

Chapter 2

Urban Facts



Abstract Today, the majority of the world’s population – roughly 54% – lives in urban areas. Though global, this trend nonetheless varies greatly depending on the country and continent. It appears that in Europe and the Americas (both North America and Latin America) the urban population has reached roughly 80%, versus less than 50% in Asia and Africa. Yet, it is in the two latter regions that 90% of the world’s urban transformation process will take place and have the greatest impact in terms of living spaces, economic activities, culture, lifestyles and mobility.

While considerable differences exist between countries, the same can be said of cities. Though most research focuses on major urban agglomerations (cities of over a million and megacities of over ten million), the fact that nearly 50% of the world’s urban population lives in cities of less than 500,000 inhabitants has been somewhat overlooked. Infinite in number, these small and medium-sized cities are extremely interesting in terms of the role they play as intermediate cities that serve their surrounding regions, providing public and private services and facilities that benefit both rural and urban populations. Yet, research on these cities shows that they are at a disadvantage compared to larger cities in terms of poverty, insufficient financial resources and skilled workers.

By considering the environmental, economic and social dimensions of sustainable development independently, we are able to differentiate South cities and integrate our 30 years of research within the framework of this multi-faceted problem. We argue the fight against poverty and instability are both a common thread and the greatest challenge to creating sustainable, inclusive cities.

To begin, environmental issues must be analyzed bearing in mind that urban life generates waste and pollution of natural resources (water, air and ground). The latter negatively impact individuals’ health when the sources of contamination and their effects are not monitored. In many South cities, where makeshift housing with sub-standard hygiene and sanitation conditions prevail, such monitoring is still in its nascent stage. Thus, many poor are exposed to environmental risks that far surpass those in other neighborhoods.

In South and North countries, cities are drivers of the economy. As home to half of the world’s population, they contribute 80% of the global GDP. In emerging and developing countries this economic dynamic couples with a high proportion of informal employment, a key source of urban insecurity. Far from being a space of

transition between the rural and urban economy, the informal economy is an integral part of the globalization of modes of production and marketing that goes together with the modern industry sector.

The picture of the South city would not be complete without an analysis of its social dimensions. Cities continue to grow with waves of rural migrant populations. These new inhabitants account for about 40% of urban growth in developing countries. For these individuals and families, urban integration means development potential not only economically and monetarily but also socially, culturally and healthwise, especially for new generations who were raised and educated in the city.

This positive urban vision should not overshadow the fact that the city is a machine designed to produce poverty and social inequalities. Nearly a billion people are living in slums, more than 90% of which are in poor countries. Economic growth is only partially reflected in the improved living conditions of the most destitute. The number of urban poor is expected to double in the next 30 years, a glaring indication of the need to rethink urban planning based on this mixed reality of wealth creation and growing disparity between social groups.

Keywords Urbanization · Small and medium-sized cities · Globalization · Economic growth · Social inequalities

2.1 Urbanization: A Global Trend

Since 1990, the world has seen an increased gathering of its population in urban areas. This trend is not new, but relentless and has been marked by a remarkable increase in the absolute numbers of urban dwellers. In 1990, 43% (2.3 billion) of the world's population lived in urban areas; by 2015, this had grown to 54% (4 billion). The increase in urban population has not been evenly spread throughout the world. Different regions have seen their urban populations grow more quickly, or less quickly, although virtually no region of the world can report a decrease in urbanization. (UN-Habitat 2016) (Fig. 2.1)

In 1950, 30% of the world's population was urban; by 2050, 66% of the world's population is expected to be urban. Today, the most urbanized regions include North America (82% living in urban areas in 2014), Latin America and the Caribbean (80%) and Europe (73%). In contrast, Africa and Asia remain mostly rural, with 40 and 48% of their respective populations living in urban areas (Fig. 2.1).

Here, as briefly summarized on the occasion of the Habitat III Conference. The facts are clear: the world is now mostly urban, with 3.96 billion urban dwellers in 2015 for a global population of some 7.55 billion, and a projected 6.41 billion for a global population of 9.77 billion in 2050¹ (UN DSAPD 2017) (Fig. 2.2).

This is the result of urban growth, which is not consistent at the global level. Such impressive differences have long distinguished continents based on dividing lines between countries and within each country. Systematically speaking, the more

¹<http://www.urbanet.info/world-urban-population/> (Accessed 21 May 2019).



Fig. 2.1 Ouagadougou, an African capital in constant renovation, 2005. (Reproduced with permission from Bolay)

a rural the country, the higher its current urban growth rate. Conversely, the larger a country's urban population, the lower its urban growth rate.

Thus by 2050, more than half of the world's population growth will be in Africa, with an estimated additional 1.3 billion people, followed by Asia, with an increase of 750 million people. Latin America, the Caribbean and North America will also experience modest population growth (Fig. 2.3). Europe is the only region whose population is expected to decline between 2017 and 2050. In total, 90% of urban growth will be in South countries, and in Asia and Africa in particular (UN DSAPD 2017).

The world urban population has grown rapidly, from 746 million in 1950 to 3.9 billion in 2014. Despite a lower level of urbanization, Asia is home to 53% of the world's urban population. With 758 million urban dwellers, China alone accounts for 20% of the world's urban population, followed by India with 410 million and the United States with 263 million. Europe is home to 14% of the world's urban population, and Latin America and the Caribbean 13%.

These changes, both the recent ones and those to come in the next decades, result in urban population growth rates that vary considerably from one continent to another. Growth rates in historically urbanized regions like Latin America and Europe are currently very low (1.3% for Latin America and the Caribbean and 0.5%

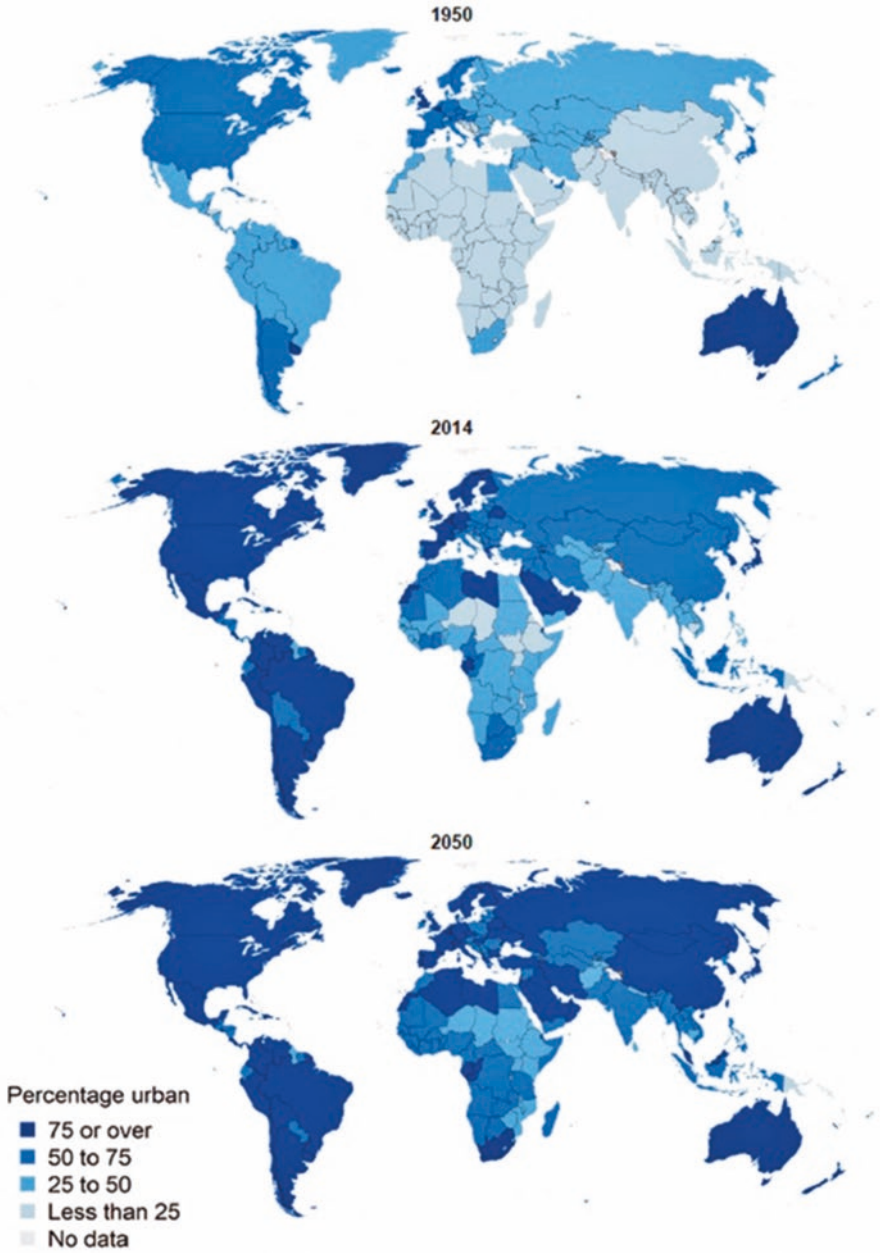


Fig. 2.2 Percentage of the population residing in urban areas in 1950, 2014 and 2050. (Reproduced from UN DSAPD 2015)

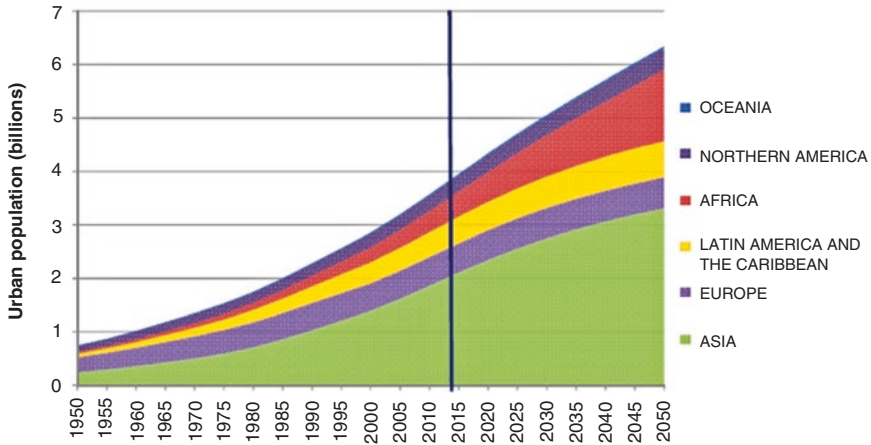


Fig. 2.3 Urban population by major world regions. (Reproduced from UN DSAPD 2015)

for Europe in 2017, according to World Bank data).² Asia and Africa, on the other hand, still have relatively high growth rates, though they too have gradually declined in recent decades (3.55% for Africa between 2005 and 2015 and 2.65% for Asia over the same period) (UN-Habitat 2016).

