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What sustainable development for the cities of the South? Urban issues for a third millennium

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The Millennium Development Goals (MDGs) – proclaimed in the year 2000 and aimed at guiding the planet's management and its priorities for the next 15 years – were widely based on the concept of 'sustainable development'. This concept will be once again broadly discussed in 2012 on the occasion of the United Nations Rio+20 Summit. It will be an opportunity to decipher to what extent the city, as much from a spatial as from a societal point of view, is a stakeholder in such debate. After analysing the various interpretations of the concept of 'sustainable development', this article questions its implementation within the framework of the MDGs and the role assigned to urban actions. Due to its complexity and in spite of its economic and demographic prevalence, urbanism has been bypassed by a number of international global initiatives launched to date. A series of options have been proposed to finally give the city the high profile it deserves in any sustainable development analysis, aiming as much at the urbanistic and material production as at the social and economic balance of its inhabitants.

Keywords: cities; urbanism; urban environment; Millennium Development Goals; sustainable development

1. Introduction: from concept to application, what questions arise in transforming urban reality?

One of our primary concerns was the issue of 'sustainable development' and its application to the urban issues that – for more than half a century and under various forms – have been reshaping the inhabited territories of our planet's developing regions. Together with this is a question that is easy to raise but difficult to settle: How could a global and complex phenomenon such as urbanization in developing countries be so neglected that one cannot but observe that in developing countries the urban situation is deteriorating on a human, environmental as well as infrastructural level? This

concern led to an analysis of the urban sustainable development concept, followed by a review of the major international development strategies intended to fulfil its objectives.

2. Cooperation, development and sustainability

Cooperation, which is today so far reaching and anchored in cities across the world, cannot overlook development issues that have permeated the long, ambivalent and contradictory Western history binding the Western world to 'third' continents (Rist 1996). Admittedly, striving for collective well-being is the purpose of all organizations

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engaging in this field. Disagreements emerge when defining the approaches and strategies implemented to reach these goals, with the meaning conferred for almost 50 years now to ‘development’ and for the past 25 years or so to ‘sustainable development’, as well as the resources to address it. Urbanization – through its territorial imprint, demographic expansion as well as social and economic momentum – is, and will continue to be, at the heart of this debate.

Therefore, it is necessary to provide an initial definition of ‘sustainable development’. The World Commission on Environment and Development, appointed by the United Nations at the end of the 1980s (1987) to prepare the Earth Summit in 1992, established what would become ‘the alphabet’ of sustainability by hinging development on two essential components:

- first, the time factor, by emphasizing that development can only be sustainable if it ‘meets the needs of the present without compromising the ability of future generations to meet their own needs’ and
- second, the focus on ‘an equal balance between the necessary ecological, social and economic dimensions of development’ (Comité interdépartemental de Rio 1995).

Whatever your views may be, these postulates had a notable political impact and became the cornerstones of countless initiatives. A large number of states have devised standards, indicators, regulations and action programmes giving material substance to these principles on a national and local level.

The United Nations Commission for Sustainable Development has thus drawn up a list of indicators that set out – for four sectors (social, environmental, economic, institutional) – causal factors designed to provide a coordinated assessment of sustainable development, on a global or country level (United Nations 2007).

Nevertheless, this concern for consistency pre-dates the media craze around this concept. From the 1970s, an entire economic trend had challenged

the tenets of unbridled productivism, of either capitalist or socialist allegiance, to highlight ecological devastation as well as enduring social injustice.

Three fundamental elements delineated the sustainability of eco-development, as coined by Ignacy Sachs (1997): social equity, environmental protection and economic efficiency are not only the path to follow but also the guarantee of genuine progress in the long term – social equity since the mechanisms to distribute existing wealth among the individuals of a society foster justice as well as productivity and ingenuity in all fields; environmental protection since natural resources are largely exhaustible and degradable, and must therefore be used in a rational and optimal manner; and economic efficiency since the sole laws of profit do not cover the direct and indirect costs of production, which affect users and increase inequality between the ‘beneficiaries of the system’ and those who incur its real cost.

In addition to these three aspects of sustainable development, Sachs brings up two dimensions, which engage us directly as urban stakeholders. On the one hand, spatial organization would better regulate the distribution of human settlements and economic activities on the territory. It would also mitigate the excessive concentration of people and activities in saturated and fragilized areas in favour of a decentralization maximizing spatial planning with a lower ecological imprint on available resources. On the other hand, there is a cultural dimension, in that the proposed changes would take into consideration value systems, the historical development of the human communities involved, the socio-political context as well as social and cultural organization structures prevailing in the regions concerned.

Nevertheless, it does not suffice to acknowledge general principles – one has to convince (and in some cases compel) – to demonstrate their absolute necessity. This is when problems arise, since declarations of intent are rarely followed by a solid implementation that meets clear and quantifiable goals. There is also a big risk that ‘sustainable development’ may be viewed as ‘a luxury for wealthy countries’, at the expense of poorer

countries, heightening the disparities between the beneficiaries of sophisticated and costly development and large masses of disenfranchised people; this in turn widens the existing gap between developed areas and derelict territories.

