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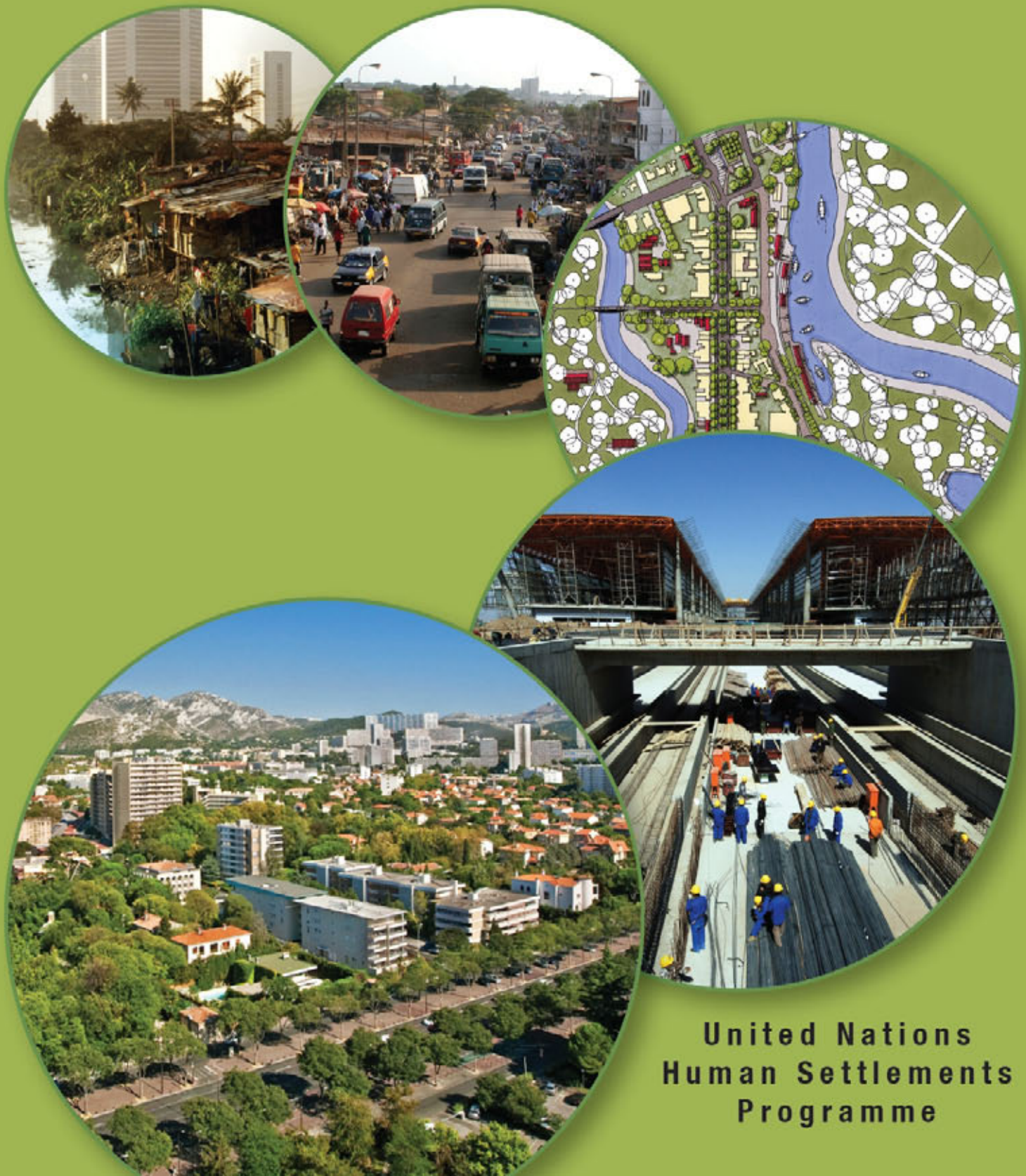
GLOBAL REPORT ON HUMAN SETTLEMENTS 2009

PLANNING Sustainable Cities



United Nations
Human Settlements
Programme

PLANNING SUSTAINABLE CITIES

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United Nations Human Settlements Programme

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FOREWORD

The major urban challenges of the twenty-first century include the rapid growth of many cities and the decline of others, the expansion of the informal sector, and the role of cities in causing or mitigating climate change. Evidence from around the world suggests that contemporary urban planning has largely failed to address these challenges. Urban sprawl and unplanned peri-urban development are among the most visible consequences, along with the increasing vulnerability of hundreds of millions of urban dwellers to rising sea levels, coastal flooding and other climate-related hazards.

