Sustainable cities or sustainable urbanisation?

Rapid urbanisation is arguably the most complex and important socio-economic phenomenon of the 20th and 21st centuries. Generally understood as a shift from a predominantly rural to a predominantly urban society, it also represents major and irreversible changes in production and consumption and the way people interact with nature. It is therefore somehow surprising that, within the international debate, it is only recently that cities and the urbanisation process started to be looked at through a 'sustainability' lens.

The notion that cities play a key role in 'sustainable development' — whatever the definition adopted — only started to become popularised and mainstreamed into policy making and planning since the early 1990s. But as it often happens when a new perspective rapidly gains momentum and widespread adherence, the apparent consensus on the urgent need to promote sustainable cities has been underlined by significant differences with regards to the questions of what urban sustainability means, why and how to promote it and for whose benefit. Furthermore, is it all just about the greening of the built environment and urban form?

It is now widely acknowledged that the impact of urbanisation will continue to bring about major global and local changes well into the current century, as many countries in the developing world are presently in, or about to enter, the high-growth and rapid-transition phase of the urbanisation process. A total net addition of 2.2 billion people to the 2000 world population is forecasted by 2030 and it is expected that most of this additional population will be absorbed by the cities and towns of low-income countries, likely to rise from 1.9 billion in 2000 to 3.9 billion in 2030. By contrast, very small changes are predicted in the urban population of high-income countries, expected to increase from 0.9 billion in 2000 to 1 billion in 2030.

Despite the fact that demographic forecastings should be taken with caution due to the inconsistent definitions of 'urban' and 'rural' adopted by different nations across the world, they are powerful in revealing the magnitude and scale of the urbanisation process. However, a closer look not just at the scale but at the nature of contemporary trends reveals that these do not simply imply that most of the world population will be living in cities but that urbanisation does and will continue to have a significant impact on the global carrying capacity of the earth and to affect the way in which rural and urban households and individuals straddle between the 'urban' and the 'rural' ². The latter is important because decisions about health, fertility, migration, production, natural resources use and so on are increasingly affected by the diffusion power of the urbanisation process, not just spatially but through the global economy, informational spill-overs and social networks ³.

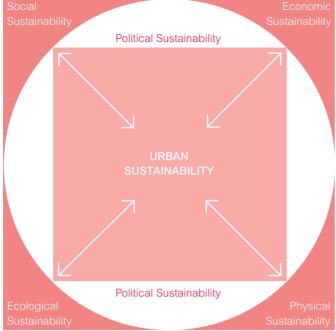
Indeed, it is increasingly accepted that in many regions of the developing world, including its largest countries, the boundaries between urban and rural are getting blurred. Even if the focus has

shifted over time from a spatial definition (assuming a central urban point surrounded by a de-densifying periphery) to a more functional and relational focus on diverse flows between the rural and urban sectors, recent developments both in theory and in real world contexts – such as space—time compression and globalisation – point to the need of a reassessment of the changing nature of the rural-urban divide and of the contemporary urbanisation process ⁴.

The emerging landscapes in terms of human settlements challenge conventional definitions and perceptions of the city and the countryside with regards to their location, physical structure, functional relation, institutional context and cultural outlook. For instance, the concept of the 'informational city' ⁵ suggests that, in the context of globalisation, information technology constitutes the most strategic commodity, dividing wealth between and within cities into the 'information rich' and the 'information poor'. This has often been understood as the general blurring of frontiers, not only between the rural and the urban, but between the so-called First and Third Worlds. However, it should not be assumed that urbanisation runs always vis a vis an even integration of 'all' cities and 'all' urban dwellers into the world economy, neither that this increasingly urban-based world economy can be easily 'tamed' to redistribute wealth and to reduce the ever expanding 'ecological footprint' that supports it ⁶.

As global trade has vastly expanded throughout the 20th century, cities have become less reliant upon their hinterland for sustenance and are increasingly importing not only their consumer goods, but also food, energy, water and building materials from distant sources. At the same time, wastes produced in urban areas are increasingly been exported to distant regions. This means that very often the origin of food and energy and the destination of wastes is invisible to urban dwellers, creating dependencies that might not be ecologically or geopolitically stable, secure or indeed, sustainable 7. The problem is that the limits imposed by the expansion of the urban ecological footprint do not become evident until they are translated into local impacts, such as higher food or energy prices, frequent floods or the increment of environment-related diseases such as skin cancer.

A comparison of the urban ecological footprint of cities in developing and developed countries reveals that, in overall terms, the former rely more heavily on their own hinterlands than do cities in the developed world, as the latter tend to draw on distant 'elsewheres' to satisfy their



Urban - regional ecological capacity

The Five Dimensions of Urban Sustainability, from Allen, Adriana (2001) 'Urban Sustainability under Threat: The Restructuring of the Fishing Industry in Mar del Plata. Argentina', 'Development in Practice', vol. 11. Nos. 283. pp.152–173

"The apparent consensus on the urgent need to promote sustainable cities has been underlined by significant differences with regards to the questions of what urban sustainability means, why and how to promote it and for whose benefit"

demands in terms of food, energy and so on, thus increasingly bypassing their hinterland and resulting in missed opportunities for reciprocal rural-urban linkages within the same area and/or region. However, the picture is not that simple. When taking a more disaggregated look at the ecological footprint of different income groups within fast growing cities in the developing world, significant differences emerge between the wealthy and the poor, revealing a consistent link between income and the demands individuals place on the environment, as regards both their consumption of renewable and non-renewable resources and their patterns of waste production. This implies that the challenge of urban sustainability cannot be addressed without an examination of wider relationships between urban areas and their hinterlands or 'bio-regions', nor without unpacking the inequality that unfortunately prevails in the contemporary urbanisation process, where conditions of hyper and sub-consumption coexist neck-to-neck8.