A number of urbanists hold the view that sustainable development is – as numerous states as well as the United Nations tend to do in major statements of principle – outlined in a ‘disembodied’ fashion, beyond space and time. This criticism overlooks all too quickly the fact that the division between ‘rich and poor’ results most times in a fragmentation of inhabited territories, in segregation both in the North and the South, against which sustainable development should be a genuine tool for analysis and action (Godard 1996; Theys 2002). According to Serge Latouche, sustainable development is but a ‘conceptual fabrication’, through which one wishes to pursue development driven by globalized economic growth without challenging the historical foundations of geographic and social exploitation, in an attempt to erase its social consequences and environmental impacts (Latouche 1993, 2001), which may even appear as a reaction towards the anti-growth trends of the 1970s–1980s, in a pro-market perspective that was relatively non-committal for businesses and states (Castro 2004). For Sylvie Brunel (2004, 2008), sustainable development results in a sacralization of nature at the expense of human activities. Both authors concur on the analysis of a terminology formulated by thinkers from the North, globalized by international organizations and imposed, directly or indirectly, on decision-makers of the South by development agencies. In his seminal work on sustainable development (2004), Brunel points out that the emergence of such terminology in the early 1980s was first and foremost based on an environmental, political and international rationale. However, sustainable development is also a methodology used to gather, analyse and compare data related to environmental as well as social and economic issues. As an example, the World Atlas of Sustainable Development, published by Anne-Marie Sacquet (2002), maps and interprets a certain amount of available data. However, as

highlighted by Sneddon *et al.* (2006), it is true that a number of societal changes were not taken into account in the analysis which served as a basis for the definition of ‘sustainable development’: whether cultural and religious ones, such as the rise of fundamentalism, or social and political ones, such as the increase of terrorist violence and its institutional control. The authors nevertheless argue that it is necessary to broaden the debate beyond a purely ideological concept to assess its operational capability, the hope being that the ‘socio-theoretical and normative tools sketched continue the ongoing interrogation of sustainable development as a policy discourse and development practice’. The inevitable impact of climate change is another major transformation of our societies, which clearly outweighs ‘mere’ environmental issues and becomes a milestone in understanding and re-organizing the world, both at a global level as well as at a more sector-specific level when related to urban planning (Nicholls *et al.* 2007; Bulkeley 2010; World Bank 2010; Sumi *et al.* 2011; UN-Habitat 2011).

Urbanism does not go amiss in this conceptual and operational concoction. Drawing from the chapter dedicated to human settlements¹ in Agenda 21, two types of indicators are proposed. The first ones aim to measure the force of the momentum (primarily the urban population growth rate) and the state of the phenomenon (by specifying percentages of populations living in urban regions, divisions between formal and informal settlements, total living surface per capita, house price to earnings ratio).² In addition to this town-centred information, a second set of data can be combined to distinguish populations according to their living environment: migrations; earnings and unemployment rate; sewerage works and sanitary impact; water usage; land administration; solid and industrial waste management; environmentally friendly laws and regulations.

Many towns worldwide apply these practical recommendations to assess sustainable development. However, does that mean that they are genuine urban guidance tools, decision-making tools, as their international promoters would hope? The

question remains open since the application of these recommendations requires human and financial resources that few territorial authorities possess in countries of the South. Moreover, when taken out of context, such recommendations are difficult to harness in terms of urban management as they focus little on the conditions of applicability of results.

For all the disputability of these categories, they take credit for deciphering the magic word of ‘development’, subdividing it into various dimensions and putting forward a method to analyse it.

3. A sustainable development set in motion: the Millennium Development Goals

The turn of the millennium was the ideal opportunity to bring issues back to the table. The United Nations did so by adopting the ‘Millennium Declaration’ (UN 2000) in September 2000, setting out the great principles that would henceforth drive international action forward (Table 1).

They first address the collective responsibility of promoting the principles of human dignity, equality and equity worldwide, in particular for the most vulnerable. They also foster peace and justice both on a national and international level, in the knowledge that in the last decade of the twentieth century, armed conflicts have cost more than 5 million human lives. Once these options have been laid down, globalization still poses a major challenge. It has yet to be moulded into a positive force for humanity, given that, to this day, its costs and benefits have been unfairly distributed and that developing countries have to cope with specific difficulties to make the most of an economic environment we would like to be inclusive and fair. It is therefore quite natural to quote the following actions: committing to good governance, improving access to financial resources, paying particular attention to the specific needs of the most impoverished nations, better including the products of least developed countries in international markets, promoting debt exemption for the poorest countries and more appropriate conditions for the debts of other developing countries

and increasing international development aid. The expected results are clear: by 2015, we should halve the proportion of the world population living on less than \$1 a day, ensure that all children complete a full course of primary schooling, reduce by three-quarters the birth mortality ratio and by two-thirds the under-fives mortality rate, halt and begin to reverse the spread of HIV/AIDS, provide specific assistance to HIV orphans and achieve significant improvement in the lives of at least 100 million slum-dwellers.

These social, healthcare and financial initiatives would be coupled with other measures, such as the protection of the environment in order to integrate these changes into a ‘sustainable development’ perspective (agendas 21,³ Kyoto Protocol, conservation of forests as well as biodiversity, water resource preservation, mitigating the emergence of natural and human disasters).

The World Bank examined very rapidly the compendium of UN proposals and calculated its cost. Whatever the method used, donors should earmark between 40 and 60 billion additional dollars per year to aspire to fulfil such goals (Doryan 2002). In other words, they should double the international aid allocated over the past few years. It is very unlikely that such commitments will come to fruition given the lack of clarity of development funding resolutions taken in March 2002 during the Monterrey Summit.⁴

Although there is much doubt on an international level as to the likelihood of attaining the desired objectives, the Millennium Development Goals (MDGs) display a fundamental strength according to Paluzzi and Farmer (2005): ‘the demonstration that many of the most devastating problems that plague the daily lives of billions of people are problems that emerge from a single, fundamental source: the consequences of poverty and inequality’.

According to the United Nations Development Programme (UNDP; 2008), which is continually assessing progress in implementing the MDGs, the mid-term review was globally positive, with major improvements in the fields of basic education, access to healthcare and natural resources, use

Table 1. Millennium Development Goals.

