

**Slum Upgrading:  
Interdisciplinary Perspective and Intersectoral Action  
Towards Urban Sustainable Development**

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Paper Presented in Track 3: Housing and Community Development at the  
3<sup>rd</sup> World Planning Schools Congress, Perth (WA), 4-8 July 2011

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**ABSTRACT:**

*The slum question is not marginal to urban planning and social development – it is at its very heart. All the more so now that urban growth takes place primarily in developing countries in which populations move from rural to urban regions at a very fast pace. And around one billion of people (with a perspective of 2 billion in 2030), the third of the world's total urban population, live in such conditions of precariousness. Confronted with this demographic and spatial revolution, urban decision-makers are often helpless. Sometimes this is due to a lack of political will, but more often it is the result of a lack of financial resources and insufficient or inappropriate individual and institutional capacities, with an impact in terms of inappropriate instruments and deficient support to decision-makers.*

*The aim of this communication is to: 1) actualize the analysis of the phenomenon; 2) outline through a number of urban case studies in several emerging and developing countries, some relevant conditions that should be gathered to improve the human and built situation with a view to urban sustainable development.*

*Through case studies in Latin America, Western Africa and South East Asia, we will demonstrate that the good practices in slum upgrading and urban development are generally based on similar criteria: a) an interdisciplinary approach of the issues linking environmental analysis, urbanism and socio-economic perspective; b) a multi-actors' definition of strategies, policies and priorities in the implementation of concerted actions; c) a conception of urban planning, which includes sustainable development areas: sound territorial distribution of population and human activities; social equity; economic prosperity, and conservation of environmental resources; d) the translation of the expected balance into decision-making processes (institutional and political framework) and covering the economic, environmental and social costs to society (mainly the economic and financial dimensions).*

**Keywords:** *slum upgrading - urban development – interdisciplinary planning*

## **Introduction**

Twenty-five years ago, I first set foot on the African continent. I was a young Urban Office manager in the Slum Upgrading Agency of Nylon Zone, in Douala, Cameroon, starting off on my career as an International Cooperation worker. In front of me was the agency's director, a Cameroonian man in his forties who welcomed me and presented the project aims, actions to be carried out, and the benefits that would be reaped by the 150,000 impoverished city-dwellers living in this vast slum in the suburbs of Douala. Behind him, there was a colourised map from 1980, announcing the broad lines of an urban planning project for the year 2000. It had been drawn up at the time for the government, by a foreign consultancy firm. All the drawings were wrong, the city boundaries had been exceeded, informal settlement areas erased, existing infrastructures missing and replaced by roads, drainage systems and other public amenities which, still today, have never gone beyond the imagination of a few firms, specialized in projection, with no sense of reality.

I still think of it occasionally, after having criss-crossed the African, Asian and Latin American continents and contributed to many studies, several rehabilitation projects and various assessments; all leading to the same conclusion: facts are known, and as Mark Twain would have said: "facts are stubborn things". This much is certain, often facts pass us by; we are unable to control them, let alone influence them. And, confronted with this reality, consciously or unconsciously, we occasionally would rather deny them (Ascher, 2001). We continue, as urban planners and professionals, to project new physical infrastructures within the framework of cities of the South, in an attempt to improve the living and settlement conditions of urban populations, without going beyond the level of local and sporadic implementation, and this for a limited period of time, without mechanisms to maintain them on a sustainable course and without any long-lasting effects.

This trend continues like an inevitable tide, with its predictable, often denied and mostly misunderstood consequences. Today, urbanization is a phenomenon that is symptomatic of the development of emerging and developing countries (Cohen, 2004): powerful, in the social, spatial and economic transformations it triggers. Urbanization is systematically combined with – in countries of the South – extremely rapid growth of new urban residents, and continuous increase in the number of poor people, often marginalised on economic and spatial levels. They, in turn, engender increasingly informal living standards (housing conditions, employment, etc.), deterioration in natural and built environments (water, soil, air

and waste), increasingly precarious living patterns in urban areas and growing insecurity and vulnerability of the most disadvantaged social groups.

The epitomy of such trends, observed in all countries of the South, is the slum, which has become the typical feature of urban growth processes, the antithesis of a desirable urban development that should be sustainable, harmonious and balanced, not only on a spatial level, but also in environmental, social and economic terms.

Faced with decades of repeated failures and modest local improvements, it is time to rethink the “urban issue”, by reconsidering slums, not by relegating them to the fringes of our concerns, but placing them in the very heart of urban land use systems. Slums should be in line with our sustainable development prospects, which should be the starting point for reflecting on the urban future – the cornerstone of urban planning methodologies – more modest but better targeted on the needs identified from urban reality; more rigorous in their diagnosis and able to incorporate both the physical dimensions of urban development but also its societal and environmental components.

This presentation is a plea in favour of this approach, trying to redefine the problem and its multi-faceted nature, while focusing on the paths and the means to qualify and quantify it, imagining, in the future, instruments able to assess problems, prioritize them according to their general and specific aspects, in order to contemplate solutions able to address the urgent issues that need to be resolved to ensure better living conditions for the poor populations of cities of the South, and therefore, for all city-dwellers, and all the protagonists who act in the city for their personal well-being as well as to protect and enhance public goods.

