems in an Urbanizing World: Finding Solutions for Cities in Africa, Asia and Latin America*, Earthscan Publications, London, 470 pages.
[89] Von Weizsäcker, Ernst, Amory B. Lovins and L. Hunter Lovins (1997*), Factor Four:Doubling Wealth, Halving Resource Use*, Earthscan, London, 322 pages.
[90] Rabinovitch, Jonas (1992), "Curitiba: towards sustainable urban development", *Environment and Urbanisation*, Vol. 4, No 2, October, pp. 62-77.
[91] Menegat, Rualdo (2002), "Environmental management in Porto Alegre", *Environment and Urbanisation*, Vol.14, No.2

## THE IMPORTANCE OF LOCALLY DETERMINED SOLUTIONS

Considerations of urban problems need to be turned from (often inaccurate) generalizations about the problems to more consideration of local governance structures that can address them and the kinds of national and international conventions or agreements that encourage local action to address not only local problems but contribute to the solution of global problems. It is important from a development perspective and from an ecological perspective that improvements in urban areas are rooted in local realities. Here too, there are some powerful myths about where action is most needed.

**MYTH 11 (semi-myth): "New national and global policies and institutions are needed to address urban problems"**

Many of the discussions about how to deal with urban problems (or environmental problems in general) focus on national strategies and better governance nationally. But most urban problems need local institutions to address them and to do so in ways that are accountable to local populations. In part, this is because of the phenomenal diversity between urban centres, which makes any generalised solutions invalid or of limited effectiveness. While tables that have urban population statistics for different nations may seem to show broad trends towards increasingly urbanised societies in much of the world, the scale and nature of such trends and their underlying causes differ greatly from country to country. There are also differences between regions and cities in the same country and over time. Even if globalisation and the legal and institutional changes it brings are an increasing influence in most urban centres, it is important not to forget how unique social, economic, political and demographic structures are influencing urban change within each location. Or the different resource bases in and around each city. Or how different the impact of globalisation is on each city.[92] Or how undemocratic it is to impose 'solutions' that are not supported and developed with local populations.

Effective local governance is more important in the lives of most urban dwellers than good national or global governance,[93] although to be brought about it often requires changes in government at provincial/state, national and global levels. National governments and international agencies cannot meet their 'global' responsibilities without effective local government institutions as partners. For instance, how can biodiversity can be protected, malaria and other diseases reduced and greenhouse gas emissions kept down, without effective and representative local governments? Most global environmental problems will only be resolved through the aggregate impact of actions undertaken by local governments – yet local governments are rarely given much consideration in global conferences and global action plans. Given the key role of local governments in ensuring that both environment and development goals are met, it is surprising to find so little recognition of local governance in most discussions of sustainable development or deliberations of how to meet global targets such as the Millennium Development Goals.[94] The 'big' issues such as greater equity, greater justice (and protecting human rights), protecting key resources, reducing greenhouse gases, achieving greater democracy, reducing poverty, and managing globalization are often discussed, without considering the local institutions needed to ensure progress in these areas.

In Europe and North America, we have become so used to a web of local institutions that serve, support and protect us that we forget their importance. We do not question the fact that we get water of drinking quality piped to our homes, and sanitation and electricity 24 hours a day and that garbage is collected regularly - with the costs

[92] See the special issue of *Environment and Urbanisation* on Globalization and Cities (Vol. 14, No 1, April 2002).

[93] Satterthwaite, David (2002), *Reducing Urban Poverty: Some Lessons From Experience*, Poverty Reduction in Urban Areas Series Working Paper 11, IIED, London, 40 pages.

[94] The Millennium Development Goals grew out of the agreements and resolutions that most of the world's governments endorsed at world conferences organized by the United Nations in the past decade; they set explicit targets related to expanding education and basic services, reducing poverty, reducing gender inequality, improving health (especially child and maternal health) and improved environmental management and many international agencies are now using these to focus their efforts and assess progress. See http://www.developmentgoals.org/About_the_goals.htm

representing a very small part of our income. There are schools and health centres to which even the lowest-income households have access. There are emergency services available to all, when needed. We have local politicians through whom we can make demands and voice grievances. Legislation and courts protect us from eviction, discrimination, exploitation and pollution. There are safety nets for those of us who lose our jobs or fall sick - and pensions for our retirement. There are lawyers, ombudsmen, consumer groups and watchdogs to whom we can turn if we feel that we have been cheated. And all of this is possible because of local government institutions overseen by democratic structures. Even if some services are provided by private companies or non-profit institutions, the framework for provision and quality control is provided by local governments or local offices of national or provincial governments. While coverage for some services may be sub-standard and some groups ill-served, the broad web of provision adequately serves the vast majority of the population.