Goal and targets (UN Secretary n.d.)	Achievements 2011 (following the UNDP data)
<p>1 Eradicate extreme poverty and hunger</p> <p>Target 1. Halve, between 1990 and 2015, the proportion of people whose income is less than \$1 a day</p> <p>Target 2. Halve, between 1990 and 2015, the proportion of people who suffer from hunger</p>	<p>Despite significant setbacks after the 2008–2009 economic downturn, the world is still on track to reach the poverty-reduction target. By 2015, it is now expected that the global poverty rate will fall below 15%, well under the 23% target</p>
<p>2 Achieve universal primary education</p> <p>Target 3. Ensure that, by 2015, children everywhere, boys and girls alike, will be able to complete a full course of primary schooling</p>	<p>The net enrolment ratio of children in primary school has only gone up by 7 percentage points since 1999, reaching 89% in 2009. More recently, progress has actually slowed, dimming prospects for reaching the MDG target of universal primary education by 2015. Children from the poorest households, those living in rural areas and girls are the most likely to be out of school</p> <p>With an 18 percentage point gain between 1999 and 2009, sub-Saharan Africa is the region with the best record of improvement</p>
<p>3 Promote gender equality and empower women</p> <p>Target 4. Eliminate gender disparity in primary and secondary education, preferably by 2005, and in all levels of education no later than 2015</p>	<p>Wide gaps remain in women's access to paid work in at least half of all regions. Following significant job losses in 2008–2009, the growth in employment during the economic recovery in 2010, especially in the developing world, was lower for women than for men</p>
<p>4 Reduce child mortality</p> <p>Target 5. Reduce by two-thirds, between 1990 and 2015, the under-five mortality rate</p>	<p>The number of deaths of children under the age of 5 declined from 12.4 million in 1990 to 8.1 million in 2009</p> <p>Between 2000 and 2008, the combination of improved immunization coverage and the opportunity for second-dose immunizations led to a 78% drop in measles deaths worldwide. These averted deaths represent one-quarter of the decline in mortality from all causes among children under 5</p>
<p>5 Improve maternal health</p> <p>Target 6. Reduce by three-quarters, between 1990 and 2015, the maternal mortality ratio</p>	<p>Figures on maternal mortality tend to be uncertain. Still, the most recent estimates suggest significant progress</p> <p>In the developing regions as a whole, the maternal mortality ratio dropped by 34% between 1990 and 2008, from 440 maternal deaths per 100,000 live births to 290 maternal deaths. However, the MDG target is still far off</p> <p>Maternal deaths are concentrated in sub-Saharan Africa and Southern Asia, which together accounted for 87% of such deaths globally in 2008</p>
<p>6 Combat HIV/AIDS, malaria and other diseases</p> <p>Target 7. Have halted by 2015 and begun to reverse the spread of HIV/AIDS</p> <p>Target 8. Have halted by 2015 and begun to reverse the incidence of malaria and other major diseases</p>	<p>Deaths from malaria have been reduced by 20% worldwide from nearly 985,000 in 2000 to 781,000 in 2009. The largest absolute drops in malaria deaths were in Africa</p> <p>New HIV infections are declining steadily, led by sub-Saharan Africa. In 2009, an estimated 2.6 million people were newly infected with HIV – a drop of 21% since 1997</p>

(Continued)

Table 1. (Continued)

Goal and targets (UN Secretary n.d.)	Achievements 2011 (following the UNDP data)
<p>7 Ensure environmental sustainability</p> <p>Target 9. Integrate the principles of sustainable development into country policies and programmes and reverse the loss of environmental resources</p> <p>Target 10. Halve, by 2015, the proportion of people without sustainable access to safe drinking water and basic sanitation</p> <p>Target 11. Have achieved by 2020 a significant improvement in the lives of at least 100 million slum-dwellers</p>	<p>An estimated 1.1 billion people in urban areas and 723 million people in rural areas gained access to an improved drinking water source over the period 1990–2008. Eastern Asia registered the largest gains in drinking water coverage from 69% in 1990 to 86% in 2008. Sub-Saharan Africa nearly doubled the number of people using an improved drinking water source from 252 million in 1990 to 492 million in 2008</p> <p>Disparities in progress between urban and rural areas remain daunting</p> <p>Over 2.6 billion people still lack access to flush toilets or other forms of improved sanitation</p> <p>Although gaps in sanitation coverage between urban and rural areas are narrowing, rural populations remain at a distinct disadvantage in a number of regions</p> <p>Progress in ameliorating slum conditions has not been sufficient to offset the growth of informal settlements throughout the developing world. From 2000 to 2010, the share of urban residents in the developing world living in slums declined from 39% to 33%. More than 200 million of these people gained access to either improved water, sanitation or durable and less-crowded housing. However, in absolute terms, the number of slum-dwellers continues to grow, due in part to the fast pace of urbanization. The number of urban residents living in slum conditions is now estimated at some 828 million, compared to 657 million in 1990 and 767 million in 2000</p> <p>In all regions, coverage in rural areas lags behind that of cities and towns. In sub-Saharan Africa, an urban dweller is 1.8 times more likely to use an improved drinking water source than a person living in a rural area</p>
<p>8 Develop a global partnership for development</p> <p>Target 12. Develop further an open, rule-based, predictable, non-discriminatory trading and financial system (includes a commitment to good governance, development and poverty reduction, both nationally and internationally)</p>	<p>At the 2010 High-level Plenary Meeting of the General Assembly on the MDGs, world leaders reaffirmed their commitment to the MDGs and called for intensified collective action and the expansion of successful approaches</p>

of technologies, external debt relief and better social commitment from private companies. On the other hand, crucial issues still have to be tackled and require urgent corrective measures: deep-set poverty in sub-Saharan Africa, gender equality in schooling, occupational integration and political

representation, toxic emissions and precarious living standards (one-third of urban populations live in shanty towns and 2.5 billion individuals lack adequate sanitation).