### **State of art : figures and the individuals behind them**

In developing countries, about two billion people currently live in an urban environment. According to United Nations forecasts (UN-Habitat, 2003), this figure could double within the next thirty years. Today, it is estimated that more than one billion of these poverty-stricken urban dwellers live in slums (Bolay, 2006; Neuwirth, 2005; Davis; 2006). The world is urbanizing inexorably and this trend, according to demographers, is henceforth essentially taking place in emerging and developing countries, first of all in Asia and Africa, and to a lesser extent, in Latin America. It is coupled with a progressive shift of poverty, which, although it remains mainly a feature of rural populations (who constitute 75% of the world's

poor), is now continuously increasing in urban areas (Ravallion, M; Chen, S.; Sangraula, P.; 2007)

A further relevant characteristic pointed out by the United Nations Population Division is that a majority of the world's city dwellers still live in small or medium-sized urban agglomerations. In developing countries, 16% of the population live in megalopolises of over 5 million inhabitants, 24% live in metropolises with between 1 and 5 million, 9.4% in agglomerations with between 500,000 and 1 million inhabitants, and 50.5% in cities of less than 500,000 inhabitants (United Nations, Population Division, 2007). Even though attention generally focuses on metropolises and larger cities (Henderson, 2002), most urban issues will have to be tackled in smaller cities.

The United Nations has indirectly defined five key drivers necessary for promoting slum-free urban development: access to water, sanitation, security of land tenure (Durand-Lasserve & Royston, 2002), building sustainable housing, and sufficient living space. The report drafted by the United Nations on the occasion of the New York summit of 2005 stated that the deployment of these remains to be confirmed: the percentage of people in developing countries with access to drinking water rose from 71% in 1990 to 79% in 2002, while access to sanitary facilities increased from 34% to 49%. However, the number of slums mushroomed in this same period. It is estimated that there were 662 million of these poverty-stricken city dwellers in 1990 and 998 million in 2007. According to the United Nations, this figure will reach 1.4 billion in 2020 (UN-HABITAT, 2007), possibly 2 billion in 2030 (UN-HABITAT, 2003).

DFID (2007) has pointed out that the challenges of a sustainable and acceptable form of urbanization from a social and political standpoint remain a priority and they are of an unprecedented magnitude in view of what is promoted by the United Nations:

One third of the world's urban population – some one billion individuals – live in slums; 94% of slum dwellers live in developing countries. Africa and Asia will be predominantly urban by 2030; 72% of urban populations in Africa live under appalling conditions, and this figure rises to 80% in the poorest countries on the continent. Cities in developing countries will absorb 95% of world urban growth over the next two decades, while the total urban world population will swell to 5 billion by 2030. Today, 560 million city dwellers have no access to clean sanitation. Around the world 6.7 million people were evicted from their homes between 2000 and 2002.

This all-embracing dynamics produces “disrupted” agglomerations in which urban planners and other specialists deal with only a limited portion of the territory, seconding public authorities who are often disappointed or disarmed and withdraw from the fray (Paquot, 2000; Paquot, 2006). Urban specialists also show little inclination to solve the burning issues that beset the population. Seeing the negligence of their governments, the most energetic residents develop autonomous strategies and launch measures to solve their daily problems independently, and on their own terms. This distance between urban dwellers and decision-makers, and the dysfunction it provokes in urban management, generates problems that are all too well known:

- A disintegration of the social fabric and a shift of poverty from rural to urban regions
- A dual urban space with well-equipped business and residential areas, and precarious settlement zones that are ill-integrated within the urban structure
- Urban territorial planning that is disconnected from land occupation, generating self-help housing
- Incoherent distribution of responsibilities between urban actors (political authorities, civil society organizations and residents’ associations)
- A rapid deterioration of the urban environment due to the degradation of the built environment and the contamination or depletion of natural resources.

The immediate consequences of this situation are:

- For users: their habitat is of inadequate quality; town districts have poor infrastructure, equipment and collective services, and suffer various forms of environmental degradation;
- For those in charge of urban planning: the impossibility to apply classical models of spatial organization becomes apparent, as does the need to invent remedial solutions based on existing social and territorial conditions.

