

Urbanization and sustainable development

Some notes for the presentation by David Satterthwaite for the UN Population Division

I fear I must begin this presentation with a confession. A rather embarrassing confession. This is: I like cities. This is not something that is usually said in development circles where cities are seen as problems. Why do I like cities – because I live well in them, I enjoy their vitality, the history they concentrate, the diverse goods and services they provide me with, the music, the theatre – and in the last year I have been in Buenos Aires, Nairobi, Karachi, Mumbai, Bhubaneswar, Jaipur and Cape Town, as well as London, New York, Copenhagen and Delft. Urbanization – the increasing proportion of a nation's population living and working in urban areas - is so often still seen as a problem. Large cities are seen as a problem.

But urbanization is strongly associated with economic success:

- All the richest nations are highly urbanized; all the poorest nations are predominantly rural
- All the most successful economies in Africa, Asia and Latin America are urbanizing rapidly
- Almost all the least successful economies are not urbanizing or urbanizing very slowly

Urbanization also brings

- very strong developmental advantages – for instance for lowering unit costs of providing piped water, sewers, drains, health care, education, emergency services.....
- some strong environmental advantages – for keeping down energy use, for cutting wastes, for controlling pollution, for cutting greenhouse gas emissions.

So why in survey after survey do so many governments want to stop or slow urbanization? Why do they see urbanization as a problem? And why do cities get blamed for so many problems?

One mayor of a successful city in Africa was asked what would help him most to support local development and he said – keep people in rural areas.

Why is urbanization seen as a constraint to sustainable development?

What I would like to explore in this presentation is the link between urbanization and sustainable development.

Sustainable development is understood as having a strong development component – meeting people's needs – and a strong environmental component – without compromising the ability of future generations to meet their needs. This definition comes from the Brundtland Commission's report Our Common Future.

Urbanization and economic growth

Urbanization follows economic growth. People concentrate in urban areas because this is where new investment and new jobs are created. So in many ways, urbanization is a reflection of economic success. It reflects the increasing proportion of GDP generated by industry and services – and the increasing proportion of the labour force working in industry and services. Here are some graphs showing this association. Look at how closely the level of urbanization tracks the proportion of people working in industry and services and the proportion of GDP generated by industry and services.

(Graphs to be shown here)

This is evident for all low- and middle-income nations; also for sub-Saharan Africa. For individual nations.

We can also see this association between urbanization and economic success for individual cities. The large successful, rapidly growing cities concentrate a much higher proportion of a nation's GDP than of its population – as shown in the Table that I borrowed from a paper by my friend Richard Stren.

City	City Population	Percentage of the national population living in that city	Percentage of the nation's GDP generated by that city
New York	18.7 m	6.2	9
Mexico City	19.4 m	18.1	41
Sao Paulo	18.3 m	9.8	28
Shanghai	14.5 m	1.1	6
Mumbai	18.2 m	1.7	16

Are there exceptions? Yes, there are a few exceptions. Cities whose population has grown very rapidly because of an influx of people fleeing wars, civil unrest, famine and disaster. But these are exceptions. There are also examples of nations that urbanized without economic growth – but not many. And most of these exceptions are from African nations after gaining political independence. But this was not a bad thing because it was when apartheid like controls on the rights of Africans to live and work in urban areas were removed. So Dar es Salaam may have grown very very rapidly – but a lot of this growth was women and children coming to Dar to join their husbands which they had not been allowed to do previously.

Another piece of evidence showing the association between urbanization and economic growth is that most of the world's largest cities are in the world's largest economies; there is a strong economic logic to where large cities have developed.

(Graphic to be shown on this)

(Graphic to show the location of the world's fastest growing large cities)

But urbanization does not simply follow economic growth, it also serves to support it. New enterprises concentrate in cities because they benefit from many economies of scale for their own operations – and benefit from all the other firms and services and skilled people located there. For governments, its also a lot cheaper to provide the infrastructure and services as there are also large economies of scale or proximity for providing roads, piped water supplies, sewers, drains, electricity etc.

I have a lot of sympathy for the African mayor who looked with horror at all the people moving to his city – but from a national perspective, there are huge developmental advantages to this as it is cheaper, quicker and easier to reach this rapidly expanding population with good quality infrastructure and services.

Does this imply an ever increasing concentration of people and enterprises in very large cities and poverty elsewhere? Well happily, no. As national or regional economies grow, the larger cities get too expensive for many enterprises and they invest in smaller cities. This decentralization of urban development is greatly helped, if smaller cities are well governed and there is good inter-city transport and communications. And there are so many examples of this – in Europe, North America, Latin America and Asia.