Jedwab et al. (2014) also point out that the pace of demographic and territorial change has accelerated appreciably throughout history and in different parts of the world (Fig. 2.4).

Urban expansion in the developing world has been dramatic. Between 1950 and 2015, the total urban population in developing countries increased from 300 million to 3 billion; the urban share tripled from about 17% to 50%. Overall, there are many similarities with the urban expansion process of developed countries in the 19th century. Yet, there are also important differences. First, urban expansion has been so much faster in today's developing world. In Europe, urbanization accelerated with the advent of the Industrial Revolution, rising from 15% in 1800 to 40% in 1910. Both Africa and Asia reached the same rate in half time, moving from 15% in 1950 to 40% in 2010. (Jedwab et al. 2014:6)

In recent decades, the focus has been on large agglomerations of several million inhabitants (cities of more than million inhabitants) and megacities of more than ten million inhabitants. Effectively, the numbers in such cities have increased exponentially. In 2000, for instance, there were 16 megacities versus 31 in 2016. It is estimated that by 2030, this number will have risen to 41, with most of the new megacities being in Asia) (United Nations 2015). Yet, all in all, these megacities will only be home to 8.7% of the world population in 2030. The 662 metropolises of more than a million inhabitants (United Nations 2016) on the other hand will be home to 27%. At the other end of the spectrum and 26.8% of the world's population will live in cities of less than 500,000 inhabitants. Small and medium-sized cities are therefore extremely important, given that they are currently home to 49.1% of the urban population (44.6% in 2030) (United Nations 2016:3).

²<https://data.worldbank.org/indicator/SP.URB.GROW> (Accessed 21 May 2019).

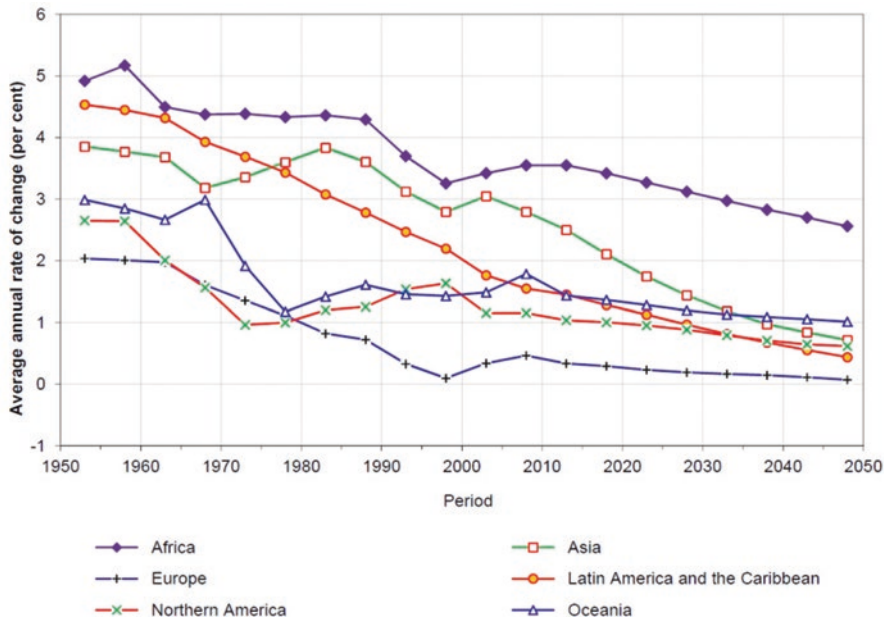


Fig. 2.4 Rate of urbanization by major area, 1950–2050. (Reproduced from UN DSAPD 2015)

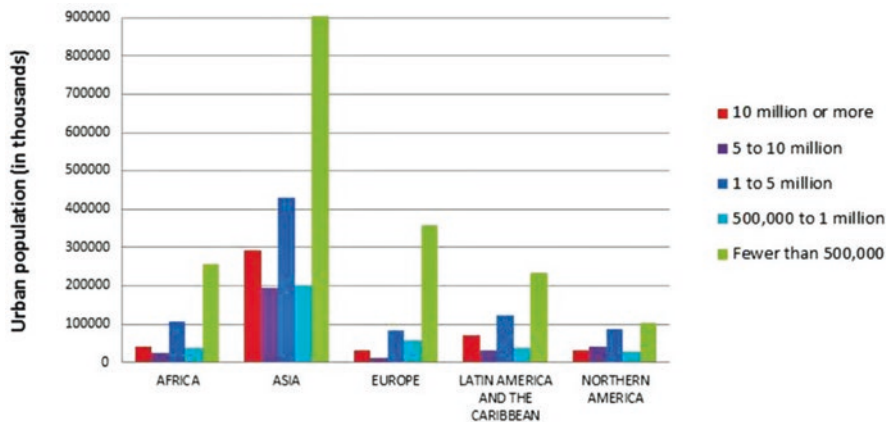


Fig. 2.5 Distribution of the urban population by city size and world region. (Reproduced from Berdegué et al. 2014)

Focusing solely on the urban population, we can deduce that nearly half of the world’s urban dwellers reside in relatively small settlements of less than 500,000 inhabitants (Fig. 2.5). UN-Habitat emphasizes the essential role these cities play in terms of their relationship to the rural world (UN-Habitat 2015). This phenomenon is not unique to developing countries; it can be seen on every continent, thus

supporting on our polycentric our view of population growth and urban development (Berdegué 2014; Adam 2006; Cohen 2004). We insist on the fact that these small and medium-sized cities face specific, relatively unknown issues and effectively play a strategic role in terms of regional development by providing services to both local and regional populations (Bolay 2016). We will consider this point in greater detail in [Chap. 5](#) in our discussion of Montes Claros.

This rural-urban connection is all the more strategic for the planet's future development, given the rural population worldwide is still high (currently nearly 3.4 billion but expected to fall to 3.2 billion by 2050). Africa and Asia are home to nearly 90% of the world's rural population. Though predominantly rural, Africa and Asia are urbanizing faster than the other regions and are projected to become 56% and 64% urban, respectively, by 2050.

Small and medium-sized cities often act as intermediary cities, as defined in previous works (Bolay and Rabinovich 2004; Bolay et al. 2003). Rather than focusing on population size and urban sprawl alone, we decided to examine cities' dynamics in terms of their intermediary function at several scales: (1) locally, with regard to their periphery, (2) regionally, with regard to economic activities and the rural/suburban population, (3) nationally, relative to their role in the urban network and (4) internationally, in terms of their attractiveness and globalized trade. To comprehensively explore the dynamics of urban intermediation, we established several areas of investigation: demographics (to determine migration flows); economics (to identify key sectors and markets); politics and institutions (based on the existing public institutions and the range of services offered); services and amenities (to highlight the diversity of the offer and demand); the environment (identifying the natural resources available and the impact of urban life on their balance); social relations (to analyze behaviors and social networks) and; culture (to understand local creativity and outside influences).

Using this frame of reference, which is still valid today, we can differentiate three types of intermediate cities according to their position in the spatial context:

- So-called “affected” intermediate cities: autonomous cities that have a strong territory position and trade relations with comparable or smaller urban hubs, but belong to a socioeconomic network that allows them to benefit from the influence of the closest city.
- So-called “satellite” intermediate cities: intermediate cities near large cities that offer their complementarity in terms of manpower, infrastructure and facilities;
- So-called “remote” intermediate cities: intermediate cities with a more closed system vis-à-vis the outside given their remote location (Bolay and Kern 2019).

Although still often poorly defined and often equated with medium-sized towns, intermediate cities are increasingly attracting the attention of researchers, policy-makers and politicians³ given that they are now home to a large percentage of the world's urban population.⁴

³A good example is the first World Forum of Intermediary Cities, organized in Morocco in July 2018.

⁴<https://intermediarycities.uclg.org/en>, (Accessed 21 May 2019).

Bellet and Llop (2002) explore the role these medium and intermediate cities play in their territories at the local and regional scales as centers of social, economic and cultural interaction. They are also connected with infrastructure networks that untie local, regional, national and international partners, and are usually home to various levels of local and regional government administration that must meet the demands and needs of large sectors of the population – a result of the decentralization phenomenon that can be observed in many South countries.

The authors present additional characteristics based on a survey of some 90 intermediate cities around the world. The former must be solidly argued, as they might seem opportunistic in a somewhat idealized vision of small and medium cities “where life is good,” versus the “urban hell” of large agglomerations. For now, however, they must be explored in order to clearly distinguish between the generic DNA of intermediate cities and their specific characteristics. The authors also speak of more stable, sustainable systems that allow for more balanced relations with the respective territories, and of using natural and human resources in a more equitable way at the regional level. They purport that intermediate cities are more easily governable, manageable and controllable, thus allowing for greater civic participation in the governance, administration and management of the city as well as settlements that are more human and livable, allowing citizens to identify with their city more easily. These cities do not suffer the environmental issues associated with megacities (e.g. social conflict). They are also less economically competitive than cities where the higher administrative functions tend to be located (Bellet and Llop 2002: 248–249). However, in a more critical stance, Kern and I (Bolay and Kern 2019) counter argue that a majority of these small and medium-sized cities lack the necessary institutional capacities to manage their rapidly growing populations. Data collected in different countries confirms that residents of smaller settlements suffered a marked disadvantage in terms of piped water and electricity supply, waste disposal services and schools compared to residents of larger cities (Cohen 2006), where levels of infant and child mortality are negatively proportional to city size (National Research Council 2003). Making smaller cities a focus on urban agendas must be a priority, particularly given their exponential demographic growth.