Two commentaries provide a better understanding of the value of such data. The first, of a general

nature, challenges the rigour of the findings presented by the United Nations, which in terms of quality and quantity do not meet by far the indicators chosen to assess how the designated targets were achieved. Information available is only partial and often very patchy in terms of content (UNDP 2010, 2011). But, globally, the United Nations try to make it clear to the international community that efforts are being made, despite not always reaching their goals. Additionally, historical and geographical circumstances explain a number of slippages and shortcomings, although the means to address them do not go beyond the political will and goodwill of the relevant stakeholders. A second analysis concerns the progress observed in the environmental field to reach target 11 in favour of slum-dwellers. It is apparent first of all that environmental problems are particularly pressing in rural areas where they affect a greater number of people. Also, the analysis shows that if improvements have been observed in the slums of many developing countries, the number of precarious settlements has continuously increased over the years. And there is no evidence that this trend is going to diminish or disappear. Slums have increased in number and with them impoverished city-dwellers. The impression remains – as is often the case when reading official reports on the major initiatives implemented by international organizations – that these experiences, whatever the good intentions which govern them, lack rigour and operability and derive more from policy and citizen incentives than genuine, concrete action plans with measurable impacts. These questions were already addressed in 2008 by the journalist Anne Perkins (2008), who indicated that one of the weaknesses was the lack of reliable data in many poor countries (Nguyen 2010). But the fundamental critical analysis was conducted by S. Amin in an article published in the *Monthly Review* in 2006. Amin, whom we know provides a radical criticism of North–South relations and development, nonetheless highlights a number of analyses in the context of the globalization of international trade, dismissing a few naïve interpretations of the decisions applied by the United Nations that

they contain. Although he acknowledges that these eight goals are perfectly legitimate and desirable, he believes that the methods applied reinforce a liberal and mercantile organization of society and pay no attention to the political causes which have debased the terms of trade between industrialized, emerging and developing countries.

4. Sustainable cities and the role of urbanism in the Millennium Goals

In developing countries, around 2 billion people currently live in an urban environment. According to the United Nations' forecasts (UNCHS-Habitat 2003), this figure should double in the next 30 years. Today, it is estimated that 1 billion of these poverty-stricken urban dwellers are based in slums (Bolay 2005).

The United Nations Human Settlements Program (UN-Habitat) is responsible for supporting member states in fulfilling one of the MDGs' main urban targets: to achieve a significant improvement in the lives of at least a hundred million slum-dwellers by 2020.⁵ The ambition is modest given the challenges posed by the world's urban crisis, as it only strives to benefit 10–15% of city populations living in a situation of extreme precariousness. Nevertheless, it deserves our attention as it acknowledges a major development problem area for the international community: the habitat of poor urban dwellers. Another major priority worth highlighting is the reduction by half of the proportion of people without access to drinking water and sanitation by 2015.

Further MDGs will have a positive impact on urban life such as incorporating sustainable development principles in public policies or halving the number of people living on less than \$1 per day. The same applies to the reduction of the child mortality rate and the spread of HIV. All these measures are aimed equally at rural and urban populations.

Indirectly, the following five key drivers defined by the United Nations encourage a slum-free urban development: access to water, sanitation, security of land tenure, the building of sustainable housing and sufficient living space. Although

these projections were reiterated during the United Nations summit held in 2005 in New York,⁶ their deployment remains to be confirmed. The report drafted on the occasion underlines it: the percentage of people in developing countries with access to drinking water has increased from 71% in 1990 to 79% in 2002, while access to sanitary facilities has increased from 34% to 49%. Yet, in the mean time, the number of slums has mushroomed. It is estimated that these poverty-stricken city-dwellers were numbered 662 million in 1990, and 998 million in 2007. According to the United Nations, this figure will reach 1.4 billion in 2020 (UNCHS-Habitat 2007).

Once more, the facts remind us that tremendous effort is still required and that early signs do not let us believe that these goals will be reached. Overseas cooperation in the United Kingdom (Department for International Development, United Kingdom Government 2007) has pointed out that the challenges of a sustainable and acceptable urbanization from a social and political standpoint remain a priority and are of an unprecedented magnitude in view of the proposals promoted by the United Nations:

- One-third of the world's urban population, some 1 billion individuals, lives in slums.
- Ninety-four per cent of slum-dwellers live in developing countries while these regions are experiencing the highest urban growth rate with the least resources to address it.
- The number of people living in slums should rise to 1.4 billion by 2020, knowing that by 2030, Africa and Asia will in turn be predominantly urban.
- Seventy-two per cent of urban populations in Africa live in appalling conditions; in the continent's poorest countries, this figure reaches 80%.
- Cities in developing countries will absorb 95% of the world's urban growth over the next two decades, while the total urban world population will swell to 5 billion in 2030.
- One of the targets of MDGs relates to sanitation. At present, 560 million city-dwellers do not have access to clean sanitation.

- Between 2000 and 2002, 6.7 million people around the world were evicted from their homes.

What resources and approaches are needed to address this worrying situation? The financial resources of international public aid are stagnating. They hit the 60 billion mark in 1992 and gradually declined, rising again to previous levels in 2003.

The lack of additional resources is not the only concern. It is also necessary to question the approaches and methods adopted to improve the conditions of poor city-dwellers. According to David Satterthwaite (Hasan *et al.* 2005), action is a priority as well as the promotion of available alternatives by mobilizing – in a different and conclusive manner – stakeholders involved at national and, most importantly, local level (Pham Gian Tran *et al.* 2002). Instead of being stigmatized as ‘the problem’, the poor should be considered as active members of a partnership fighting against poverty. However, their skills and potential are unclear and, therefore, rarely drawn on. Additionally, local authorities play a crucial role in strategies aimed at upgrading urban living conditions. They are the ones who will – with more or less reach – set land policies and rules of land allocation to poor families. They will choose between emptying or rehabilitating slums. They might share or not decisions related to poor neighbourhoods with grass-roots associations. This overview would not be complete without mentioning local and international NGOs, which also contribute to these communities and their ability to negotiate with urban authorities. Although options for negotiating exhibit a commendable open-minded approach, local authorities experience many difficulties in implementing them as they are short of material and human resources and jousting with the interests of influential economic stakeholders, often lacking a genuine political will, and sometimes displaying high levels of corruption.