If national governments are worried about the rapid growth of their large cities, the best way to reduce this is to support good governance in other smaller cities. Look at the many successful cities in the Southeast of Brazil that have drawn new investment away from Rio de Janeiro and Sao Paulo; these include Porto Alegre and Curitiba. Both cities that have grown very rapidly. Both cities with a deserved reputation for social and environmental innovation. Both strong examples of how rapid urban growth does not mean rapid growth in urban problems.

Urbanization and health

If I was to say that urbanization was good for health, many of you might laugh. There is lots of evidence to suggest I am wrong. It is common for half of a city's population to live in slums and illegal settlements where health conditions are awful. Infant and child mortality rates ten to twenty times what they should be. I think of squatter settlements I know where one child in five dies before their fifth birthday. I think of the many African cities that have average life expectancies that are below 50 years – which means that the average life expectancy for poorer groups may be only 20 or 30 years. This is very similar to the average life expectancy for low-income groups in cities in England 150 years ago.

The reason for this awful health is easy to see. Concentrate people, industries, motor vehicles and their wastes – and this produces disastrous health. Cholera, diarrhoeal diseases, air pollution deaths, deaths from traffic accidents. Urban life as poor, nasty, brutish, and short (as Thomas Hobbes suggested in 1651, when there is no good government).

But the more urbanized a nation, generally the higher the life expectancy. All the nations with the highest life expectancy are predominantly urbanized; most of the nations with the lowest life expectancy are predominantly rural.

(Graph or table to illustrate this – or graph showing average life expectancies in different cities)

There are also many examples of large cities with among the highest life expectancies in the world and the lowest infant and child mortality rates. So large cities need not be unhealthy places. Indeed, they can be and should be among the world's most healthy places. The residents of Porto Alegre, this major Brazilian city, have an average life expectancy that is higher than many cities in Europe and North America. The residents of Tunis in North Africa also have a high life expectancy – more than 30 years higher than many other African cities. The key question is why.

A very large part of the answer is that low-income groups do not have huge health penalties. Perhaps the toughest and most important indicator of a good city government is how small the gap is between the life expectancy of rich groups and the life expectancy of poor groups. In badly governed cities, the gap can be 40 years. In well governed cities, it can be cut to a few years or even less.

In cities with high average life expectancies, most of their low-income population has access to safe, sufficient, water, good sanitation and good services. Most live in homes built of permanent materials in settlements that are not at risk of eviction. They have city governments that have taken advantage of population concentration.

Concentrate people, production and wastes without a good city government and its a health disaster. But this concentration of people, production and wastes lowers the unit costs for many kinds of infrastructure and services that produce the best of health (24/7 piped water supplies, good sanitation and drainage, good health care and emergency services, good schools from pre-school through secondary school to university)

Urban concentration lowers the cost of raising taxes or charges to pay for infrastructure and services; it also lowers the cost of enforcing pollution control and occupational and environmental health regulations.

Urbanization and social development

Urban concentration supports a more direct engagement between government and citizens. Most of the best examples of more participatory, responsive and accountable governance in the last 30 years come from cities.

Again to my favourite Brazilian city, Porto Alegre, which helped pioneer participatory budgeting – so every resident knew the size of the government’s budget and how it was spent and citizens in each district could help set priorities for public investment.

Or in Mumbai and many other cities in India, the amazing partnerships that have been developed between government agencies and the federations of slum dwellers and pavement dwellers. In Mumbai, one of the most successful cities in Asia, around half the population live in slums or on pavements lacking provision for basic services. Living in very poor quality overcrowded dwellings. But this is beginning to change, through partnerships between government agencies and two federations: the National Slum Dwellers Federation and *Mahila Milan* (a federation of savings groups formed by women living in slums or on pavements). In most slums in Mumbai there are now community police stations where local police and slum residents work together. In many slums in Mumbai, there are now community-managed toilets and washing facilities that were built and are managed by resident committees.

Or in Karachi where partnerships between residents in informal settlements, a local NGO (the Orangi Pilot Project-Research and Training Institute) and local government agencies have transformed provision for sanitation and drainage and greatly improved health – and almost all of this achieved without foreign aid.

Or in many Latin American cities, where elected mayors saw the power, capacity and innovation that the inhabitants of slums and squatter settlements had – seeing these people as key parts of city success, not as city problems. And how this has transformed cities such as Bogotá, Rosario, Manizales, again Porto Alegre and many other cities.