The research we conducted on intermediate cities in Latin America at that time led us to other, more nuanced conclusions about this set of qualifiers (Bolay and Rabinovich 2004; Bolay et al. 2003, 2004). More equitable, balanced relations between society, political powers and the environment are far from being the reality in all intermediate cities. As we will see later in this book, government funding is often proportionally inferior to that of large cities. Moreover, economic and social poverty are more prevalent, and paternalistic relations and cronyism between decision-makers and citizens commonplace, giving rise to dependency, subordination and even corruption. Infrastructure and technical networks may also be less efficient than in big cities, which has a negative impact on the quality of natural resources. What is certain is that intermediate cities – though quintessential given the issues they raise – remain little studied and merit further investigation.

UN-Habitat effectively reminds us that small and medium-sized cities have the highest population growth (UN-Habitat 2016) and that little effort has been made to

solve the urban planning and social integration issues they face, despite their demographic importance and strategic role, and compared to investments made in major cities. According to Birkmann et al. (2016), the population of small and medium-sized cities is projected to rise by 32% between 2015 and 2030 – meaning 469 million more people in these cities – whereas large cities and megacities are projected to grow by 26%, or 203 million people. Satterthwaite (2016) tells us that, in 2010, while there were 81 cities of more than 500,000 inhabitants in sub-Saharan Africa, there were 1612 urban centers of less than 50,000. As regional markets, these cities establish a continuum between villages and rural populations. Yet, the risks their populations face are greater than those faced by inhabitants of larger agglomerations, as community services – be it water, sanitation, electrical supply or wastewater treatment – are less efficient and generally less prevalent.

This renewed commitment to medium-sized cities and their strategic role in serving as a link between the rural and urban worlds came to fruition at the latest UN's conference on housing and sustainable urban development in Quito, Ecuador, in 2016. After a week's worth of work and debates, a theme group issued a declaration supporting the idea that intermediate cities are an important link in the territorial system between larger cities, towns and other human settlements. With populations of 20,000 to 500,000 (and up to one million in some countries), they offer, among other things, a form of governance that is closer to the people. They also offer health, education, social and cultural infrastructure that extend to the surrounding rural areas and, as such, often become “stopping points” for populations who might have migrated to larger cities and metropolises (Habitat III).⁵ As previously stated with regard to the work of Bellet and Llop (2002), the vision here may again seem somewhat idealized and ignorant of the difficulties (including a lack of planning) intermediate cities face. However, it does highlight the potential for development, provided the necessary means are made available in a medium and long term perspective.

2.2 Fragmented South Cities. Between Poverty and Environmental Risks

Far from statistical abstraction, an analysis of South cities highlights two symptoms specific to current urbanization trends around the world: the insecurity and resilience symbolized by the “slum” and the deterioration of natural resources (versus sustainable development).

Today, insecurity and impoverishment epitomize the construction, development and thus future of cities. This spatial and socio-economic marginalization (informal/makeshift settlements, illegal occupation of private/public land, gated communities and peri-urbanization) can be translated by the symbolic term “slum,” which, in some Spanish-speaking countries, is translated *villa miseria*, *bidonville* in French,

⁵ <http://habitat3.org/the-new-urban-agenda/preparatory-process/urban-dialogues/intermediate-cities-cuenca/> (Accessed 21 May 2019).

favela in Brazilian Portuguese and shantytown in English. Yet, behind these etymologies lies the same reality. The contemporary city – be it planned or not, and whether well or poorly managed – develops at the price of obvious contradictions: though a shelter and refuge at the individual and family levels and while serving as center for economic, cultural and educational opportunities, the city remains an arena for antagonistic struggles between the common good and individual interests, public and private, rich and poor.

A third of the world's urban population – one billion individuals – live in precarious conditions, while 94% of slum dwellers live in developing countries. Africa and Asia will be predominantly urban by 2030; 72% of urban populations in Africa live in extremely poor conditions. This figure rises to 80% in the poorest regions of the world. Cities in developing countries will absorb 90% of the world's urban growth over the next two decades. Today, 560 million city dwellers have no access to sanitation. UN figures (UN-Habitat 2008) show that this demographic expansion varies greatly depending on the world region. In 2010, roughly 32.7% of the world's urban population – 61.7% in sub-Saharan Africa, 35% in Southern Asia, 31% in Southeast Asia, 23% in Latin America and the Caribbean and 13.3% in North Africa – live in slums," (Bolay et al. 2016:11–12).

This issue – omnipresent in our work since the 1990s – continues to raise questions and guide our thinking. How can we invest so many human and financial resources to better manage cities and their future without having eliminated (or at least greatly reduced) the thousand and one material and social forms of insecurity and poverty? In our view, this is still the greatest challenge for urban planning: creating an innovative approach designed to improve the city's organization for residents and visitors and to be more inclusive of populations in need.

Perhaps it is best to begin with some photos taken during our years of urban research in different countries affected by such realities, in order to highlight some of the more critical issues (Figs. 2.6, 2.7, and 2.8).

Some 25 years ago, a large-scale interdisciplinary and international research project was launched for greater Ho Chi Minh City (Fig. 2.6). The project explored the links between the rising number of informal settlements and water contamination (Bassand et al. 2000). The goal was to understand what insecurity meant in the Vietnamese context at that time and to determine how Vietnamese and Swiss scientists from different disciplines could advise the government and support community groups in their local development activities (Bolay et al. 2002). The country had recently embraced the market economy; business had improved and control over individuals was diminishing. The result was strong rural flight towards HCMC that continues today.

At the time, 25,000 families were listed as living in cabins on stilts on the canals and rivers that run through the Vietnamese economic metropolis, which was already overpopulated and had little vacant land. These same canals were and are still used as dumps and toilets by the people who live along them in makeshift self-built houses. As such, the water has become highly contaminated, with frequent flooding during the rainy season. In just a few years, HCMC's population and inhabited area grew phenomenally.



Fig. 2.6 Ho Chi Minh City (HCMC), Vietnam, 1994. (Reproduced with permission from Bolay)

Scientific cooperation was established between disciplines that, at first glance, seemed completely unrelated. However, they were quite complementary in their approaches to and understanding of this complex problem. The result was an innovative and novel scientific partnership between Vietnamese and Swiss researchers in the areas of economics, sociology, geography, environmental engineering and chemistry. Based on this coordination between various disciplines, scientists and urban managers, we were able to (1) objectively diagnose the nature, causes and effects of water contamination, (2) determine the human, urban and industrial factors that con-



Fig. 2.7 El Alto, suburb municipality of La Paz, 1997. (Reproduced with permission from Bolay)

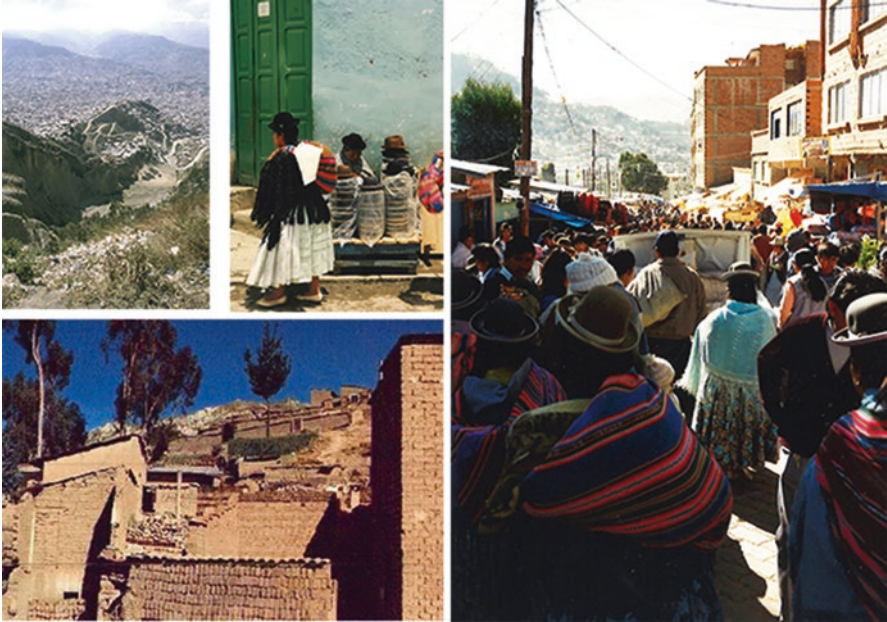


Fig. 2.8 La Paz, Bolivia – left to right: top to bottom 1990, 1997, 1993, 2012. (Reproduced with permission from Bolay)

tributed to this pollution (and what the consequences on individuals' health would be) and (3) evaluate technical solutions in terms of water distribution, waste collection and wastewater recycling. The goal was to strengthen the HCMC government's environmental services in consultation with the grassroots organizations at all levels and urban decision-making bodies (people's committees) (Bolay et al. 2000).

1997, La Paz, Bolivia, an Andean city carved into the earth, clinging to the rock and surrounded by mountains (Fig. 2.8). Your breath forgets to disembark with you at El Alto airport, 4150 m above sea level. The highway cuts across the overpopulated slopes, and the city's historic center (situated at 3600 m) charms visitors with its Hispanic cathedral, colonial streets and colorful, discreet *cholas*⁶ with their bowler hats. Activity buzzes, indigenous peoples (mainly Aymaras and Quechuas) shoulders rub with mixed-race townspeople. Yet, a silent segregation can be felt at all levels: vernacular languages versus Spanish, poor neighborhoods in the Altiplano and rich residential areas in the southern part of the city, housing, formal/informal economic integration, cultures and religions (Fig. 2.8). The beauty of the Andean landscape is impressive, with men and women moving quietly behind the urban bustle of horns and pollution. The further down one goes, the richer the neighborhoods, with their milder climate, become. The further up one goes into El Alto, a poor suburban area, the scarcer the vegetation and more rustic the small *adobe* mud houses become.

⁶Name of indigenous peasant women in Bolivia.

At the time, we were working on setting up an inter-/transdisciplinary research and support group to advise the Ministry of Urban Planning on the implementation of its new law on social housing involving representatives of the aforementioned ministry, a banking cooperative, an NGO that supports the construction of low-income housing in poor neighborhoods and university researchers. This innovative approach was designed to integrate non-scientific actors involved in implementing the new regulatory text early on in the process. The goal was twofold: to first take into account the characteristics of the potential beneficiaries of this new plan and then to adapt the system to individuals (not the other way around (Bolay 1998; Bolay et al. 1993)). Interdisciplinarity was essential to this process.