The problems associated with urban growth in low and middle-income nations can only be addressed through the development of a comparable web of accountable local institutions in cities and smaller urban centres. Such institutions are also needed to ensure that the investments and interventions of national governments, international agencies and private companies recognise, respond to and are accountable to local needs. This certainly needs national action but much of this is to enable and support competent, effective, accountable local government – and to ensure a more equitable division of public resources among local governments.

**MYTH 12: "National governments and international agencies must target their policies so as to reach those most in need in urban areas"**

There are two contrasting ways to address urban poverty. One is directed by national governments and international agencies, designed by 'experts' drawing on official data and official definitions of 'who is poor' and 'who is in need' to identify 'target groups' and design policies to meet their needs. For most international agencies, these 'experts' are drawn primarily from high-income nations. The other way to address urban poverty is to make resources available to respond to and support local democratic processes in which the rights of all citizens to basic services, the rule of law and accountable institutions are stressed. Inevitably, all government policies are influenced in part by experts and in part by citizen pressures - but the tendency in the past has been to favour the expert driven top down approach.

One of the difficulties with expert-led 'solutions' is that most experts lack knowledge about the specifics of each city or urban neighbourhood and most also lack engagement with the local population. Foreign experts often cannot speak the language of those living in the settlement where their recommendations will be implemented. Their recommendations are also biased by their experience in other nations or by their reading of other 'success stories'. It has also become fashionable for 'best practices' to be identified, documented and then touted as lessons that can be applied in other locations. What worked in the informal settlements in Karachi is suddenly assumed to be relevant to Ouagadougou or Port-au-Prince – or other cities in Pakistan.[95]

Ironically, many of these 'success stories' developed locally, without any input from 'international experts' and often with little involvement of national governments – the locally generated development plan in Ilo, Peru,[96] the local agenda 21 developed in Manizales, Colombia (although this received support from the national government)[97], the civil-society driven governance system in Porto Alegre,[98] the community-managed sewer construction system in Karachi[99] (now hailed as a success but initially condemned as the wrong approach by external experts),[100] the community-managed resettlement programme in Mumbai[101] and the community-managed toilets in Pune and Mumbai,[102] the various housing projects developed by the South African Homeless

[95] See Alimuddin, Salim Arif Hasan and Asiya Sadiq (2000*), Community driven water and sanitation: The Work of the Anjuman Samaji Behbood and the Larger Faisalabad Context*, IIED Working Paper 7 on Poverty Reduction in Urban Areas, IIED, London, 84 pages for a discussion of how the successful community-driven sewer construction programme in Orangi, Karachi, had to be modified to make it effective in the city of Faisalabad.

[96] López Follegatti, Jose Luis (1999), "Ilo: a city in transformation", *Environment and Urbanization*, Vol.11, No.2, October, pages 181-202.

[97] Velasquez, Luz Stella (1998), "Agenda 21; a form of joint environmental management in Manizales, Colombia", *Environment and Urbanization*, Vol.10, No.2, pages 9-36.

[98] Menegat, Rualdo (2002), "Environmental management in Porto Alegre", *Environment and Urbanisation*, Vol.14, No.2; Souza, Celina (2001), "Participatory budgeting in Brazilian cities: limits and possibilities in building democratic institutions", *Environment and Urbanization*, Vol 13, No 1, pages 159-184.

[99] Orangi Pilot Project (1995), NGO Profile: Orangi Pilot Project, *Environment and Urbanization*, Vol.7, No.2, October, pp. 227-236; Zaidi, S Akbar (2000), *Transforming Urban Settlements: the Orangi Pilot Project's low-cost sanitation model*, City Press, Karachi, 121 pages.

[100] Orangi Pilot Project 1995, op cit.

[101] Patel, Sheela, Celine d'Cruz and Sundar Burra (2002), "Beyond evictions in a global city; people-managed resettlement in Mumbai", *Environment and Urbanization*, Vol. 14, No. 1, pages 159-172.

[102] Burra, Sundar and Sheela Patel (2002), *Community toilets in Pune and other Indian Cities*, PLA Notes; Special Issue on Participatory Governance, IIED, London.