Yet, instilling dialogue with public and private partners is essential to local inhabitants. Although treated as bargaining chips, they have to take ownership of their present and future. It is particularly the case in key areas of urban rehabilitation.

The land policy on slums is a good illustration. Sites exposed to market pressures can rapidly become a target for property investors. It is imperative to thwart this trend often observed in marketable urban centres, and to foster the land rights of occupants by facilitating administrative procedures as well as reducing their cost. Land tenure security will have a very positive impact on the investment of inhabitants to improve their housing and neighbouring infrastructures (Durand-Lasserve and Royston 2002). It is widely known that, most often, the underprivileged build their homes gradually over the years, and generally in all illegality. Quality build could only be achieved by adapting financial systems, which all too often do not benefit people without wages or title deeds. A strategic change is paramount. Indeed, studies conducted in contexts as varied as Mauritania or Bolivia show that loans granted to low-income families are profitable and sustainable when provided by institutions endeavouring to meet the needs of the poor, their financial resources and living standards. By obtaining warranties other than personal, land- or property-related from poor families, credit institutions which are open to these customers have observed that reimbursements are made in due time, in spite of often high interest rates (Mitlin 2001). This is all the more apparent when debtors can organize themselves collectively and receive much-needed advice. From the mid-1990s, thanks to this vote of confidence, Bolivian families from the outskirts of La Paz were able to approach an alternative bank to get organized financially and gain financial loans from an NGO to install latrines and sanitation for their dwellings. The system represents major progress for families and good business for financial institutions (Bolay 1998). Fulfilling the millennium urban goals does not simply depend on material rehabilitation of the living conditions of the poor; it requires primarily social and moral rehabilitation, which imparts trust in the poor and respect.

Ten years after the creation of MDGs, the situation is generally deteriorating. It is imperative to launch a genuine conceptual and operational revolution if we truly want to leave behind endless

cycles, during which solutions periodically emerge while budgets flounder and main stakeholders capable of driving real change – states, bilateral and multilateral donors, international organizations, public authorities, private companies – hide behind theoretical formulae and methods proven to be utterly incapable of resolving the issues at stake.

Solutions have been tested at a local or regional level, taking into consideration the real needs of the most affected populations without losing sight of the global context of the world economy (Environment & Urbanization 2002). As recently highlighted by International Institute for Environment and Development (IIED) researchers (Bartlett *et al.* 2009), using the example of the impact of climate change on urban life, poorer groups are much more vulnerable when living in high environmental risk areas. The issue of urban stakeholders and their interaction is crucial, most particularly in developing countries, where the delay in addressing environmental costs could deal a fatal blow to the poorest populations who have no access to basic services such as water and sanitation (Bolay and Taboada 2011). Although adaptive measures require actions of urban planning that better include the interests of various social groups, only genuine collaboration with local inhabitants will meet their needs and make them fully contributing players in the creation of towns, as demonstrated in Cuba, for example (Pleyan and Perez 2002).

5. Urban sustainable development: towards a multidimensional approach of a complex reality

Urbanization in the South is a complex phenomenon; it is the result of a long history of indigenous cultures, colonization, independence, migration and racial mix (Gilbert and Gugler 1992). In the course of time, cities have been a driving force of spatial distribution of men and goods, by centralizing trade, knowledge and decision-making. Beyond the specificities inherent to each region of the world, urbanization in the South also involves unavoidable by-products, a mix of discrimination and segregation, conflicts and

resilience (Pedrazzini 2005), poverty and opportunities (Neuwirth 2005). They cannot be dissociated from a struggle for life fraught with numerous pitfalls: pockets of concentration of haves and have-nots (the former in over-equipped and commercially attractive areas, the latter in run-down areas) and social fragmentation of inhabited territories, which split the city into gated communities and public spaces increasingly imbued with the commodification of collective life, leading to an economic marginalization of the most disadvantaged parked in derelict neighbourhoods and an environmental deterioration that affects them primarily.

Although there are striking social and territorial inequalities in countries of the South, they remain widespread. ‘Glocalisation’ is the result of struggle and inter-meshing of local culture and global influences (Dimitrova 2005): a society with a firm grasp on technologies and communications, yet ill-assorted; a society where modernity does not translate into an even distribution between city-dwellers and social groups but distinguishes itself by a widening gap between increasingly arrogant and ubiquitous winners, and a mass of individuals with uncertain fates who have fallen through the net of triumphant globalization (Ascher 1995; Forrester 1996; Mongin 2005).

Whether observing slums in Delhi, a suburb in the north of Marseille or an ethnic neighbourhood of Chicago, studies always reflect the same issues, as all cities are governed by similar socio-economic, political and urbanistic variables despite their historical, cultural and geographic idiosyncrasies (Harris and Fabricius 1996). Although synonymous with technical and societal progress in the 1950s, urbanization can no longer be defined as a single-faceted phenomenon. In the critical situations experienced by the most vulnerable countries, the city – a breeding ground for tensions – is entirely represented by a deterioration of the natural and built-up environments and living standards of the vast majority of its inhabitants (Paquot *et al.* 2000; Bolay 2006).

This underlines a failure of the traditional instruments of city and regional planning. A

significant number of those who ‘think and make the city’ maintain that it is possible to hinder the well-known negative effects of rapid urbanization, thanks to new conceptual approaches and new means of intervention. At present, terms such as ‘urban project’, ‘city project’, ‘strategic planning’ or ‘urban environment management’ are some of the attempts by specialists in this field at redefining urban planning (Paquot 1996; Bolay *et al.* 2000; Tribillon 2002).