The plan posed architectural and technical issues as concerns building materials (raw earth or *adobe*, which is used in popular neighborhoods the world over, fired bricks or cement), sanitary installations and access to public facilities in developing peripheral areas. Financing was another major concern: what private or public institution would be willing to make loans to individuals with no fixed income based on alternative guarantees, versus usurious lenders with interest rates of more than 10% a month! Administrative and regulatory questions such as building permits and land ownership recognition are expensive procedures that take months to process for applicants with no special privileges or who are unwilling to bribe officials, as De Soto (1989) noted in a liberal view of deregulation. Many popular microcredit experiments, whose results are still highly debated, have developed around the world (Glévin and Moulévrier 2011; Marconi and Mossey 2006; Weber 2002).

In the wake of these institutional changes in Bolivia, several non-profit organizations have become solidarity banks for people with low-income but with the means to repay individually through savings groups (Velásquez González 2007). The question of how to implement technical, financial and institutional solutions that allow modest citizens who work outside the formal framework (and are thus unsalaried) to get loans to buy land to build quality housing is still a critical topic.

Contrasting yet similar realities in divergent climatic and socio-political contexts: Vietnam – a socialist state that is reaping the benefits of unbridled, globalized capitalism – on the one hand, and Bolivia – a country entangled in disastrous policy reversals on the other. Elected in 2005, Presidential Evo Morales, a former trade unionist and spokesperson for the indigenous majority, called for indigenous socialism in a country where a large, though often hidden, proportion of the income comes from the production of coca leaf and the illegal processing and export of cocaine.⁷

Initially colonized by powerful Western countries, South countries have seen a variety of labels, including “underdeveloped,” “developing,” “emerging” and finally “Global South.” These terms, whose meaning is increasingly blurred and imperceptible, symbolically mark the “smooth” transition towards the globalized integration of these countries as well as the economic and social inclusion of their citizens, though statistics tend to show quite the opposite: while wealth production continues to increase at the global level, inequalities between countries are on the rise both at the country level and between social groups (rich vs. poor, center vs. periphery, etc.)

⁷<https://lostiemposdigital.atavist.com/ley-coca-bolivia> (Accessed 21 May 2019).

(Dabla-Norris et al. 2015; Kanbur and Sumner 2012; Bolay et al. 2005). The globalization that allegedly was to democratize international relations and facilitate developing countries' entry into the market is in fact a red herring (Artus and Virard 2008; Bolay 2004). Customs control has become increasingly rare and protectionism – at least until recently – had fallen out of fashion.⁸ However, agreements between industrial superpowers (like NAFTA between USA, Canada and Mexico) and countries desirous to enter the game strengthen the strong and further weaken less technologically- and financially-developed countries. Thus today, the genetically-modified maize industrially produced in the US is cheaper in Mexican supermarkets than the national maize, jeopardizing the livelihoods of thousands of small-scale rural farmers whose survival depends on this resource. Joseph Stiglitz (2010) speaks of globalization intrinsically linked to crises and their contagion.

Willingly or by force, the Global South has been integrated into this connected, interdependent, unequal planet (Birdsall 2006). But the globalization of trade, goods, funds and people is not limited to certain regions of the world. The Global North and Europe in particular is not immune to increasing poverty (Ballas et al. 2017), due in large part to fierce global competition (Europe is expensive!) and economic stagnation whose consequences on the urban environment are undeniable.

A technical and social assessment of living environments done in Bulgaria in 2000 opened my eyes to an unknown face of Europe. The provincial city of Targoviste, plagued by the closure of its arms factories, was discovering post-socialism and doubt in the face of a future that was uncertain to say the least. The Swiss Cooperation wanted to assess the housing needs of Bulgaria's poor following the political and social changes brought about by the end of "socialist" relations between Russia, the last relic of the former USSR, and Eastern Europe. The immediate consequences of the dismemberment of this "socialist bloc" were the closing of factories, the privatization of low-income housing developments (tenants suddenly became owners), the rise of unemployment and open resentment of the Roma people. In striking parallel to urban evolution in developing countries, the Malcho Malchev district in Targoviste was home to 5000 inhabitants of Roma origin for an urban population of some 60,000 inhabitants.

Their self-built houses (40–60 m² on average) accommodated five or six families (Fig. 2.9). With drainable trench latrines, running water outside the home, inadequate sanitation and unpaved dirt roads, pathologies due to insalubrity were commonplace and irregular school attendance remained a problem. Moreover, strong cultural ties to the gypsy tradition, a markedly ethnic social organization and the desire to be integrated in the city socially and economically while continuing to live in "their neighborhood" were all factors for consideration (Bouvet and Bolay 2000). Two parallel proposals were made to the Swiss Cooperation Agency. The first was a project to rehabilitate the Malcho Malchev neighborhood based on what existed, using local labor and providing technical and social assistance. The second was to

⁸The election of Donald Trump as US President in January 2017 challenged this international consensus on the benefits of international rules favoring the free market.



Fig. 2.9 Self-built house in the Malcho Malchev neighborhood, Bulgaria 2000. (Reproduced with permission from Bolay)

create a privatized housing development management system designed to empower new owners with administrative and financial organization allowing for the maintenance of buildings and housing units and reappropriation of public spaces. The goal was to balance the project so as to not focus solely on the Roma, at the risk of making them the unintentional victims of resentment from the rest of the population. In



Fig. 2.10 Targoviste, Bulgaria 2000. Privatized units in the Zapad neighborhood. (Reproduced with permission from Bolay)

the end, the Swiss backer chose to invest in other sectors in the country to facilitate the transition to capitalism and accelerate its integration into the European Union. Thus our intervention in Bulgaria was not truly a success. However, it highlighted the similarities and differences between a European country in transition and our experience of cooperative projects with Asia, Africa and Latin America. Here, too, did we observe growing poverty, the need for urban planning that takes into account the needs of the poor and a widespread desire to become part of a globalized world with more individual and collective opportunities (Fig. 2.10).

More recently, we considered two cities that seemingly have nothing in common but are, in fact, both booming intermediate cities – one in Brazil and the other in Burkina Faso. The first, Montes Claros in the State of Minas Gerais, has 400,000 inhabitants and an impressive concentration of industrial companies (Figs. 2.11 and 2.12). The other, Koudougou, is the provincial capital of Burkina Faso and an economic center with 120,000 inhabitants about 100 km from Ouagadougou (Figs. 2.13, 2.14, and 2.15). Both face similar problems associated with spatial extension and the emergence of new neighborhoods on their outskirts. The local governments, which suffer from budget shortages and a lack of human skills, are unable to handle the situation or effectively respond to the issues at hand. Planning is on the agenda in both cities, which rely on support from the national government, international agencies of cooperation, NGOs and major industrial groups.

What do we learn from all of these differences and unique forms? First of all that our concepts, theories and analyses are rooted in a historical and temporal reality that are of little use if we cannot understand them contextually based on specific



Fig. 2.11 Montes Claros city center, Minas Gerais, Brazil 2015. (Reproduced with permission from Bolay)

interpretations by different actors who, in their own way, participate in the construction of the city, to follow ethnopsychiatrist Devereux (1967). At the same time, it is important to recognize the relationships that researchers, contributors and specialists establish with actors on site. Behind the specificities of each city lie major trends (the globalization of economic exchanges, decentralization of decision-making powers, territorial extension and ever-present, ever-increasing pauperization). Individuals and families must navigate these complex waters using formal strategies (notably work, school, housing and health care), which makes the city highly attractive, especially in places where the majority of the population is rural (Figs. 2.16 and 2.17).

To conclude, cities are increasing in number, size and population, particularly in the Global South and Asia and Africa more specifically. However, these regional and national distinctions do not hide the two key trends that emerge from an analysis of these figures: (1) though the overall changes in the urbanization process strengthen the position of major cities, metropolitan areas and megacities, nearly half of the world's urban population today lives in small and medium-sized cities (Bolay and Rabinovich 2004) and (2) urbanization gives rise to a double phenomenon of spatial fragmentation of cities and socio-economic segregation of their populations (Bolay et al. 2016).



Fig. 2.12 Montes Claros, Brazil 2015, with its new social housing developments (the federal government’s *minha casa, minha vida* project). (Reproduced with permission from Bolay)

2.3 Sustainable Urban Development: Dimensions and Questions

For the past 25 years, sustainable development has been the catchword for global initiatives designed to preserve the planet’s resources while ensuring better social and economic conditions for all peoples regardless of the continent, country or region. This is the case both in the current context and for generations to come, which brings us back to 1987 and the United Nations World Commission for Development and the Environment, headed by Mrs. Brundtland, a former Norwegian minister. It was the report provided by this commission that was to serve as a reference for the first Earth Summit held in Rio de Janeiro in 1992 (WCDE 1987). The report was a historical milestone in terms of raising awareness about environmental issues and their impact of our societies. We will come back to this point later.

In the years that followed, numerous researchers criticized and questioned the very foundations of this approach (Pogge and Sengupta 2015; Smythe 2014; Connelly 2007; Hove 2004; Rist 1996), claiming that the term “sustainable development” was as much politically and ‘mediatically’-motivated as scientifically based. As Sneddon et al. (2006: 254) state, “Inequalities in access to economic opportunities have dramatically increased within and between most societies, making pragmatic governance toward social and environmental goals increasingly difficult.” The authors note, however, that sustainable development’s universal notoriety



Fig. 2.13 The main marketplace in Koudougou, the third largest city in Burkina Faso 2014. (Reproduced with permission from Bolay)

has put the critical questions of socio-economic equity and human-environment relations back on the agenda with renewed interest, due to (1) the extremely pessimistic forecasts of specialists regarding the impacts of climate change (IPCC 2014), (2) debates on current economic guidelines (Milner and Mukherjee 2009; Amin 2004; Bolay 2004; Ravallion 2003) and (3) the divergent and conflicting interests that give rise to them. The fact remains that the terminology itself is rooted in language and has become quite popular with time. It is therefore fair to regard it critically and to consider how the term “sustainable development” can be useful in analyzing the modern world and better understanding cities in order to improve them.