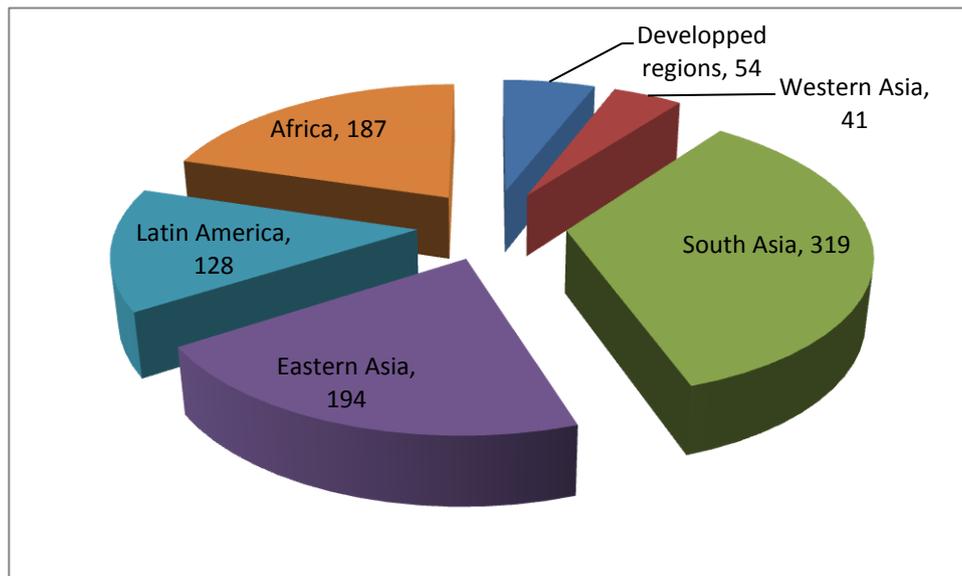
The widespread phenomenon of slums across the planet deserves further analysis. It is, as stated by Jacques Véron (2008), one of the contemporary impacts of the “urbanization of the world”. The figures collected by the United Nations on this issue in 2003 (UN-HABITAT,

2003) show that their expansion varies widely according to regions of the world. If, on a global level, about 31.6% of the world urban population live in slums, this concerns 71.9% of the sub-Saharan population in Africa, 58% in South Central Asia, 36.4% in Eastern Asia, 33.1% in Western Asia, 31.9% in Latin America and the Caribbean, 28.2% in Northern Africa and 28% in Southeast Asia. Slums are both a sign of poverty, and even more so, of social disparities and inequalities reproduced on a territorial level. Even though they do not concentrate all poor city-dwellers, who are to be found in other city neighbourhoods, they particularly embody material and urban precariousness, marginality and vulnerability of large sections of the urban population, while generally impacting the city's organization, in the present day, and even more so, for future prospects of urbanization.

The long-standing remit of UN-Habitat is to define the parameters so as to be able to analyse, assess and quantify the extent and nature of slums, adopting five key indicators for international benchmarking: access to water; access to sanitation; structural quality of housing; overcrowding and high density, and security of tenure. These indicators clearly highlight the deficiencies of these neighbourhoods compared to the standards of objective quality that urban planners and specialists wish to provide for the city and against prevailing living conditions. In my opinion, it would have been useful to add three complementary dimensions: one regarding the number of community amenities installed in the area (schools, health centres, markets, etc.); a second, focusing on access to public transport (existing bus lines, trams, and other means of transport – state-run and/or private); and a third, reflecting the economic importance of the informal sector. Alsayad & Roy (2003) think of urban informality as an organizing urban logic, while manifested in distinct sectors. During a United Nations workshop organized on the issue, Mboup (2004) demonstrated the relative significance of the individual identification parameters of slums on a global level: lack of secure tenure 70%; lack of durable housing 65%; lack of sufficient living space 60%; lack of improved sanitation 50%; lack of improved water 20%. Based on the impact of climate change in terms of the vulnerability of poor urban dwellers in Latin America, researchers from the International Institute for Sustainable Development (IIED) combine these criteria with a few parameters that are interesting to trend, such as: locations most exposed to hazards (risks of flooding or landslides); who lives in locations lacking the infrastructures that reduces risk; who lacks knowledge, capacity and opportunities to take measures to limit impacts (Hardoy, Pandiella ; 2009).

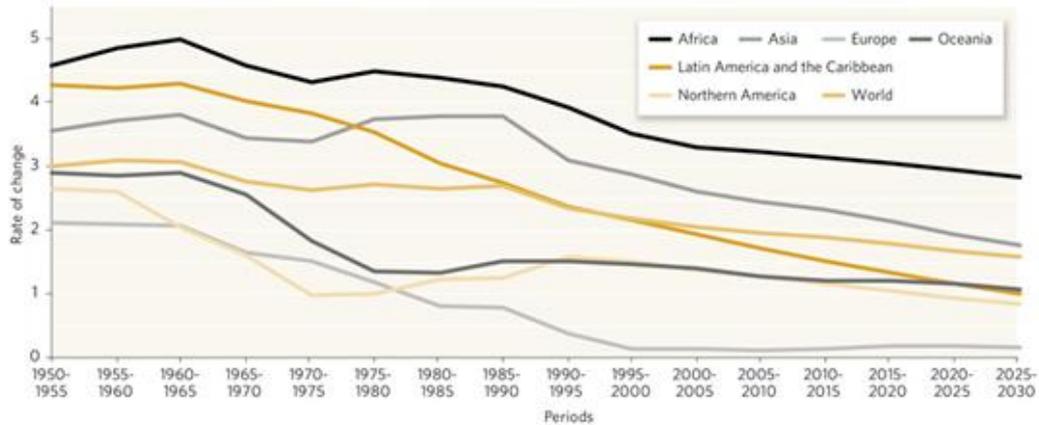
In quantitative terms, it is easy to realise that all continents have been affected by this phenomenon: Asia, Africa and Latin America. However, we will particularly highlight the cases of Africa and Asia, given that we are, comparatively, dealing with regions of the world that are still very rural in demographic and economic terms, and for which urban transformations are occurring at a very fast pace. Therefore, it is most probably in Asian cities that problems of poor urban development will emerge in the most alarming manner.