A new approach to urban development would require many elements, but four aspects seem fundamental if we are to fully understand urban development and have any hope of shaping it for the future: first, a multidimensional perspective on new urban forms, in both diagnosing problems (inter-disciplinary vision) and devising proposals (holistic approach and inter-sectorial actions); second, the participation of all stakeholders involved in designing and implementing the city’s transformations; third, the multiplicity of scales to take into consideration, ranging from neighbourhoods to the edge of the city, on and outwards to urban expansion and regional perspectives; and finally, the variety of instruments available, which combine social and urban processes with the creation of architectonic or urbanistic objects.

Nevertheless, positive change to the urban model in this perspective does not solely depend on the willpower of architects and urbanists, no more than it does on other professionals in the field of urban development. This choice will be the end result of a combination of possible approaches. Each discipline, each profession, must partake in the shared endeavour to make sense of territorial and social complexities. Besides, any plan to alter a built-up environment should take a wide view of the site it is impacting as it is also a project of urban governance (Montgomery *et al.* 2004; Jouve 2008), where various political and institutional aspects will be translated into a global strategy.

In this light, sustainable development as a whole and sustainable urban development with its own distinctive territoriality cannot be reduced to their sole physical and environmental dimensions. Although the battle against the deterioration of

natural resources is urgent and requires appropriate technical solutions, it is important to remain open-minded in order to reflect on the various societal parameters impacted. This would entail an evaluation of the social cost of urban rehabilitation operations, including their consequences – in one form or another – on the poorest populations (Bolay *et al.* 2005).

The need to involve multiple urban stakeholders in city transformation initiatives is generally widely accepted, perhaps because this consensual perspective is seen as ‘politically correct’. To have a real chance of success, this all-inclusive approach should be viewed as a genuine process of negotiation. Indeed, political leaders do not often see the value of holding talks with sometimes demanding and critical city-dwellers, preferring authoritarian, paternalistic and client-focused methods.

The taking into account of various levels of urban initiatives epitomizes the ongoing debate between the prerequisites of global strategic planning – combining spatial planning with the requirements of local and regional socio-economic development – and the need to improve infrastructures, equipment and other urban facilities in a constructive and environmentally friendly manner. In addressing urbanism at a ‘micro’ level in each neighbourhood and meeting those users, this vision would match local expectations with corresponding requirements, looking at the urban environment as a whole, reflecting current issues, society and space. This would be an appropriate method for launching initiatives addressing more than ‘fragments of cities’ and would also focus on ‘macro’ relationships between the social and geographic environment and the agglomerations in which they develop: regions for smallest rural cities, provinces or nations for medium-sized cities, countries or the world for global cities (Sassen 2000).

The recognition of a shifting urban reality in terms of both spatial configuration and societal challenges should encourage us to design tools, which more flexibly reflect, value and adapt to present and future reality. Some planning instruments tend to enforce standards set against

references that are distant from reality and may thwart ongoing development, alter it and even take the wind out of its sails. It is therefore recommended to give priority to tools that not only define clear actions – which can therefore be evaluated and adapted – but are also easy to implement.

6. Sustainable development and urban environment: at what cost to end users?

Improving the urban environment is crucial for the future of developing cities. Urban well-being means the preservation of not only natural resources and built-up land, but also people’s health as well as social and urban cohesion. Along with this statement of principle – on which we concur with a majority of experts (Hardoy *et al.* 1993; Atkinson and Dávila 1999; Bolay *et al.* 1999; Satterthwaite 1999; Pugh 2000; Westendorff 2004; Lieberherr-Gardiol 2008) – two key questions should be highlighted: Which guiding principles will drive urban initiatives? How much will it cost and how will this be covered by taxpayers?

In most developing cities, the answers to these questions oscillate between two positions: on the one hand, a more minimalistic approach takes into account the limited financial resources of public authorities, which usually entail sporadic upgrading of existing infrastructures and transferring main nuisances to regional level.⁷ A second position takes a purely technological viewpoint that mimics solutions validated in Western cities and then transplanted in entirely different social and economic contexts.⁸ These urban development projects, often implemented within the framework of international cooperation, do not fully address issues of ownership by local authorities and inhabitants, or their sustainability. The prioritization given to various areas of activity such as equipment maintenance and staff training is secondary to ensuring lasting relations with international donors – if not altogether set aside.⁹

Given this financial and political interdependency, changes to the urban environment all too often lose sight of the additional burden on users

or means of recovering costs. The depth of the problem only appears when equipment and services are entrusted to public authorities. This is where questions on urban management, maintenance and depreciation of equipment are revealed. In fact, any solutions put forward, thus taken out of context, will in the long term have a direct impact on the territory's spatial and social organization. The public budgets of the poorest countries can all too scarcely bear such expenditure. Furthermore, authorities primarily allocate services and collective equipment to the 'better' neighbourhoods or transfer costs to beneficiaries without social equalization. This implies an additional financial burden to 'living in the city', which most times leads to great disparities amongst city-dwellers who have access to paid services.¹⁰ Other users will strive to access them, with no guarantee of quality or reliability,¹¹ leading to a fragmentation of the urban space, as observed by Balbo and Navez-Bouchanine in their Rabat case study in Morocco 15 years ago (1995). The study revealed three key features of social and spatial marginalization: the illegal city, the informal city, the disconnected city. Urban fragmentation is still marked today by growing social and economic inequalities (Harrison *et al.* 2004).