People's Federation[103]. Many of the more innovative and successful donor-funded urban initiatives have been the result of these donors channelling their funding through local institutions and allowing local decisions to determine priorities (with particular attention to ensuring that low income groups were involved in these decisions).

One of the most hopeful signs for poverty reduction in urban areas is the growing number of nations where there are representative organizations and federations formed by the urban poor themselves. These have demonstrated that they can articulate their needs and negotiate for them with governments and international agencies and also develop their own solutions, using these as examples to show what can be achieved by locally-generated, locally-controlled 'solutions.' In several cities in South Africa, there are many settlements developed by the Homeless People's Federation that have far better quality housing than that provided by government programmes, yet cost no more.[104] In several cities in India, the alliance formed between slum dwellers federations, *Mahila Milan* (cooperatives formed by women slum or pavement dwellers) and a local NGO SPARC have produced homes, neighbourhoods and community toilets that are far cheaper and better quality than most government schemes. Comparable innovations have been demonstrated by federations of the urban poor in Cambodia, Namibia, Philippines, Thailand and Zimbabwe and are emerging in several more nations.[105] These federations have even formed their own international umbrella organization, Shack Dwellers International, to increase their capacity to change the policies of international agencies and to support each other's efforts.[106]

Thus, there is a need for 'deep democracy'[107] which includes local institutions that are representative of local populations and inclusive, in the sense of ensuring that everyone's views are represented. Such institutions must have the knowledge and capacity to ensure sustainable use of local resources and to ensure that basic infrastructure and services are available to all. They need the power and the legal basis to allow them to negotiate effectively with powerful external agencies or companies - even to question the proposals they put forward - and to hold these agencies or companies to account if they contravene agreements. Without such institutions, major projects or investments are profoundly undemocratic because the populations in the areas where these take place have little power to influence them. One structural difficulty that all the aid agencies and international development banks face is that they have no formal channels through which the views of their 'clients' (low-income groups in 'recipient nations') can influence their decisions. But there are some important exceptions. The UK Government's Department for International Development has provided support to local funds for community and municipal initiatives in two cities in Uganda and two cities in Zambia where decisions are made locally about what is funded – with such decisions accountable to and transparent to local populations.[108]

---

[103] Baumann, Ted, Joel Bolnick and Diana Mitlin (2001), *The Age of Cities and Organizations of the Urban Poor: The Work of the South African Homeless People's Federation and the People's Dialogue on Land and Shelter*, IIED Working Paper 2 on Poverty Reduction in Urban Areas, IIED, London.

[104] Baumann, Bolnick and Mitlin 2001, op. cit.

[105] See *Environment and Urbanisation* Vol. 13, No 2 (October 2001) for more details of the work of these different federations.

[106] See *Environment and Urbanisation* Vol. 13, No 2 (October 2001) for more details; also http://www.dialogue.org.za/

[107] Appadurai, Arjun (2001), "Deep Democracy: Urban Governmentality and the Horizon of Politics", *Environment and Urbanization*, Vol 13 No 2, pages 23-43.

[108] Kiyaga-Nsubuga, John, Raphael Magyezi, Sarah O'Brien and Mark Sheldrake (2001), "Hope for the urban poor: DFID city community challenge (C3) fund pilot in Kampala and Jinja, Uganda", *Environment and Urbanization*, Vol 13 No 1, pages 115-124; also Satterthwaite, David (2002), "Local funds and their

The Swedish International Development Cooperation Agency (Sida) has supported a range of local institutions in Central America that have helped improve housing conditions and basic services for large numbers of low income urban households at low unit costs and with many costs recovered to allow further investment in urban improvement elsewhere.[109] Some governments have also adopted this model – for instance the Urban Poor Fund set up by the government of Thailand in 1992 to support community-directed improvement programmes.[110]

potential to allow donor agencies to support community development and poverty reduction", *Environment and Urbanization*, Vol. 14, No. 1, pages 179-188.

[109] Sida (1997), "Seeking more effective and sustainable support to improving housing and living conditions for low income households in urban areas: Sida's initiatives in Costa Rica, Chile and Nicaragua", Environment and Urbanization, Vol.9, No.2, pages 213-231 and Stein, Alfredo (2001), "Participation and sustainability in social projects: the experience of the Local Development Programme (PRODEL) in Nicaragua", *Environment and Urbanization*, Vol 13 No 1, pages 11-35.