Figure 1: Regional distribution of urban slums dwellers (J-C Bolay, from UN-HABITAT, 2003)



The United Nations (UNFPA, 2007) indicate that the global rate of urban growth between 2005 and 2010 reached an annual pace of 2% worldwide, varying between 0.5% and 4% according to countries and regions of the world. In Africa, the continent with the largest population growth, this rate goes up to 3.2%, it accounts for 2.4% in Asia, 2.8% in Arab countries, 1.7% in Latin America and the Caribbean, 1.3 % in North America, and only 0.1% in Europe as a whole.

Figure 2: Average annual rate of change of the urban population, by region, 1950-2030



Source: United Nations, 2006. World Urbanization Prospects: The 2005 Revision, Table A.6. New York: Population Division, Department of Economic and Social Affairs, United Nations.

As for the current decade, 2010-2020, the tendency is towards a widespread decline of rural and urban population growth, even if regional differences remain significant, marked by similar trends in favour of urban expansion (UN-HABITAT, 2009): 1.8% of annual urban growth on a world scale, 3.18 in Africa, 2.23 in Asia, 1.42 in Latin America, 1.14 in North America and 0.18 in Europe.

### Urban regeneration projects: what is the impact on slums?

In developing countries, urban, spatial and demographic growth is characterized by deterioration in the physical, economic and social living conditions of an ever-growing proportion of urban population, which has been globally and continuously increasing for decades (Montgomery et al, 2003).

This equation – increased precariousness of urban settlement = impoverishment of urban populations – can be summed up as what Potsdam Institute’s researchers have labelled the "favela syndrome" (Kropp et al, 2001). Nevertheless, making such a diagnosis, fuelled by many material, natural and socioeconomic indicators, does not enable us to identify trends over time; highlight the contradictions between residential practices, social rationales and public policies; or to outline lasting solutions focusing on the well-being of urban majorities.

New avenues of reflection need to be explored to go beyond the following:

- on the one hand, any exclusively sectoral, technology-based and territorial approach, with which a “bright future” made of standpipes and clean toilets is reinvented in all neighbourhoods of all third world cities.

– on the other hand, any millenarian and global vision hiding the profound contradictions of contemporary societies behind the fallacious political and financial intent of governments and international organizations, which, occasionally, are nonetheless genuinely concerned by the plight of the poorest.

In light of these worrying developments, local, national and international policies have gradually changed:

- a first repressive approach long aimed at eliminating slums and enforcing an urban regimenting of the poor – in other words, migrants and other dangerous populations – into manufacturing and productive cohorts.
- for almost thirty years, there has been a tendency toward the assimilation of urban masses, for whom an enabling State provides services and advice – at best, framework conditions, at worst, laxity and corruption – forcing the poor to become small businessmen in charge of their own destinies, and, in doing so, in charge of present and future city land development.

B. Michelon (2010) provides a good summary of these developments ranging from the implementation of urban policies in sub-Saharan Africa, which targeted “simplified actions in an increasingly complex institutional landscape”, including the destructive mindset in the 1950s and 60s, to awareness of the need to improve real and structural living conditions of slum-dwellers in the 1970s, to the benefit of more inclusive urban regeneration projects from the 1980s, and this, against the backdrop of institutional reforms, the decentralisation of powers and structural adjustments. Such trends, also observed in Asia and Latin America, must not distract us from the continuous process of destruction and expulsion, e.g. between 2000 and 2002, 6.7 million people around the world were evicted from their homes (Bolay, 2011).

Above all, slums embody the physical and material configuration of contemporary cities, characterized by – in terms of housing and environment – a number of material deficiencies, which define their precarious and insalubrious nature. Slums are both a material and architectural reality, inherent to each individual or collective dwelling, and an urban and ecological reality. Yet slums, beyond their structural instability, also provide a breeding ground for social advocacy, economic innovation and urban adaptability, thus changing into what they should be in the eyes of decision-makers: an environment to be regenerated for the

benefit of inhabitants, a living space to be enhanced and a challenge to be met to promote greater urban coherence.

As regards territorial organization, standard urban planning principles would dictate land use, the demarcation of infrastructures and the definition of technical services and networks essential to community life to meet a comprehensive vision set out by the relevant authority, which would then be translated into a physical form before individual stakeholders are allowed to enjoy their occupancy rights, in keeping with the rules laid down. In slums, this technocratic and linear rationale is undermined by social practices stemming from generally poor individuals, families and social groups, who – confronted with the neglect of public authorities – attempt to solve urgent urban integration issues by their own means, on a scale relevant to the way that they envisage the problem (typically, the plot, the house and then the neighbourhood), without taking into account other levels of urban intervention (i.e. agglomeration, administrative territory, urbanized area, metropolis, rural/urban region, etc.).

The immediate consequences for users on the one hand, are a low-quality built environment; a neighbourhood with insufficient infrastructures, community amenities and services; a polymorphous pollution of the natural environment; and for urban planners on the other hand, the inability to apply standard spatial organization models and the need to recreate land use patterns from pre-existing constraints.