Given the failure of public authorities to give rise to efficient planning, a new stakeholder emerged in the 1980s and has since occupied a central role: this is the private operator (UNCHS-Habitat 1993), with whom local authorities established the notorious public-private partnerships (PPPs) in an increasingly growing number of fields. These relationships, long standing in some European countries (e.g. the water distribution networks in France) are now being promoted by the World Bank and other development agencies in many emerging and developing countries.¹² External observers have voiced criticism about the urban impact of such initiatives as tools for urban inclusion. In terms of social accessibility, do these actions meet the needs of populations lacking services and infrastructures? In terms of spatial accessibility, are these new means of privatizing formerly public services directed at precarious

inhabitants – and if so, under what conditions? As for economic accessibility, is the total or partial transfer of production and maintenance costs adapted to the financial means of the poorest populations? Many questions remain unanswered when reviewing specific empirical case studies such as the Buenos Aires study on water and social habitat (Kullock *et al.* 2002; Murillo 2002) or the La Paz study on household waste management (Collazos and Navarro 2002).

These ill-designed projects, dissociated from inclusive principles of sustainable development, may spawn rejection or even political unrest amongst the so-called beneficiaries¹³ of these new management methods, as seen in El Alto a few years ago – a poor suburb of La Paz, Bolivia.¹⁴ As stated by Séverine Dingham (2005), supporters of PPPs believe that the private sector is capable of improving the quality of service management, while critics often disapprove of their overly complicated nature and the focus on productivity gains, which are not always guaranteed.

Although this market offer may have a positive impact on the quality of service provision, with improved regulations and conditions, it must, however, be viewed as a major philosophical change, as the management of infrastructures shifts from 'public service' (with an indirect cost collection, and therefore social equalization linked to taxation of earnings and wealth) to commercial bids for collective goods in generally monopolistic urban procurement systems.¹⁵ Individuals see their status change from city-dwellers with rights of users to that of somewhat captive consumers, depending on the sector concerned. In the absence of social policies, the most disadvantaged will in all likelihood suffer from reduced access to urban services that they cannot afford.

This is precisely the challenge of present and future initiatives: to recapture the key elements of the sustainable development concept and establish whether innovations in the implementation of new systems really factor in social and ecological concerns at the heart of this concept, in order to overcome contemporary economic dynamics – increasingly deterritorialized, mobile, severed from

political and local contingencies, yet ultimately defined by the profitability of any operations carried out.

7. Conclusion: sustainable urban development, realistic solutions to complex issues

Twenty years after the 1992 Rio Summit, sustainable development is broadly defined as a public policy outline, as much on an international as on a national and local level.

Urban agglomerations – which shelter more than 50% of the world's population and about 80% of individuals based in continents as varied as Europe and Latin America – have remained focused on ensuring a level of consistency between the environmental, social and economic components of sustainable development. This concept is now used as a reference for 'the urban condition at a time of globalisation' (Mongin 2005).

Climate change, environmental deterioration, precarious living conditions, limited basic services, hazardous solid waste management, informal economies, violence and insecurity, corruption and poverty are all urban issues that unsettle the league of experts, while measures adopted in the past 30 years and those contemplated for the next 20 do not reflect these high stakes, particularly in the poorest countries. In addition, the same puzzling question keeps arising: how can such a fine-grained understanding of the complexities of the urban phenomenon translate into such restraint in the actions undertaken?

Knowledge of the city and urban living, in both its present and future forms, has sharpened, as much on a scientific and theoretical level as on an operational level. As communication technology has improved, exchanges have multiplied and intensified, lending more visibility to local initiatives, best practices and policies that are worth replicating and implementing in other contexts. There have also been changes in urban governance and in the creation of business relationships amongst partners, who have been claiming hierarchical rights and preferential treatment for far

too long. Gradually, change was needed in a great number of cities, of various sizes and set in various locations: Agenda 21 implementation, rehabilitation of historical centres and enhancement of historical heritage, development of technical networks, public transport innovations, better recognition of requests made by local populations and creation of deliberative forums.

Despite a steady increase of urban initiatives, a succession of themed gatherings of researchers, decision-makers and donors and despite heartening speeches from elected officials, the figures are alarming once the focus shifts from a narrow, local viewpoint to the overall situation. The number of city-dwellers in the world is rising, all the more so in developing countries, where the disadvantaged continue to grow in numbers, living on low wages, in poor housing and unsafe conditions, perpetuating the vicious cycle of precariousness as well as social and economic disparity.

The reasons are simple. The concept of sustainable development highlights an obvious contradiction: on the one hand, restrictive measures or incentives that benefit the environment and more equal distribution of wealth in favour of the poorest populations; and on the other hand, a global economy that requires ever-increasing flexibility, and fewer barriers, in order to maximize profitability.

In the midst of these contradictions are the cities, into which an ever-greater and diverse population pours in and which act as drivers of public, private, intellectual, financial and industrial production.

We need to refine urban thinking in developing cities and reassess the changes that need to be implemented. The objective must be territorial and societal planning that meets the needs of sustainable development, in line with the history, culture and environment inherent to each location. And the stakes are extremely high. On the one hand, the urban population continues to grow and 95% of this demographic increase is taking place in emerging or developing countries, many of which lack the financial resources and human skills to tackle it and to provide solutions that are adapted to the scale of the challenges posed. These budgetary and

managerial uncertainties are compounded by the threats which undermine urban areas, be they the dramatic need of renewable energies or the dangers caused by the destruction of the living environment due to climate change and the resultant natural disasters. The repercussions can be felt at different levels of social life: poor regional planning, inadequate technical networks, a deteriorated quality of natural resources, informal and precarious economic activities, social conflicts and mounting insecurity, to name but a few consequences.

These rules would be based on a renewed understanding of urbanism and would serve as a guide to future appropriate actions:

- Urban living should be seen as a sociological construct, the result of the interactions between men and women that give it life. Therefore, any global diagnosis should be drawn from these social phenomena, from the insight that the various urban stakeholders can provide. This feedback from those at ground level should be supplemented by analyses conducted by experts who will compare urban realities to the constraints and opportunities that stem from other scales of intervention.
- But the city is also a fantastic wealth-creating engine – this, not only from an economic and financial point of view, but also in terms of human resources, the capacity of some individuals to adapt to urban surroundings and create their own environment, and in terms of the skills of others to invent, innovate and resolve both small and big problems on an individual household scale, a community neighbourhood, city or regional scale. These assets should be systematically weighed up to assess their role in contributing to a joint effort to improve living standards in the city: public budgeting and allocation of funds, social capital and human investment as well as institutional, political and social organizations.