The question of sustainability is much more complex than it appears at first glance, particularly when it comes to harmonizing various areas of development (environmental, economic and social) that tend to clash in a world with an ever-growing population (7.3 billion in 2015, 8.5 in 2030 and 9.5 in 2050, UN 2017⁹). Three key dimensions must be balanced: (1) the preservation of natural resources and mitigating climate change, (2) economic growth that respects the environment and (3) social equity and the fight against disparities, a major challenge that researchers have highlighted for decades. Since the 1970s, Sachs (1997) has drawn attention to the contradictions between our devastating economy of non-renewable resources and the growing number of poor people worldwide. What he called “eco-

⁹<https://esa.un.org/unpd/wpp/> (Accessed 21 May 2019).



Fig. 2.14 Stalls at the main market in Koudougou, Burkina Faso 2014. (Reproduced with permission from Bolay)

development” – in other words, an economy that is respectful of the environment, lands and cultures – is, among other things, the source of everything included in the concept of sustainable development beginning in the late twentieth century.

These global challenges inevitably affect cities of all types all over the world, now that most of the world’s population lives in urban areas and that this rate is expected to reach 66% by 2050 (United Nations 2015). These issues are being raised in a critical way given the complexity of urban growth and its importance demographically, its spatial extension and the need for services and infrastructures generated by the development of the economic, social and cultural activities of city dwellers (Klopp and Petretta 2017; Yigitcanlar and Teriman 2015; Khakee 2014; Bolay 2012; Keivani 2010; You 2007). Urban challenges are now among the 17 sustainable development goals that were established by the United Nations for 2030 at the third Urban Summit in Quito in 2015.¹⁰

It is therefore important to reexamine the key points of these dimensions – environmental, economic and social – in order to reform urban planning in a way that integrates them into a future vision and translates them into coherent, coordinated actions. In this way, economic interests and social concerns can become compatible with the preservation of environmental resources.

¹⁰<http://habitat3.org/the-new-urban-agenda/> (Accessed 21 May 2019).



Fig. 2.15 The new bus station, Koudougou, Burkina Faso 2014. (Reproduced with permission from Bolay)

2.3.1 Urban Environmental Risks

While everyone publicly agrees that protecting the environment and preserving natural resources, be it locally (where individuals can act at their own level) or in light of more global threats (e.g. climate change, desertification, marine pollution and biodiversity loss), it is hard to find an international consensus on a specific, comprehensive definition of what constitutes the environment, and more specifically, the urban environment. This is due to the fact that the city is at the junction between the natural resources essential to individual and social life – earth, water and air – and the material resources that comprise the built environment, which shape human settlements.

This is also understandable given that both the city and its inhabitants are consumers of natural resources (land and water, in particular) and energy (electricity, oil, nuclear, solar, wind, etc.), as well as massive polluters of these resources (air/water pollution, lack of wastewater treatment, soil contamination, household and industrial waste, etc.). This consumption requires sophisticated protection mechanisms, effluent treatment and recycling of used resources. Moreover, the issue cannot be addressed solely from within the uncertain borders that delimit the urban area. Urbanity invariably involves interactions with the “outside,” be it a hinterland comprised of peri-urban and rural areas (Allen 2003), more distant rural and agricultural areas or remote natural areas with little or no population (mountains,



Fig. 2.16 Street vendor in downtown Koudougou, Burkina Faso 2014. (Reproduced with permission from Bolay)



Fig. 2.17 A main road in Koudougou, Burkina Faso 2014. (Reproduced with permission from Bolay)

oceans, deserts, etc.). Any change to the external environmental can have an impact on the supply of natural resources to cities (for example, rising sea levels due to global warming, desertification, etc.). Similarly, the impacts of human, economic and/or domestic activities (heating, industrial fumes/smoke, transportation, etc.)



Fig. 2.18 Soil erosion in the city of La Paz, Bolivia 2012. (Reproduced with permission from Bolay)

can be felt far beyond the urban limits when purification procedures are not systematically implemented, as is often the case in South cities (Dodman et al. 2013; UN-Habitat 2012; D’Amato et al. 2010; Tong-Bin et al. 2005; Hardoy et al. 1992).

Environmental issues have been on the agenda both locally and globally for nearly 50 years. Many scientists have warned against the negative ecological impacts of economic development in industrial societies (Fig. 2.18). The book that raised the most alarm was undoubtedly *The Limits to Growth: A Report for the Club of Rome’s Project on the Predicament of Mankind*, a report by MIT researchers who were commissioned by the Club of Rome to demonstrate the risks and limitations of the current economic model (Meadows et al. 1972). Criticized for its “zero growth” stance and, hence, its impact on the future of emerging countries and comfort levels acquired in Western countries, the book nevertheless denotes increased awareness and the need for better long-term development solutions. It is in this alternative spirit that, from 1970 to 1990, several researchers fueled the debate, highlighting the term “eco-development.” The term was first coined by Maurice Strong, Secretary General of the Conference on the Human Environment¹¹ in Stockholm in 1972, to

¹¹ <https://www.google.com/url?sa=t&rct=j&q=&esrc=s&source=web&cd=2&ved=2ahUKEwio5rXz0-ncAhUSbFAKHT0sBkAQFjABegQICRAC&url=http%3A%2F%2Fwww.un-documents.net%2Faconf48-14r1.pdf&usg=AOvVaw0VF-o83hQFBfO6QpbAFeSN> (Accessed 21 May 2019).

signify an alternative form of economic development to the present pattern of economic expansion (Mellos 1988). Several authors have contributed to this thinking (Georgescu-Roegen 1971; Schumacher 1973; Sachs 1978, 1980; Daugherty et al. 1979; Galtung 1980). The fact is that any form of economic production invariably has an impact on the ecosystem and, as such, must be managed in order to minimize the latter. Remediation costs therefore must be included in the production process and product prices.

Extremely innovative at the time, Sachs (1980: 12) makes what today is a very obvious link between the environment and development. In the introduction to his book, he says, “The philosophy of development (or if we prefer the ethics of development) outlined below applies to both Third World countries and the opulent countries of the North, and to rural and urban projects and industry. Contrary to what detractors of eco-development and some outrageous supporters of soft techniques claim, there is no question of going back to a bucolic way of life that has been nothing more than an idealization against historical and fallacious of the past. On the contrary, eco-development is a tool for foresight and exploration of development options challenging the prevailing trends that currently prevail. The increasingly dramatic conflict between growth and the state of nature can be resolved differently than by stopping growth. The challenge is finding ways and means to grow that create compatibility between social progress and the sound management of resources and the environment.”

Beyond political and ideological divergences, this period of questioning and reassessment of the world’s chosen economic path was seized upon internationally during the famous United Nations Earth Summit in Rio de Janeiro in 1992. Its founding text, a report entitled “Our common future,” published in 1987 by the Committee on Environment and Development, is still a reference today. The report lays the foundations for what would later be called “sustainable development.” Two fundamental principles served as its basis: (1) safeguarding the needs of the present generation without compromising those of future generations and; (2) creating compatibility between the ecological, social and economic dimensions of development. These principles were strongly contested by certain scientists, who saw them as strategic and political first and foremost (Bolay and Taboada 2011; Brunel 2004; Bolay 2004; Latouche 1993; Partant 1983). Nevertheless, they resulted in a set of standards, indicators and initiatives designed to translate these principles into concrete actions at the local, national and global levels based on the Agenda 21 action plan.¹² Sneddon et al. (2006:257) clearly discern the challenges behind these issues and other pronouncements: “Environmental issues are pervasively integrative in the sense that the value of preserving the environment and maintaining its viability is widely shared at every level of community, yet the very same issues have led to pervasive and divisive fragmentation among and within groups, communities, countries, and international systems when actions designed to implement the proposed commitments proved to be highly controversial and... largely ineffectual.”

¹²<https://sustainabledevelopment.un.org/content/documents/Agenda21.pdf> (Accessed 21 May 2019).

Ignacy Sachs was one of the first to put the urban question in the spotlight in the 1980s, highlighting its vital importance in the quest for “harmonious” development that respects the environment. He argues that because “the urban explosion in Third World countries is the most significant event in the second half of the 20th century, so much that, soon, the majority of the world’s inhabitants will be living in slums in Asian, African and Latin American cities,” (Sachs 1984:802) that “the approach to eco-development is precisely characterized by a desire to harmonize social, economic and ecological objectives. This applies to both urban and rural development” (Sachs 1984:806).

During a research project on Ho Chi Minh City, Vietnam’s economic metropolis, in the 1990s (Bolay and Du 1999), we found obvious ambiguities in the analysis of the environmental impact of urban development and the appropriate scales of intervention to recommend. On one hand, preserving natural resources (water, air and soil) that were being threatened by pollution and often at the expense of individuals’ health (especially the poor) was critical. Yet, it was also necessary to improve living conditions by providing jobs and services to the community. In addition to these concerns about priorities in terms of responsible public action was the question of the reference territory, between macro-dimensional analysis, which incorporates the entire metropolitan and suburban area, and micro-dimensional action at the neighborhood and communities level, which takes into account the environmental risks specific to each location and the living conditions of each family and/or social group.

For these reasons, we describe the urban environment at four levels:

1. The local level, which focuses on the environmental damage produced by urban activities and their impact on the quality of local resources (e.g. clean water supply, waste water treatment system, treatment of household waste and human excreta, etc.) within the urban fabric, taking into account its immediate effects on the population’s health.
2. A level connecting local and surrounding regional levels that focuses on the interfaces between the city and its hinterland, whose repercussions are less immediately felt by urban populations but rather extend beyond its borders (e.g. like the air pollution resulting from most urban transport, the pollution of rivers, lakes and seacoasts, the deforestation of nearby forests, and the spread of the suburbs at the expense of agricultural lands and other green areas).
3. An extra-urban level that focuses on the impact of long-distance urban activities (e.g. greenhouse gases, industrial acid emissions and aquatic transport of heavy metals).
4. A global level whose origin is not specifically urban but that affects the living conditions of urban populations, among other things (e.g. natural disasters, hurricanes, earthquakes, global warming impacts such as rising sea levels in coastal areas where urban populations are higher (Baird 2009); 40 to 50% of the urban total population according to Barragan and Andrés 2015).