In terms of urban management, this leads to two conflicting rationales of design and intervention: one focused on the long-term and on an overall planning process envisioned in a consistent manner on a spatial and technical level; the other, based on social immediacy and users' site occupancy to meet family and specific community needs.

Countless slum upgrading projects have been implemented worldwide. Very frequently, they are implemented under the aegis of external development agencies (NGOs, international organizations), or by the local authorities, sometimes under the pressure of grassroots associations, often with the support of foreign bilateral and/or multilateral donors. In the present day, Cities Alliance<sup>1</sup>, an international coalition of agencies from the World Bank, the European Union, local and national authorities, NGOs and slum-dwellers' associations, is one of the main global initiatives in this area, with more than a hundred projects launched from the 2000s, on various continents and through two programs: city development strategy and slum upgrading, entailing investments of tens to several hundreds of thousands of dollars per project. In the ten years of its existence, some 247 projects have been initiated, with an

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<sup>1</sup> <http://www.citiesalliance.org/ca/>

investment of about 112 million dollars<sup>2</sup>. When assessing three major slum upgrading operations successfully conducted by the World Bank, during the 1990s, Werlin (1999) notes that, a few years after completion of works<sup>3</sup>, most project goals were not really fulfilled, in terms of material and long-term sustainability, cost overruns, lack of maintenance, delays in land ownership regularization and conflicts within community beneficiaries. A string of examples confirm this and may be consulted in just a few clicks. For example, an MIT website – online for a few years now – addresses about thirty ongoing cases over the last twenty years, analysing the goals, investments made, activities achieved, and presenting the strengths and weaknesses of individual projects<sup>4</sup>. Impareto & Ruster (2003) have also assessed, on behalf of the World Bank, five programmes implemented in Latin America (Bolivia, Brazil, Costa Rica, Mexico and Peru), with particular attention to slum upgrading and community participation. In the findings of their comparative analysis, they state that: “a slum upgrading program is not a collection of technical actions to be performed independently of each other. It is an integrated and comprehensive intervention aimed at improving the physical characteristics of a neighborhood and its inhabitants’ quality of life”, and that to have a significant impact, the tools used must be applied to an urban agglomeration as a whole. Additionally, inhabitants, even when destitute, do not see themselves as victims of society, but as its active, dynamic and creative partners. Similarly, Turkstra & Raitelhuber (2004) conclude their remarks on the GIS (Geographic Information Systems) follow-up of two slums in Nairobi and Addis Ababa, by emphasizing the need for action plans, not only on a sectoral level but also by working jointly with the various stakeholders operating in underprivileged neighbourhoods.

This naturally brings us to a change of paradigm, now taken up by the United Nations, who like all advocates of urban rehabilitation of impoverished areas, challenge operations that are strictly technical and material, and aim for integrated and multi-dimensional operations, meeting both the housing and urban concerns of populations, who desire a healthy, safe and sound built environment, but also the global urban integration issues of economically and socially marginalised populations. To that effect, inhabitants become key players of urban transformation (UN-HABITAT, 2009; Bolay, 2006). In a vast quantitative analysis carried out from UN data on about a million slum dwellers in all continents, Arimah (2010) concludes that the prevalence of slums is directly linked to the macroeconomic environment,

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<sup>2</sup> [http://www.citiesalliance.org/ca/sites/citiesalliance.org/files/Annual\\_Reports/AR2010\\_FullText.pdf](http://www.citiesalliance.org/ca/sites/citiesalliance.org/files/Annual_Reports/AR2010_FullText.pdf).

In medium terms, it represents an individual investment of 450,000 US dollars per project.

<sup>3</sup> Calcutta, 428 million US\$; Jakarta, 353; Manila, 280.

<sup>4</sup> <http://web.mit.edu/urbanupgrading/upgrading/case-examples/index.html>

therefore decreasing with income. It is obviously highly dependent on the migration flows fuelling the cities of the South, and on the legal and regulatory framework laying down the conditions of access to land and property.

Without providing a comprehensive view of what is done today worldwide to regenerate slums (UN-HABITAT, 2010; Brockman, 2009) and to provide decent living standards for their inhabitants, the few examples presented here allow us to pinpoint some of the permanent features which should be contemplated in the future.

The first finding is that a large majority of slum upgrading operations are conducted beyond the range of regular local and national government budgets. Taking action on an *ad hoc* basis when confronted with a structural problem is certainly the most hazardous manner of contemplating it, regardless of the quality of the results immediately achieved. The second finding is of a financial nature. When comparing investments required to successfully run a city on tangible and intangible levels, funds earmarked for slum upgrading actions are, almost systematically, very modest and limited in time. Indeed, there are a few exceptions only, now considered as historical cases, which offset this trend. And very rarely are these operations then embedded in the city's usual management practices, with maintenance and follow-up budgets. The third finding addresses the changes observed in approaching and solving problems. Now, almost all projects involve multiple stakeholders and contemplate several levels of problem-solving: housing, infrastructures, amenities, but also economic advancement and social involvement. This does not mean, however, that this participatory approach is flawless: some of the weaknesses regularly identified include political pressure, deficient financial mechanisms, red tape and delayed upgrading works. The last point that should be highlighted, applicable to all cases, consists of the development, over the last decades, of projects which increasingly factor in the inhabitants' demands stemming from consultation processes, incorporating basic data, such as financial capacities, achievements made and their cost, as well as the poor populations' social accessibility to the city and its amenities.