We shall conclude by stating that the current and future trials faced by cities are surmountable and that innovative forms of urban planning that are adapted to social and spatial contexts are perfectly within our reach. Nevertheless, genuine political willpower is essential to provide strong backing to material and immaterial ‘public goods’ – namely the city and urban living. With the right willpower, the tools that are in place can be adapted and priorities can be set to benefit the maximum number of people and ensure inclusion of the disenfranchised. Once political will has been asserted, the wholly unresolved open-ended question remains as to the approaches and methods to apply. And nothing can be done without clearly established priorities for the city as a whole, its neighbourhoods as well as its neighbouring region. Therein lies the problem. The pressures exerted on the city, whether economic or political, are enormous. Moreover, a large number of projects only reflect power struggles and sectorial conquests to the detriment of a holistic approach, not to mention better living conditions for the majority of city-dwellers, who are often poor and socially and economically marginalized as well as undermined in their urban integration.

This projection of tomorrow’s cities is ambitious in its intentions and strives for territorial and public equipment planning that benefits communities as a whole, in all their diversity. It is based primarily on the quality of the data and on attribution criteria and indicators of success, and takes into consideration complex and contentious realities as well as available resources – enabling choices that are based on well-founded and substantiated arguments. This planning method is the result of in-depth discussions between all the stakeholders concerned and rests on an entirely new, holistic approach where ‘sustainable development’ is seen as a ‘strategic project’ and where the urban poor in large cities are given a priority share of any benefits. Identified 10 years ago (Pedrazzini *et al.* 1996), ‘those who make the city’ will put planning back on the centre stage, both as the subject of theorizing and reflection on urban futures in developing countries and as the guiding motif

for social and professional practices that need to be promoted.

Notes

1. <http://www.un.org/french/events/rio92/agenda21/action7.htm>.
2. UNO Sustainable Development Indicators: <http://www.un.org/esa/sustdev/publications/indisd-mg2001.pdf>.
3. In this regard, see <http://www.unep.org/Documents.Multilingual/Default.asp?documentid=52>.
4. United Nations International Conference on Financing for Development (<http://www.un.org/esa/ffd/>), 18–22 March 2002, Monterrey, Mexico.
5. MDGs' Goal 7: Ensure environmental sustainability, target 11 (<http://www.undp.org/french/mdg/goal7-f.shtml>). UN-HABITAT estimated that reaching this goal would represent an investment of about 1800 dollars per person to be divided between government aid and a contribution from the beneficiary, meaning a total of 180 billions, without including the costs incurred by the 700 million new slum-dwellers, who will emerge by 2020. Moreover, the United Nations agency calculated in its 2007 report that the combination of public and private investment in sub-Saharan Africa only covers 5–10% of the funding needed for the rehabilitation of shanty towns in this part of the world (UNCHS-Habitat 2007).
6. <http://www.un-habitat.org/content.asp?cid=1631&catid=543&typeid=6&subMenuId=0>.
7. There is still major room for improvement in the processing of contaminated materials, solid waste and sewage. Indeed, it seems that only 15% of wastewater is purified in Latin America (Winchester 2005).
8. Two sectors would benefit from these technological transfers: processing of household refuse, with equipment purchased (or received) from the West, ill-adapted to roadways or collected materials (Pham Gian Tran *et al.* 2002); and waste water processing by sewage treatment plants, which are very expensive in terms of maintenance and operating costs.
9. According to Bigio and Dahiya (2004), from 1992 to 2003, the World Bank's investment in urban environment upgrading initiatives accounted for 20% of approved projects, namely 12 billion dollars, which represented about 12% of the World Bank's total investment during this period.
10. For example, household connections to drinking water, electricity, fixed or mobile telephony, public transportation and household waste collection.
11. As said in Mexico, services are 'parachuted', such as illegal household electrical lines operated

clandestinely from public grids, by bribing technicians or more generally by occupying vacant property to build households.

12. For example, of five sub-Saharan countries which attracted the most private investment through PPP projects (South Africa, Nigeria, Mozambique, Côte d'Ivoire and Kenya), South Africa was clearly in the lead, accounting for 48% of investment in the region from 1990 to 2004. The telecommunications and energy industries attracted the highest amounts, with 36 out of a total 39 billion US dollars (World Bank reference: <http://web.worldbank.org/WBSITE/EXTERNAL/ACCUEILEXTN/PAYSEXTN/AFRICAINFRENCHEXT/SENEGALINFRENCHEXTN/0,contentMDK:20818340~menuPK:461499~pagePK:141137~piPK:141127~theSitePK:461478,00.html>).
13. For instance, some residents of the poor suburbs of Buenos Aires decided to abandon household water meters, as costs induced by this technological and managerial innovation exceeded their financial means (read more in Kullock *et al.* (2002)).
14. Read more in the letter of complaint addressed by El Alto's inhabitants to international cooperation agencies: http://funsolon.civiblog.org/blog/_archives/2007/4/13/2878606.html.
15. Although some services such as public transportation or mobile telephony may be open to competition, other services requiring very heavy investment on a local urban level stay in the hands of one provider as is generally the case for waterworks, solid waste, public transportation, energy supply (refer to the involvement of Veolia, the number one services and environment company in various very profitable sectors such as urban management, water and ground passenger transportation: <http://www.institut.veolia.org/en/> and http://www.veolia-proprete.com/sf_metier_nettoiemnt_proprete_urbaine_us.asp?rub=BBD).

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