Hardoy and Satterthwaite (1991) distinguish the different geographical scales at which environmental issues must be analyzed, the first being the home and workplace. According to the authors, the fact is that much of the urban population in the Global South lives in poverty. Hence they argue that it is mainly at home and in the workplace that people run the risk of coming into contact with pathogenic microorganisms (especially those found in human excreta and in crowded, cramped, living conditions). Such poor hygiene conditions can also often be found in the workplace, be it on the streets or in companies that operate in non-compliance with environmental regulations (when they exist). In their neighborhoods, these same individuals are the first to suffer from the lack of infrastructure and services (piped water supply, sewage connections, garbage collection and basic measures to prevent disease and provide health care). Moreover, these neighborhoods, which are often informally settled, are often located in officially unbuildable urban and peri-urban areas because they are dangerous or present risks (e.g. steep hillsides, floodplains, polluted areas around solid waste dumps, near open sewers or in industrial areas with high levels of air pollution).

At the wider city level, the three main environmental risks are toxic waste, water pollution and air pollution. These issues require heavy investments from authorities in the form of decontamination systems for industrial fumes, wastewater treatment, vehicle control, household/industrial waste management and recycling. However, the costs far exceed the financial capacity of urban governments and inhabitants.

The interaction between the city and surrounding region is also a source of environmental concern: the more cities grows in terms population and industry, the more external inputs (water, fossil fuels, land and material goods for these populations and industries) they require, and the more contamination (air, untreated water discharged into rivers, lakes and seas, waste dumping, etc.) they emit beyond their limits. As a result of pollution and poor management of natural resources, cities can become “one of the most health-threatening of all human environments: disease-causing agents and disease vectors multiply; the large concentration of people living in close proximity to each other increases the risk of disease transmission; and health care systems become unable to respond rapidly and effectively” (Satterthwaite 2003:77). This poses a constant threat to all inhabitants and the poor in particular, who cannot solve these problems on their own due to lack of financial means (Fig. 2.19). Environmental degradation alone does not help us fully grasp urban poverty, however (Satterthwaite 1999). Thus, we will now consider the urban economy, which is both a driver of growth and a marker of social difference.

2.3.2 The Urban Economy and Sustainable Development

We can safely say that the economy, the production of goods and services and consumption are inherent to life in society, regardless of the type of modes of production or their commercial success. Given that an increasing majority of individuals live in urban areas, we can easily assert that the urban economy plays a determining



Fig. 2.19 Waste in a suburb of Ulan Bator, Mongolia 2013. (Reproduced with permission from Bolay)

role in the dynamics of cities and the integration of their inhabitants. Albeit work and income are not the only reasons people settle in cities (Bolay 1986), the need to “earn a living” remains predominant and thus, in part, explains rural-urban migration.

Analyzing the urban economy is first and foremost a way of trying to understand the spatial relationships between places (cities), the people living and working there, and the production/commercial sectors present in them. Based on this analysis, which combines both territorial and human dimensions, we can better grasp the current dynamics and the strength that economic development brings to cities and their inhabitants. As Polèse (2013) argues, a city’s location and size (from small towns to mega-cities) undoubtedly determine what types of activities will be profitable and which will not. Nevertheless, the link between geographical position and cities’ function is shifting. In late twentieth and early twenty-first-century modernity, two factors have proven decisive in the transformation of urban economies: technologies and their use by urban actors, and the city’s connection with the outside, be it in terms of transportation or through accessibility to telecommunications networks. The case of the city of Nueve de Julio, which we will analyze later in this book, aptly illustrates this.

As Davis and Vernon Henderson (2003) note, it is clear that, historically speaking, cities’ development is symptomatic of the rise in power of the secondary (industrial) and tertiary (services) sectors, and to the detriment of the primary sector

(i.e. agricultural) at both the national and global levels. Regional and national differences in terms of the concentration of labor by sector and the geographical distribution of economic activities can be explained in part by the raw materials available, the age of the infrastructure, the lines of communication between cities and regions and the profitability of each sector. Public policies, which can be more or less interventionist, in turn influence these changes over time. African cities are the counter-example; their lower economic performance is more closely related to shortcomings in the urban infrastructure (UN-Habitat 2011a, 2013a).

Changes in the economy, both locally and globally, now favor cities, be it with regard to movement between economic sectors or modes of production. According to Dericke (2009), the dramatic rise of the tertiary sector benefits cities (Fig. 2.20), restructuring the economy as a whole and strengthening the urban network in parallel to international globalization (Bolay 2004). The recent liberalization of international trade rules and instantaneity of telecommunications have favored the development of a more virtual economy. According to Sassen (2001), this global opening of the economy will serve to favor multifunctional, global cities like New York, London, Zurich, Shanghai, Buenos Aires and Sao Paulo that are linked to international networks. Following the author, these cities are more than that: they are city-regions – immense spaces with population basins of millions or even tens of millions.

This is obviously the case of Greater Buenos Aires, where two-thirds of the 14 million inhabitants live on the outskirts of the Argentinian capital. The same can be said of the Mexico City metropolitan area (the Federal District, Mexico's capital), which is home to nine of the urban agglomeration's 22 million inhabitants. However, this reticular view of the global city and its interconnected economy can be extended to an entire diverse and multifaceted region (such as by referring to Switzerland as a "Swiss metropolis"). With its 8.6 million inhabitants (Bassand 2004), Switzerland has made the mobility of social and economic activities its primary factor of distinction, above and beyond urban-rural differentiations. This metropolitan focus highlights the largest cities but tends to overshadow small and medium-sized ones, though the latter, which likewise enjoy technological advances, can also exploit their comparative advantages economically.

According to the McKinsey Global Institute, "[h]alf of the world's population already lives in cities, generating more than 80 percent of global GDP today (Fig. 2.21). But the urban economic story is even more concentrated than this suggests. Only 600 urban centers, with a fifth of the world's population, generate 60 percent of global GDP," (Dobbs et al. 2011:1). Yet, only 20% of the world's population lives in them. For their analysis of the world's 2000 largest cities, they found the latter contribute 75% of the global GDP. In the top percentile, the 23 megacities of more than ten million inhabitants generate 14% of the global GDP, proving that economic power and capital production are still highly concentrated in a few major urban centers.



Fig. 2.20 Shopping mall in Kuala Lumpur, Malaysia, new urban services, 2013. (Reproduced with permission from Bolay)

The City 600: MGI's Cityscope identifies the world's fastest-growing megacities and middleweights

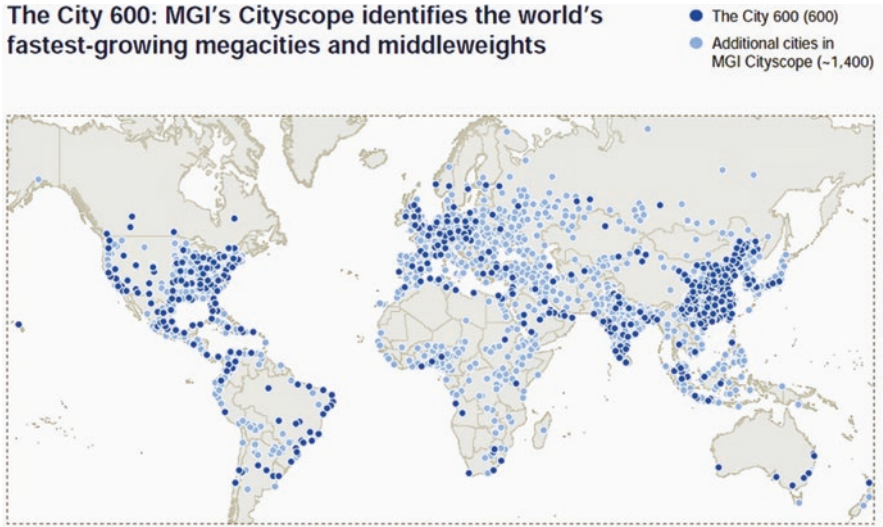
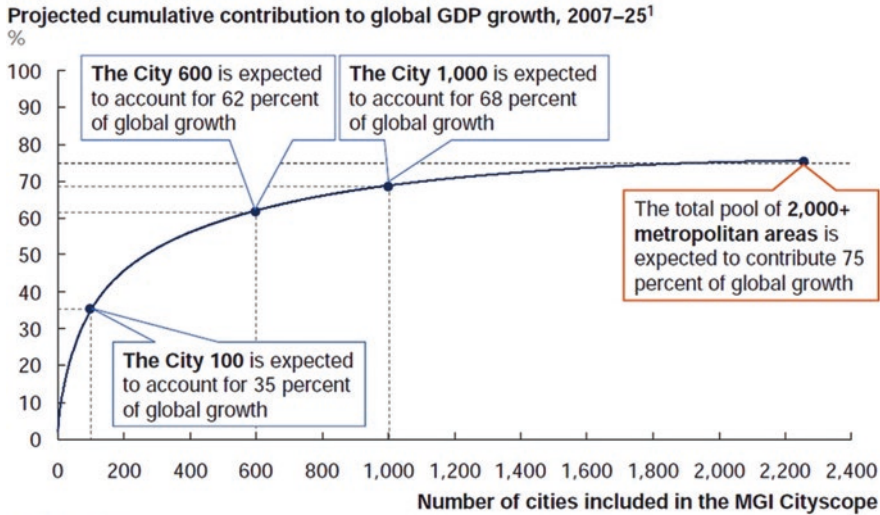


Fig. 2.21 The world's 2000 most economically dynamic cities. (Reproduced from McKinsey Global Institute 2011)

Following McKinsey, however, the economic importance of the largest agglomerations is decreasing, especially in megacities of more than ten million inhabitants. Thus, by 2025, megacities' contribution will represent 11% of the global GDP, versus 13% for cities of five to ten million, 18% for cities of two to five million, 19% for cities of 150,000 to two million, and 38% for smaller cities and rural areas. The distribution of economic hubs also indicates a profound change in the world economy, whose center of gravity in a globalized economy is shifting from formerly industrialized Western countries to emerging countries. Thus, 70% of the 600 most dynamic cities in the world are now in South countries, led by China, whose cities will contribute 30% to the increase in global GDP. The 143 cities in sub-Saharan Africa included among the 600 in the MGI report (above) provide 50% of the region's GDP and will represent 60% in 2025. This inevitably results in a significant increase in the middle and upper classes' buying power. Thus, by 2025, the authors estimate that among the 600 cities evaluated in the report, the 423 located in emerging or developing countries will have 235 million households earning more than \$20,000 annually, versus 210 million households in "developed" countries.