Indeed, rapid urban change is likely to occur in the world's poorest countries, those least equipped with the means to invest in basic urban infrastructure – water, sanitation, tenured housing – and least able to provide vital economic opportunities for urban residents to live in conditions above the poverty line. In this context, the urban poor face great exposure to biological and physical threats and also more restrictions in their access to protective services and infrastructures. Thus, the contemporary process of urbanisation in the developing world is characterised not just by a shift in the locus of poverty – from rural to urban – but more significantly compounded with the 'urbanisation of poverty and social exclusion' that derive from socio-economic, gender and ethnic inequalities.

The above discussion implies that the contemporary process of urbanisation is underlined not simply by rural—urban migration and a rural—urban poverty shift (at least in population percentages) but by a significant transformation of the linkages between the global and the local, the urban and the rural, the rich and the poor, and above all, the systemic conditions that threat the very possibility of a sustainable future.

Since popularised by the Brundtland Report, sustainable development has been described as the intersection between social, environmental and economic goals. Sustainability has performed more of a balancing act than promoting any real change of direction to development. The most pressing problem with this model is that it offers relatively little

understanding of the inherent trade-offs found in the simultaneous pursuit of these goals. Coupled with this, the picture it provides is too abstract to appreciate how sustainable development unfolds at the urban level, but also to acknowledge the political dimension of the process. By definition, cities are not sustainable, urban dwellers and economic activities inevitably depend on environmental resources and services from outside their built-up area. So what does urban sustainability mean and how can the effects of urbanisation and urban development on sustainable development be appraised?

The answer to these questions requires a more encompassing vision of the concept, one that adequately defines the goals and means of the process. Quite rightly, the environmental, economic and social goals still apply. However, in an increasingly urbanised world, the built environment or 'second nature' needs to be recognised as a central component to the liveability of the earth. Furthermore, the search for more sustainable forms of urbanisation depends on political and institutional decisions promoting the competition or cooperation of different agents with one another. Thus, it could be argued that to assess whether any given practice, policy or trend is moving towards or against urban sustainability it is necessary to consider the relationships among the five dimensions outlined below.

Economic sustainability is understood as the capacity and ability of a practice to be able to put local/regional resources to productive use for the long-term benefit of the community, without damaging or depleting the natural resource base on which it depends and without increasing the city's ecological footprint. This implies taking into consideration the full impact of the production cycle.

Social sustainability refers to the fairness, inclusiveness and cultural adequacy of an intervention to promote equal rights over the natural, physical and economic capital that supports the livelihoods and lives of local communities, with particular emphasis on the poor and traditionally marginalised groups. Cultural adequacy means, in this context, the extent to which a practice respects cultural heritage and cultural diversity.

Ecological sustainability pertains to the impact of urban production and consumption on the integrity and health of the city region and global carrying capacity. This demands the long term consideration of the relation between the state and dynamics of environmental resources and services and the demands exerted over them.

The sustainability of the built environment concerns the capacity of an intervention to enhance the liveability of buildings and urban infrastructures for 'all' city dwellers without damaging or disrupting the urban region environment. It also includes a concern for the efficiency of the built environment to support the local economy.

Last, but not least, political sustainability is concerned with the quality of governance systems guiding the relationship and actions of different actors among the previous four dimensions. Thereby, it implies the democratisation and participation of local civil society in all areas of decision-making.

The diagram (page 3.19) shows in a simplified manner the relationship between the five dimensions outlined above. The outer circle represents the ecological capacity of any given urban region and acts as a relative measure to assess whether changes or interventions in each of the five dimensions are moving towards or against sustainability. The corners of the square base or pyramid within the circle represent the economic, social, ecological and built environment dimensions, whilst the political dimension articulates them. If the four dimensions of the pyramid are seen as pulling against each other, attempting individually to break out of the circle itself, the political dimension can then be seen as the regulating mechanism ensuring that they remain within the boundary of sustainability.

This wider view of urban sustainability calls for re-embedding our understanding of cities and their multiple and diverse impacts on society and the environment within the contemporary process of urbanisation. This is because cities cannot be expected to become 'islands of reform' in isolation from the wider global political economy in which they are produced. Thus, the question of how to promote sustainable cities and indeed sustainable urbanisation cannot be dissociated from the uneven geographies of development ¹⁰ produced by the globalisation process and the way this changes the relationships between people, environment and places, both through time and space.

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Profile / Adriana Allen

Adriana has almost 20 years of experience of teaching, research and consultancy in urban and regional environmental planning and management (EPM), institutional development and capacity building for sustainable development. She has done extensive work in participatory EPM, Local Agenda 21, sustainability indicators and tools, and decentralised cooperation in urban and regional EPM. Her research interests focus on urban—rural links, environmental governance, and urban and regional political ecology studies.

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Adriana's recent research and consultancy projects include:

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