These transformations are fundamental when they are not only physical and tangible, but also focus on the various social players involved, especially inhabitants. They either foster or hold back in-depth understanding of projects, their integration in a more comprehensive view of urban and regional development, and their ownership by city-dwellers in the short term, but also and above all in the long term, as public goods placed under their responsibility.

With reference to several projects that we have been involved in as from the 1980s, I would like to shed some light on the multi-faceted aspects of urban rehabilitation projects and on preferred approaches to upgrading slums and the living conditions of their residents.

### **Slum upgrading, precarious habitat and participatory urban projects**

The “urban question” becomes multi-faceted and multi-dimensional as soon as it must account for areas that have been planned and laid out in very different manners: private and intimate such as the home, sociable and socialized as a city district, more functional and complex as an agglomeration. The challenge of urban research lies precisely in the quest for the coherence between concept and action at these different territorial levels.

The various research projects and urban development activities we have been involved in for nearly 20 years in Africa, Latin America and Asia have made us receptive to this plural and association-based approach at different levels: (intra/urban, urban/rural, regional/national/world), recognizing the contributions of specific players (public, private and community-based, individual and institutional) and taking into account their scientific and professional specificities (architects, urbanists, planners, technicians, administrators, economists, finance specialists and social scientists).

The participatory logic is essential for sustainable urban action. And it was this aspect that failed in the restructuring and urban planning project in the Nylon zone<sup>5</sup>, in Douala, Cameroon. During the 1980s, the World Bank and the Swiss Agency for Development and Cooperation (SDC) had joined forces with the national government to rehabilitate a part of this metropolis at infrastructural, housing and socio-economic level. Douala had suffered the strongest demographic growth and the greatest official neglect; the project called for the construction of roads and drainage systems, the installation of collective equipment, but also regular landownership, housing credits, the relocation of families affected by the works, the promotion of crafts and of employment in general, support for basic community organizations; in a word, this was an “integrated” urban project<sup>6</sup> (Bolay, 1988).

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<sup>5</sup> A name adopted by the inhabitants in the early 1960s with reference to the synthetic fabric that was then making its appearance on African markets; it reminded them of the soil of their peripheral zone, swampy and very sensitive to changes in rainfall.

<sup>6</sup> Expression adopted to designate a multi-functional, multi-sectoral and multi-player project, which accounts for the various dimensions of urban life and treats them in concerted and coherent fashion.

In 1980, the 13 districts of the “Nylon” zone were home to almost 20% of the city’s population: a vast dump with no drinkable water, no waste water processing or garbage disposal system, no asphalt roads, no public schools or health care centers.

The project would never have seen the light of day without the community organizations in these districts. But what happens when such local initiatives are taken over by an international development project? Scope, methods and intervening parties change. In 1983, the government of Cameroon signed a first agreement with the World Bank for 55 million USD of which 36% was lent by the Bank, 10% by the SDC and the rest by the government. At the end costs skyrocketed, with expenses up by 50% to 200% according to the object in question (Gulyani & Debomy, 2002). There was widespread dissatisfaction at the lack of concern by government authorities, at clan in-fighting and the complexity of institutional structures from which inhabitants felt excluded.

Here again, social practices are marginalized (Pedrazzini et al, 2005) when technocratic and mercantile approaches get the upper hand. The residents, migrants of rural origin, had organized in order to cope with the most pressing problems prior to the launch of the rehabilitation project, building schools, paths, drains. As the project developed they found themselves progressively eliminated from decision-making and relegated to the status of clients of inept procedures to regulate housing and landownership. And some twenty years following the completion of works, the Nylon zone has unfortunately gone back to its initial condition; roadways are impracticable and amenities in a bad state of repair. The project was oversized, maintenance budgets were not provided for the city of Douala and the national government did not allocate additional resources – not to mention the numerous ethnic and social conflicts that emerged from the idea of only giving precedence to one of the city’s impoverished areas, inhabited by non-indigenous people from Bamiléké, and to the detriment of other neighbourhoods faced with similar poverty symptoms.

Keeping a firm grip on local circumstances is crucial: i.e. starting with problems arising in the field, listening to poor populations expressing their needs and fulfilling their requests by incorporating them in structural policies adapted to institutional as well as social contexts. The elements that had been lacking in Cameroon in the early 1980s were raised as development issues in Bolivia in 1990.

In the early 1990s, a team headed by the Swiss Federal Institute of Technology of Lausanne (EPFL), in cooperation with the Bolivian Ministry for Urban Affairs, attempted to translate a presidential decision to render subsidised housing accessible to the poorest into application

modalities<sup>7</sup> (Bolay, 2002). Two elements were symptomatic of the difficulties which confronted urban dwellers in Bolivia at the time: the informal urban sector caused by macro-economic changes grew from 43% in 1976 to 55% in 1987<sup>8</sup> (Pradhan & Van Soest, 1995). In 1992, a CEPAL study estimated that there was a shortage of some 270,000 housing units<sup>9</sup>.