Using the World Bank's figures, Xing Quan Zhang (2016) shows the close link between urbanization and wealth creation, suggesting that "that urbanisation is a very strong indicator of all aspects of productivity growth over the long run. It demonstrates the co-relationship between urbanisation and economic development level. The higher the urbanisation level in a country is, the higher the GDP per capita. This trend is more obvious for countries with GDP per capita below USD 10,000. Very few countries have reached income levels of USD 10,000 before reaching about 60 percent urbanisation level" (Zhang 2016:243). The statistics the author uses demonstrate that, in general, cities have a higher rate of economic pro-

The MGI Cityscope comprises the City 600 and ~1,400 additional cities to cover the largest cities by population and GDP today



¹ Predicted real exchange rate.
 SOURCE: McKinsey Global Institute Cityscope 1.0

Fig. 2.22 The economic contribution of the world’s 2000 most active cities. (Reproduced from McKinsey Global Institute 2011)

ductivity than rural areas, particularly in developing countries – a fact that has been confirmed by the United Nations (UN-Habitat 2011b). The example of certain large South metropolises and megacities like Sao Paulo, Buenos Aires, Shanghai, Mumbai, Nairobi and Dar es Salaam proves this: with 32.5% of the national population, Buenos Aires produces 63.2% of Argentina’s GDP. Mumbai, which is home to 2% of the Indian population, produces 6.3% of the national GDP. Nothing, however, is said about small and medium-sized cities’ specific contribution to economic production, though we are well aware that it is these cities whose populations and urbanized spaces are increasing the most rapidly.

Beyond these macroeconomic considerations, Glaeser and Henderson (2017) highlight what it is that differentiates the urban economies of Western countries from those of South countries by considering two characteristics that distinguish the latter as “developing economies.” The first is the prevalence of the informal sector in economic production (which is very clearly the case in urban areas). The second concerns the dominance of the state sector in the economy at the expense of private enterprises.

Michael Cohen (2016) confirms that all countries depend heavily on the productivity of urban areas for economic growth, given that 75% of the global GDP comes from cities of various sizes (Fig. 2.22). According to the author, the informal sector accounts for 50% of urban employment in developing countries. Small and medium-sized businesses (SMBs) provide 80% of formal employment.



Fig. 2.23 Building the city, Suzhou, China 2013. (Reproduced with permission from Bolay)

The statistics presented by WIEGO (Women in Informal Employment: Globalizing and Organizing) are even more alarming. According to them, the percentage of informal non-agricultural jobs is 82% in Southern Asia, 66% in sub-Saharan Africa, 65% in East and South-East Asia and 51% in Latin America (Vanek et al. 2014). This obviously has a major impact on the urban economies of South countries and on their overall competitiveness (i.e. lower productivity, poor social/physical protection for workers, and more limited access to the market) (Fig. 2.23). Moreover and less directly, the informal sector has little concern for environmental issues and thus is more polluting. Finally, as the revenue generated is not officially recorded, it does not contribute to public revenues (taxes and taxation), thus limiting the government's financial investment capacity. In contrast to this critical analysis, some opponents argue that the informal sector can actually encourage entrepreneurship and innovation during the early stages of economic development (Jütting and



Fig. 2.24 Street market in Port-au-Prince, Haiti 2015. (Reproduced with permission from Bolay)

de Laiglesia 2009). More importantly, given the reality of rural-urban changes, it is the only way to integrate new urban dwellers and poor populations into urban economic life.

Notably – and contrary to conventional wisdom – the informal sector is not a transition from ancestral and/or traditional forms of production inherited from rural agricultural societies to nineteenth-century industrial modernity. The OECD states that the informal sector is not only contemporary, but is also expanding both geographically and in terms of number of active workers. While this is clearly the case in Latin America and Southeast Asia (Jütting and de Laiglesia 2009:12), it is in fact true for all South countries and even certain North countries (Brown and McGranahan 2016) due to increasingly globalized competition and pressure with regard to production and marketing costs. Hence, with regard to the formal sector, the informal sector is actually more complementary than competitive (Portes et al. 1989).

Many of these scholars emphasize the dual nature of the urban economy in the Global South, with a growing proportion of the labor force joining the informal system of production of goods and services (Fig. 2.24). However, there is little specific information on the sectors that make up the urban economy or their influence on and evolution in both the formal and informal systems. While local studies have been done, a global synthesis is still missing.

Controlling and guiding this economic aspect of urban development is one of the goals of urban and regional planning. As such, public policies must define the

framework conditions in which economic actors can act. Land must obviously be allocated for these activities, and infrastructure and community services created in order to facilitate economic development (i.e. energy supply, telecommunications networks, traffic lanes and means of transportation). Regulations and training strategies must likewise be considered. The community must also benefit from these investments through job creation, production conditions that respect the natural and social environment and the redistribution of the revenue generated through taxation and public finances. It is in this perspective that the UN's Habitat agency makes recommendations for a responsible, job-creating urban economy.¹³ The agency also emphasizes that these goals can only come to fruition if urban competitiveness is founded on economic rationality, which is strongly linked to political stability (UN-Habitat 2013b).

Several SDGs (sustainable development goals) thus focus on the different facets of economic development.¹⁴ Goal – “decent work and economic growth” – emphasizes the need for strong growth that creates decent jobs, promotes the role of women in the economy and protects natural resources, especially in developing countries. *Goal 9* – “industries, innovation and infrastructure” – focuses on the multiplier effect of jobs created in the industrial sector and on the key role of SMBs, which provide 90% of jobs worldwide. Thus, research, innovation, quality infrastructure and support for small and medium-sized industries are both an indispensable and profitable investment. *Goal 12* – “responsible consumption and production” – considers the raw materials and processes required for any economic production and their recycling at the end of their lifecycle. Three key areas can be distinguished here: water, energy and food, the goal being more efficient management and less contaminating processes for 2030. *Goal 11* – “sustainable cities and communities” –, which focuses on the city and its inhabitants as its name indicates, posits that a positive dynamic between economic, social and environmental dimensions in urban and peri-urban areas requires a strengthening of urban and regional planning.

2.3.3 Sustainable Development, Urban Poverty and Social Disparities

The city is a gigantic machine that produces and consumes. It is also a place where people live, and a natural/built environment – comprised of landscapes, geography, a climate, history and atmosphere -that makes it unique and facilitates or not the integration and fulfillment of those who live there. Once again, economic, environmental and social dimensions are inseparable, whatever order we consider them in. To begin, the magnitude of social challenges due to a growing urban population at

¹³<https://unhabitat.org/urban-themes/economy/> (Accessed 21 May 2019).

¹⁴<https://www.un.org/sustainabledevelopment/sustainable-development-goals/> (Accessed 21 May 2019).



Fig. 2.25 Colonia Seminario, Toluca, México – *left to right: street plan and satellite image* (Reproduced from Google maps 2018)

the global scale is exponential. As such, more individuals means more infrastructure and services in order to enjoy decent, healthy living conditions. Moreover, living in the city is a choice, an aspiration for many of the individuals, families and communities that make up urban society. While the city fosters integration, social inclusion, sharing, exchanges and solidarity, it can also create differences, segregate, exclude and marginalize certain individuals.

This is one of the major challenges facing sustainable urban development, a challenge that gives rise to the questions: what unites us? What reinforces (and deepens) inequalities? Sociological and political analysis are essential for understanding how urban societies are structured and the dynamics that are changing social hierarchies, be it socioeconomic classes, gender or immigrant groups.

As a PhD student in Mexico in the early 1980s, I interviewed more or less recent rural migrants living in the outskirts of the city of Toluca, some 70 kilometers from Mexico City (which then was home to some 500,000 inhabitants, versus the 22 million in the federal capital) (Fig. 2.25). Colonia Seminario was the name of this informal settlement that since has grown, with three geographical areas corresponding to three waves of rural migrants. Most of the migrants, who are from the State of Mexico,¹⁵ had come to make a better life for themselves and their children, but still maintained ties with their native villages and continued to participate in family farming (corn, beans and other commodities).

Moving from one sub-district to another, I conducted in-depth interviews with heads of household (male or female, depending on their availability) to look at similarities and differences in the forms of urban integration over time. After obtaining a description of their families and activities, one of the first questions I asked was why they had come to the city. I visited their homes: some were meticulous, as certain families had already been living there for 20 years, others were mere shelters of salvaged materials. I was surprised by their answers, which were often similar and

¹⁵ Mexico has 32 federal entities called “States,” including the State of Mexico, which borders the federal capital, Mexico City, to the north, east and west.

far from my initial preconception. All said the two main reasons they had come to the city were the quality of the schools for their children and the proximity to health centers. I had expected them to talk about jobs and income.

Surprised, I asked if finding a job had not their main reason for moving. Their response was even more surprising: “Work? We’ve always worked, in the countryside and now here in the city now. We were born poor and will certainly die poor. But being in the city is a new opportunity for our children, whose lives will be better than ours.” The argument was clear, logical, undeniable, and explained the city’s attractiveness, its function in a long-term vision of their families’ development (the proverbial “success story,” even at a modest level) and a magnificent projection into the future through family ties and community solidarity as new citizens with kinship ties in the countryside.