[110] UCDO (2000), *UCDO (Urban Community Development Office*) Update No 2, Urban Community Development Office, Bangkok, 32 pages.

## AFTERWORD: A HEALTH WARNING FOR GENERALIZERS

The text in this short paper could easily be used to construct new (potentially dangerous) myths. This paper is not suggesting that less attention be given to rural poverty reduction. It is saying that the scale and depth of urban poverty is constantly under-estimated and that it needs more attention. It also stresses that many characteristics of deprivation in urban areas are different from those in rural areas so effective responses will have to differ.

This paper does not say that rapid urban growth is not happening or not causing problems; it suggests that it is less rapid and less concentrated in very large cities and that the links between urbanization and stronger, more robust economies are often ignored.

This document does not say that cities are not causing serious environmental problems; it says that an increasingly urbanized world need not imply insuperable environmental problems.

The document's stress on the need for far more support to 'good local governance' does not imply that that 'good national governance' and 'good global governance' are not important. It suggests key roles for these higher levels of governance in providing frameworks and support for effective, accountable, transparent local governance – which in turn can deliver on national and global targets.

There are many other myths about urban change that this paper has not covered – including many generalizations about migrants (which fail to recognize their diversity in terms of where they came from, who they are, and what they bring to urban areas), about 'secondary cities' (which are too diverse in size, economic base and population growth rates to permit generalizations) and about peri-urban areas (for instance the assumption that most poorer groups live in peri-urban areas). In the end, this document is not so much about proposing new generalizations as about questioning the validity of existing generalizations. Perhaps more thought needs to be given as to why so many inaccurate generalizations are generated. In part, it is because we have to hand so many tables which list all the world's nations with lots of statistics. One can get most of these tables electronically and it is very easy to use the data to produce charts or graphs comparing nations with no knowledge of these nations or of the accuracy of the data. We can compare nations' levels of urbanization against their per capita incomes – without recognizing that many of the statistics on levels of urbanization are guesses or projections from old data because many nations have had no recent census. We compare city populations or population growth rates without recognizing the many different ways in which city boundaries are defined – which limits the validity of these comparisons. London, Los Angeles, Tokyo, Buenos Aires or Mexico City can be correctly stated as having populations that are declining or expanding in recent decades, depending on which city boundaries are used. And even if the statistics are accurate, what does it tell us when we find that two cities have comparable population growth rates? One may be growing primarily from rapid in-migration because of a prosperous economy and a low rate of natural increase. Another may be growing primarily because of high rates of natural increase or rapid flows of refugees fleeing wars or civil strife.

There is now a large literature on how urban trends in particular cities or city districts or small towns are influenced by a vast range of local, regional and often global factors.[111] But the generalizers ignore this literature because it does not lend itself to short summaries or easy generalizations. This creates a large gulf between the literature on the specifics and the general literature – yet the general literature should be a summary of the findings of the more specific literature.

No-one knows how many urban centres there are around the world, but as noted earlier, they must number over 50,000. They range in size from small market towns or district headquarters with a few thousand (or in some nations a few hundred) inhabitants to metropolitan regions with tens of millions of inhabitants. They include among them the best and the worst quality of lives, the highest and the lowest levels of resource use, waste and greenhouse gas emissions per person. From this vast and diverse range of urban centres, some can be selected that are growing very rapidly – but it is as easy to find a sample that are not growing rapidly or that are losing population, even in Asia and Latin America. (Probably in Africa too – although the statistical base on the population of individual urban centres over time is very weak in most nations). We do know that well-functioning and well-governed urban centres and urban systems are very important for strong economies, better service provision (water, sanitation, health care, schools.....) and good environmental management – but the means to move towards this must be rooted and determined locally – with much space given to democratic pressures. The motive for preparing this text was the myths, misconceptions and inaccuracies that abound in the literature about urban development or in more general literature that includes some consideration of urban development.[112] Please do not use this document to produce more generalizations, other than the importance of rooting responses to urban problems in the needs, rights and priorities of those who suffer most from current inactions and inappropriate policies.

[111] One of the main reasons we started the journal *Environment and Urbanization* in 1989 was to provide more grounded, detailed, locally based understandings of urban change.

[112] It would be unkind to give references for this but my research programme is constantly sent drafts of documents about urban change by international agencies or journalists that are full of the myths noted above.