Urbanization and global warming

Cities are now being blamed for global warming. It is so common to hear the statement that cities are responsible for 75 or 80 percent of all greenhouse gases. But these figures are

nonsense. There are two ways of allocating greenhouse gas emissions to nations or cities: where the emissions are produced or where the goods whose production released the emissions are consumed. If we consider where greenhouse gases are produced, drawing on the latest IPCC reports, the greenhouse gases emitted in rural areas or urban centres too small to be considered cities come to far more than 20 to 25 percent, if we take account of all the emissions they have from agriculture, deforestation, power plants, industries, motor vehicle use and non-electrical space heating of offices and homes. Indeed, most large fossil-fuelled power stations and much heavy industry (including cement production and metal smelters) are in rural areas or small urban centres.

Cities may be responsible for a higher proportion of greenhouse gas emissions, taking the consumption perspective. So it is the person or household that is consuming the food, the electricity, the consumer goods..... that is allocated the greenhouse gases that went into their production, distribution and sale. So the emissions of a rural coal-fired power station would be allocated to the people using the electricity. Presumably, the emissions from aircraft would be allocated to the aircraft's passengers. But from this perspective, most cities are very low emitters because average consumption levels are very low. Indeed, some city locations may have negative emissions as they concentrate very low-income people (with very low levels of greenhouse gas emissions) and lots of reclamation, recycling and re-use of waste (which reduces emissions). I suspect that Donald Trump probably contributes more to global warming than the entire population of Dharavi, an inner city area of Mumbai with over 600,000 inhabitants.

But taking this consumption perspective, cities still would not be responsible for 75 or 80 percent of all greenhouse gas emissions. Indeed, wealthy rural or small town or suburban households who do not live in cities actually generate far more greenhouse gases than city-dwelling households with the same level of wealth. They generally have bigger, worse insulated homes and have much higher levels of private automobile use.

But the key point is that well governed cities can have very low greenhouse gas emissions per person relative to their quality of life. They should be seen as solutions to global warming, not problems. The core of sustainable development is combining very good living conditions with an ecologically sustainable draw on the planet's resources and life support systems. Some of the nicest, healthiest, most desirable cities or city districts in Europe have relatively low greenhouse gas emissions per person. They have only a small fraction of the car use of most cities in the USA because it is so pleasurable and easy to walk, bicycle or get public transport. Some of the most gorgeous, expensive housing in city centres in Europe or the US are very space efficient and very energy efficient.

Again, cities are being blamed unfairly. And if we see cities as the problem, what we fail to see is how cities can cut the link between high quality of life and high energy use (and high greenhouse gas emissions). So much of what makes a city enjoyable and a centre of culture is not linked to high consumption or high greenhouse gas emissions – again we go back to cities as centres of culture, of dance, of theatre, of music, of visual arts. Of great food (and so much of the best food is using and celebrating local produce so this too does not have too high a carbon footprint).

Some thoughts for the future

We need the imagination to see the potential of cities; to rescue the much forgotten concept of the public good and its importance on development and in environmental management.

We need city governments with the bravery to engage with all their urban citizens and their own organizations, not just the wealthier, better connected ones.

We need civil servants and politicians with the bravery to see low-incomes groups and their community organizations living in informal settlements and working in the informal

economy as very real partners with knowledge and capacity to help build and improve cities. See them as obstacles and they will be obstacles. Quite rightly, they will fight attempts to evict them, to close down their enterprises. See them as allies and partners and look what can be achieved. Look at what the Thai government's Community Organizations Development Institute has achieved by seeing low income communities as partners in finding and implementing solutions.

In more and more nations, slum and shack dwellers are forming their own organizations and offering city and national governments partnerships. And there are so many good examples of these partnerships working in practice: in Thailand, South Africa, Malawi, Namibia, India, Brazil, Kenya.....

We need to be far more innovative in thinking how to make urban land markets work for the whole city, that allow low-income households to get decent housing

We need all city governments to think about how they can adapt to global warming – although fortunately, there are so many synergies between adapting to climate change and good development – and in their plans contribute to keeping down greenhouse gas emissions.

In the end, almost all the cities with very low greenhouse gas emissions are in low-income nations. These are also often the cities with the worst health. The challenge for these cities is to show another model of development. To show the gasoline guzzling, greenhouse gas emitting rich world that it is possible to develop as high quality cities that are high quality and healthy for their whole population without high greenhouse gas emissions.