Instead of asking the population to adapt to existing regulations and to the institutions entrusted with their implementation, the research project adopted the opposite view. Who are these urban poor in need of housing? What conditions do they live in? What are their aspirations and what are they willing to do to improve their situation? An extensive series of queries that a group of experts, representing science, the banking system, the government and civil society, attempted to answer in two steps: first by looking directly at these people's socio-economic and housing conditions; then, by examining the dysfunctions of a public housing credit system that marginalises persons without a fixed salary, and – more generally speaking – low-income families (Bolay, 1998). Reorganizing this sector called for a change of perspective: it was necessary to find financial backers ready to grant credits on different bases, and adapt them to the reimbursement capacity of the parties in question and to the speed with which they could execute the work<sup>10</sup> (unlike salaried workers they build their house themselves, working as fast as the ups and downs of their private and professional lives allow).

Later, since 1993, a 10-year collaborative project between Vietnamese and Swiss social scientists, engineers and architects deepened our understanding of the interactions between precarious habitat, poverty, social exclusion and spatial planning (Bassand et al, 2000; Bolay, Thai Thi Ngoc Du, 1999; Bolay et al, 1997). By repositioning housing issues, specifically the problems of housing for the poor, in their territorial and environmental context (Wüst, Bolay, Du; 2002), the Vietnam project established a link between the natural and the built environment, highlighting two dimensions which should provide us with a better understanding of urban slums and develop – finally! – realistic ways of dealing with this situation. This can be done by examining different spatial levels in the analysis of the

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<sup>7</sup> In the early 1990s, the poor made up 60% to 70% of both the urban and the rural population in Bolivia (World Bank, 1990).

<sup>8</sup> 68% of urban jobs in 2002!, according to an analysis of statistical data conducted by Tannuri-Pianto et al (2004).

<sup>9</sup> Meaning a deficit of 15% of overall housing, which rose to 26% in 1995 (Szalachman, 1999).

<sup>10</sup> It is also at this time, in 1992, and without reference to the present project, that the NGO PRODEM, which since 1986 specializes in micro-credits for production purposes became Banco SOL (like Solidaridad), a bank that still exists. .  
(<http://www.bancosol.com.bo/historia.html>)

phenomenon itself and when implementing solutions; with a multidimensional urban concept that integrates the habitat of the poor in a perspective of sustainable urban development (Godard, 1996). However, this approach to problems struggled to extend to all slums of Ho Chi Minh City. Firstly, it is due to the fact that the prevailing metropolitan rationale in Vietnam tends to prefer very large infrastructures and amenities viewed as useful for the whole agglomeration, without any major concerns for very local housing issues of the poor living in deprived areas – the most common solution being to resettle them in low-income housing, without worrying about their expectations or wishes.

Last but not least, there is an experiment which deserves to be recounted. In 2006, we were commissioned to evaluate the TWIZE project in Mauritania, led by the Ministry of Equipment, Housing and Land Planning located in the capital Nouakchott and in Nouadhibou, and financed with national funds and by the World Bank (Bolay, Chenal; 2008). For the developers of this large-scale project<sup>11</sup>, social housing is viewed as a powerful tool to combat poverty. The TWIZE slum upgrading programme implemented in Mauritania's two main cities aims to demonstrate this, by setting up an anti-poverty system based on four complementary components: social housing, micro-credit, vocational integration and promotion of community activities, thereby establishing TWIZE as an integrated project. It is banking on permanent dwelling providing decent living conditions, in the firm belief that it is the first step to changing the living standards of the poorest populations. The second goal of the TWIZE programme is to contribute to formalization of a housing policy in Mauritania, through its "social housing" component, in particular with the notion of shifting from a programme managed independently – through a technical unit created for this purpose – to an institutionalized programme within the Mauritanian administration. TWIZE was launched in 1998. After ten years of operation, the programme objective was to build a total of 7500 basic dwellings (a space of 20 m<sup>2</sup> composed of a room, a kitchenette and an outdoor latrine, with a possibility of extending the individual plot at a later stage) and to allocate 15,000 micro-loans for social housing. 5,200 out of the 32,000 targeted families eventually saw the construction of a new dwelling that met their expectations, and obtained one or several micro-loans. The programme was very efficient from an organizational standpoint, equipped with an effective social and technical structure. It has shown that poor populations are able to integrate a slum upgrading process and meet the requirements of a loan system, providing that it is tailored to the beneficiaries' means. There remains the open question of institutionalizing the system to

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<sup>11</sup> The project's coordinator is a large French NGO, the GRET, which commissioned us to assess the project after 10 years in existence.

make it sustainable and accessible to poor families across the country. In order to do so, such finding shall apply to Mauritania as well as to other places, the public administration, in this case the Ministry of Housing, should streamline its internal procedures and set up structures that will reproduce the efficiency and flexibility exhibited by the TWIZE programme. In addition, national governments have been requested to allocate funds, mostly internal, to facilitate and sustain the poorest populations' access to this type of social housing policy. In the case of Mauritania, new sources of revenue are emerging as the country has recently become an oil-producing power. However, the issues of fair taxation and social redistribution of public budgets remain unresolved.