This introduction could be considered a methodological bias, as it suggests that urban growth is solely linked to the arrival of migrants from rural areas. However, this is only partially true and is becoming less and less so. Once again, logic would have it that the more a country urbanizes, the more urban growth depends on the natural growth of the resident population and, to a lesser extent, immigration, as Montgomery confirms (2008: 763). Based on his sources, he concludes that “in developing countries, about 60% of the urban growth rate is attributable to natural growth; the remaining 40% is the result of migration and spatial expansion. Recently, a very similar rule was established for India over the 4 decades from 1961 to 2001, with urban natural growth again accounting for about 60% of the total.” Potts’s (2009) hypothesis based on statistical and demographic studies in 14 African countries in the 1980s and 1990s drew similar conclusions. This analysis would be more nuanced in modern-day Africa due to the urbanization process being less advanced there than on other continents. Brandful Cobbinah et al. (2015) distinguish three factors with regard to demographics: natural urban population growth, rural-urban migration and the reclassification of rural settlements as urban. However, according to these authors, rural-urban migration is once again on the rise and now accounts for 40–50% of urban growth in Africa. In addition to urban attractiveness, two other factors partially explain this trend: the organization of the agrarian system with its low rate of employability, and climate/social insecurity (drought, war, interethnic conflict, etc.). Rural migrants, who are poorly trained for urban jobs, represent the majority of urban Africa’s unemployed.

In addition to wanting to enter the growing urban market, migration flows, which are often seasonal and individual initially but later become familial and definitive, can be explained in several ways. To begin, there are cultural reasons (individualism and the draw of “the bright city lights”). There is also the question of social protection (better-educated children who, in turn, get safer, better-paid jobs and thus compensate for the welfare, unemployment and retirement benefits that do not exist in many South countries. Following the analysis of Lall et al. (2006), these rural-urban migrations are selective and mainly concern young adults (mostly male) in a context of compounded ‘push factors’ that force migrants out of rural areas and ‘pull factors’ that attract them to urban areas. The origins and destinations of these movements reflect the strengths and weaknesses of certain cities and regions. Far from

being a break, urban migration acts as support for rural families “back in the village” thanks to the transfer of remittances.

Given this, it would be illusory to confuse immigrants of rural origin and urban poverty, even if many of these new city dwellers live in slums. This is obvious from the analysis of Tacoli et al. (2015:17), who show that “migrants may be disproportionately represented within some of the worst-quality informal settlements (for instance, temporary camps for construction workers or small temporary structures on public land or settlements set up by recent migrants on the urban periphery).”

Two indicators can be used to assess rural and urban poverty in South countries. The first, which is monetary and defines poverty based on a family or individual income threshold, is useful for international comparison (i.e. by putting poor people with incomes below a given poverty threshold, usually 1 or 2 \$ US per person per day) (O’Hare and Rivas 2007:309). However, the practice of applying this calculation as a standard for the entire national or even world population without taking into account differences in terms of cost of living (which is much higher in urban areas) has been criticized. The second type of indicator, which is non-monetary, attempts to assess how basic needs such as housing, access to health care and education, as well as provision of water and electricity supply are more or less satisfied.

We essentially worked using this second type of indicator, regardless of the country, based on the idea that the main question was not whether individuals and families could be considered very poor, poor or lower middle class, but rather how they can best fit into the city and benefit from its development potential, both in terms of integration into the job market and more fundamentally as citizens, through access to basic urban services. This is why we focused on living environments (decent housing, social housing, public policies and the real estate market) (Bolay and Rabinovich 2003; Wust et al. 2002; Bolay 2002) and social/material forms of urban insecurity (access to technical networks and community services such as schools and health centers, the informal economy, etc.) (Bolay 2006; Bolay and Cissé 2001) to better understand the gaps and bottlenecks and recommend new ways of improving living conditions in the city, especially for the poor.

An emblematic figure of precarity and poverty, the slum represents the urban reality for nearly a billion people across the planet (Bolay et al. 2016). To say all slum dwellers are poor would be an exaggeration. Rather, it is fair to say that coming to the city and making a place for oneself (however modest) is less of a choice than an opportunity to be seized, with the hope that their descendants will become bona fide citizens of fact and law a couple of generations down the road.

Urban poverty is multifaceted and diverse. Ursula Grant (2010: 11) lists some of its features: “Urban spatial poverty traps exist within urban areas (e.g. urban slums along transport routes, peri-urban areas, city dumps, etc.). Such sites tend to be informal or illegal, which leaves them less likely to be represented in formal data collection and therefore less likely to be recognised within formal policymaking processes. The urban poor tend to live in disadvantaged neighbourhoods, where average income is low, employment is informal and public services are limited. Residence on the outskirts of the city, where links to work opportunities are restricted, is also characteristic. Urban spatial poverty traps can also be found at



Fig. 2.26 Slum and housing along the canal in HCMC, Vietnam 1993. (Reproduced with permission from Bolay)

national level, where urbanisation has occurred alongside low or no economic growth, e.g. in small or medium-sized towns and in refugee centres. Rapid urbanisation associated with conflict-related displacement is linked to poverty.”

Poverty, precarity and disparity are three terms that punctuate urban literature on South countries. In this chapter, we have attempted to focus less on statistics to quantify the phenomenon, despite its magnitude. The slum, which itself can be defined and analyzed from different angles, transcribes the most glaring social inequalities and their physical manifestation (i.e. territorial fragmentation), into the urban space (Fig. 2.26). As we mentioned in our recent book on the subject, “A third of the world’s urban population – a billion individuals – live in precarious conditions, while 94% of slum dwellers live in developing countries. Africa and Asia will be predominantly urban by 2030; 72% of urban populations in Africa live in extremely poor conditions. This figure rises to 80% in the poorest regions of the world. Cities in developing countries will absorb 95% of the world’s urban growth over the next two decades” (Bolay et al. 2016:11).

We must maintain therefore a critical stance and may even feel a sense of awe when listening to the official discourses of cooperation agencies and the United Nations in particular, which praise the many advances made in terms of urban development and the strengthening of policies that favor more inclusive cities, all the while recognizing that this picture does not reflect the reality. The reality is that the world’s urban population is growing, and this growth is predominantly in Asia, Africa and Latin America. Many of the urban dwellers in these regions are poor and live in situations of multiple risk. This trend is in line with population growth, which

is steadily increasing and is mainly due to increasing socio-economic disparities among urban populations in recent decades, despite the fact that studies comparing income levels between rural and urban populations show the latter are comparatively privileged (PRB 2015; Pradhan et al. 2000).

According to the World Bank, 76% of the 1.3 billion poor surveyed in 2008 lived in rural areas (World Bank 2013). However, things are changing; poverty is shifting from the countryside to cities. Again, the World Bank's report on urban-rural dynamics shows that poverty is becoming increasingly urban in a continuum that extends from the countryside to small towns to larger agglomerations. This continuum "reveals interesting insights on the relationship between poverty and city size. Recent research for a large number of countries shows that it is clearly in the largest cities" (World Bank 2013:87).

In its report on children in the urban world, UNICEF shows that disparities between social strata are widening and that, in some countries, these urban disparities are now more pronounced in urban areas than in rural ones (UNICEF 2012). Worldwide statistics show that children from disadvantaged neighborhoods have more limited access to schooling, clean water, sanitation and hygiene facilities. Several examples of countries cited in the report highlight the extent of these inequalities.¹⁶ In Angola, for instance, between 2000 and 2010, the poorest 40% of the population shared 8% of national household income, while the richest 20% enjoyed 62% of the latter. The situation was similar in Bolivia during this decade, with 9% of the wealth shared by 40% of the poor and 61% by the top 20%. In Brazil, the figures were 11% for 58% of the same population segments. They differed slightly in Chile, however, with 24% for the poorest and 31% for the richest, versus 18% for 45% in Vietnam and 18% for 47% in Burkina Faso. Among the Western countries, Germany had a more egalitarian distribution, with 22% of income shared by the poorest 40% and 37% by the wealthiest 20%, 24% for 37% in Norway, and 16% for 46% for the United States. More generally, these figures are surprising as the distribution of wealth at the global and regional levels hardly differs.

It would seem that no major differences exist based on a country's level of development. Of all the continents, it is in Latin America – which is far from being the poorest region in the global South – that the distribution is the most unequal. A country-by-country analysis would be needed to investigate public policies as well as business and personal strategies that accentuate or reduce inequalities within the society.

Moreover, these disparities are not homogeneous across national territories. Spatially, this means that the gap between dynamic urban areas with new production activities and cities less anchored in economic modernity will widen (Venables 2005). Comparing social and technical data on 167 cities around the world, Liddle (2017) finds that urban growth does not necessarily translate into lower poverty rates.

¹⁶The statistics are national and cover the 2000–2010 period. It would be necessary to look at how this information applies to the urban population and to differentiate it from the rural one.

Table 2.1 Distribution of wealth by socio-economic strata (Reproduced from UNCTAD 2012)

	% share of household income (2000–2010)	
	Lowest 40%	Highest 20%
Africa	16	49
Sub-Saharan Africa	16	49
Eastern and Southern Africa	16	50
West and Central Africa	16	48
Middle East and North Africa	19	44
Asia	18	46
South Asia	20	45
East Asia and Pacific	16	48
Latin America and Caribbean	12	56
CEE/CIS	18	45
Industrialized countries	18	43
Developing countries	17	48
Least developed countries	18	46
World	17	47

However, by way of an example, growth of 1% in the GDP per capita in these cities was reflected in a 0.3% increase in access to electricity. Similarly, this growth led to only a 0.4% decrease in the population living in slums. Generally speaking, statistical analysis shows that urbanization is generally positive with regard to income and access to urban amenities and services, but that this correspondence only applies to the upper quantiles of the urban population. Confirming this analysis, González-Pérez (2018) goes even further, arguing that this trend towards inner city polarization and social inequalities is symptomatic of the early twenty-first century city. To his mind, it is directly related to the globalized evolution of capitalism, the effects of the 2007–2008 economic/financial crisis and austerity policies at the local and national levels in most countries, which have a discriminating urban impact on North and South cities alike.

As Vieira highlighted (2012:4), “Income inequalities have been increasing significantly in emerging economies between early 1990s and 2008, reflecting the concentration of income among top earners.” This general trend continues today, even if the effects of the crisis a decade ago are beginning to fade (Table 2.1). These inequalities are reflected in urban areas, as the majority of the populations of most South countries reside in cities. These social disparities are amplified over time when the strategies of economic actors’ target profitability over territorial and social redistribution of wealth. As many studies have shown, integrating rural migrants and poor people in urban areas remains on the margins of public policies and primarily take the form of social and individual struggles. It is in this context of urban precarity and given the urban authorities’ inability to face social demands that we must rethink urban planning so that it reflects an inclusive, harmonious vision of the city with realistic rules and tools that reflect present and future economic, financial and human resources.

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