### **Some initial conclusions: Slum upgrading and urban planning**

This brief overview of four case studies, representative of the problems that confront players in urban agglomerations in developing countries, tells us a lot about the issues that link urban planning and the organization of a healthy urban environment.

Without overly simplifying issues that everyone knows to be complex, one may state that resolving the great problems of planning and organization of the resident populations requires intervention at three levels:

- the first level is in the neighbourhoods, and interacts with local authorities, grassroots community organizations, families and individuals. The aim here is to circumscribe the immediate and more remote problems the residents deal with (gainful employment, schooling for children, housing, sanitation and health), in order to examine their local and wider consequences, the remedies and their costs;
- the second level is the agglomeration. Urban planners and decision-makers will have to account for community dynamics and for the changes they bring about in each city area. This will give them their rightful place in urban planning designed and implemented for the entire urban territory;
- the third level refers to the region surrounding the city, since any change in the city has a direct impact on its hinterland, or even beyond. It is therefore important to know more about the types of interactions that evolve between an urban agglomeration, region, country, and the global world community, in order to make informed political and urbanistic choices for the

benefit of the city as a regional support or national or international exchange platform (Bolay, Rabinovich; 2004).

Such a multi-level approach highlights the inconsistencies and contradictions that may occur between social dynamics generated by the inhabitants themselves and decisions made by authorities and implemented in the city (these may be technical or transport networks, large equipment, zoning, etc.). Put side by side, these contradictory choices and political or financial priorities may help redefine urban planning to make it more strategic, flexible and adapted to the existing socio-spatial context – and above all more attentive to the needs and demands of the citizens.

Watson (2009), in its reflection on “refocusing urban planning on the Globe’s central urban issues” makes a few comments which could be used to explore new urban planning avenues, grounded in the reality of a majority of city-dwellers in the South – often poor and without adequate housing. These comments recall that “approaches to planning which have originated in the global North are frequently based on assumptions regarding urban contexts which do not hold elsewhere in the world; secondly that the global demographic transition, whereby Southern cities and their growth dynamics are now the dominant urban reality, requires that planning turns its attention to these kinds of issues; thirdly, that the sharp divide in these cities between an increasingly informalised and marginalised population and techno-managerial and marketised systems of government gives rise to a conflict of rationalities”.

Whatever its demographic or territorial characteristics, its history or socio-political specificities, the urban settings can only be understood in a diachronic perspective which will bring to light, in the long term and in comparison with other cities, the different dimensions that shape its present and its future.

Many cities lack the financial resources to allow them to make an ordered investment in the infrastructure, facilities, networks and housing that would help them to solve the urban integration problems of all their citizens. However, this crucial financial question is by no means the only constraint on sustainable urban development. According to Hasan, Patel and Satterthwaite (2005), one priority is the promotion of available alternatives, by mobilising – in a different and conclusive manner – stakeholders involved at a national, and most importantly, a local level. Instead of being stigmatised as “the problem”, the poor should be considered as active members of a partnership fighting against poverty. However, their skills and potential are not recognised, and therefore can rarely be drawn on. Furthermore, local authorities play a crucial role in strategies aimed at upgrading urban living conditions. They

are the ones who will – with greater or lesser reach – set land policies and the rules for allocating land to poor families. They will choose between emptying and rehabilitating slums. They may or may not share decisions related to poor neighbourhoods with grassroots associations. In addition, local and international NGOs, which also contribute to these communities and their ability to negotiate with urban authorities, should also be considered important actors. 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 they interfere with the interests of influential economic stakeholders, who often lack the genuine political will to improve slum dwellers' living conditions and occasionally display high levels of corruption.

Urban planning must be simultaneously considered *intra muros* as part of a strategic perspective that can define a framework consisting of a general orientation and priority actions to facilitate the development of an urban territory (Josse, Vauquelin, 2010), as well as a regional and national perspective, to take advantage of the comparative situation of different cities and strengthen their attractiveness in order to benefit a solid national network with a global outlook.

The debate on urban planning in the South was launched a long time ago. It should be fuelled with what we know and what we see: ill-adapted models, increase of precarious housing, urbanization of poverty. Everything is in place to show us that our planning practices have not reaped the benefits that could have been expected from so many skills and so many experts brought together to set things right. Thus, there is a need to rethink the issue rather than adopting misguided solutions which do not yield the long awaited results. Initially, it is crucial to assess real circumstances, not only on an urban and architectural level, but also from a social, economic and institutional viewpoint; without duplicating so-called best practices, whose production criteria we mostly fail to recognise. Then, we need to have the courage to focus on the utmost priority in cities of the South, namely the poor and slums, to design comprehensive urban transformations, geared towards improving both living standards (employment, health, education, to name but a few typical facets of the problem) and rehabilitation of the living environment (housing, infrastructures, community amenities, and other aspects of the built environment). In the knowledge that we are faced with the varying rationales of different players (public authorities, economic stakeholders, inhabitants, community-based associations, etc.), at times antagonistic and often conflicting, we should breathe new life into design, planning, and construction methods, regardless of the type of

works, an urban planning that is tailored to needs, to the players involved, to the resources available, as the case may be, all the while remaining realistic but without lacking ambition, and leaving ample room for creativity – especially when such projects are actually implemented in the field.

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