Planning Sustainable Cities: Global Report on Human Settlements 2009 looks at the widespread failure to meet the needs of the majority of urban inhabitants, especially those in the rapidly growing and predominantly poor cities of the developing world, and identifies ways to reform urban planning.

The report identifies a troubling trend in most cities in developed and developing countries: the growth of up-market suburban areas and gated communities, on the one hand, and the simultaneous increase in overcrowded tenement zones, ethnic enclaves, slums and informal settlements, on the other. Strong contrasts have also emerged between technologically advanced and well-serviced economic production and business complexes such as export processing zones, and other areas defined by declining industry, sweatshops and informal businesses.

This report documents many effective and equitable examples of sustainable urbanization that are helping to define a new role for urban planning. I commend its information and analysis to all who are interested in promoting economically productive, environmentally safe and socially inclusive towns and cities.

Ban Ki-moon
Secretary-General
United Nations

INTRODUCTION

Planning Sustainable Cities: Global Report on Human Settlements 2009 assesses the effectiveness of urban planning as a tool for dealing with the unprecedented challenges facing 21st-century cities and for enhancing sustainable urbanization. There is now a realization that, in many parts of the world, urban planning systems have changed very little and are often contributors to urban problems rather than functioning as tools for human and environmental improvement. Against this background, the Global Report's central argument is that, in most parts of the world, current approaches to planning must change and that a new role for urban planning in sustainable urban development has to be found.

The Global Report argues that future urban planning must take place within an understanding of the factors shaping 21st-century cities, including:

- the environmental challenges of climate change and cities' excessive dependence on fossil fuel-powered cars;
- the demographic challenges of rapid urbanization, rapid growth of small- and medium-sized towns and an expanding youth population in developing nations, and, in developed nations, the challenges of shrinking cities, ageing and the increasing multicultural composition of cities;
- the economic challenges of uncertain future growth and fundamental doubts about market-led approaches that the current global financial crisis have engendered, as well as increasing informality in urban activities;
- increasing socio-spatial challenges, especially social and spatial inequalities, urban sprawl and unplanned peri-urbanization; and
- the challenges and opportunities of increasing democratization of decision-making as well as increasing awareness of social and economic rights among ordinary people.

An important conclusion of the Global Report is that, even though urban planning has changed relatively little in most countries since its emergence about 100 years ago, a number of countries have adopted some innovative approaches in recent decades. These include strategic spatial planning, use of spatial planning to integrate public-sector functions, new land regularization and management approaches, participatory processes and partnerships at the neighbourhood level, and planning for new and more sustainable spatial forms such as compact cities and new urbanism. However, in many developing countries, older forms of master planning have persisted. Here, the most obvious problem with this approach is that it has failed to accommodate the ways of life of the majority of inhabitants in rapidly growing and largely poor and informal cities, and has often directly contributed to social and spatial marginalization.

There are a number of key messages emerging from the Global Report, all of them contributing towards finding a new role for urban planning in sustainable urban development. One important message is that governments should increasingly take on a more central role in cities and towns in order to lead development initiatives and ensure that basic needs are met. This, to a large extent, is a result of the current global economic crisis, which has exposed the limits of the private sector – in terms of its resilience and future growth as well as the ability of the 'market' to solve most urban problems. It is clear that urban planning has an important role to play in assisting governments to meet the urban challenges of the 21st century.

As the world becomes numerically more urban, it is important that governments accept urbanization as a positive phenomenon and an effective means for improving access to services, as well as economic and social opportunities. If urban planning is to play a more effective role as a consequence of this policy orientation, countries need to develop overall national urban strategies.

With respect to the reconfiguration of planning systems, the Global Report's message is that careful attention should be given to identifying opportunities that can be built on, as well as factors that could lead to the subversion and corruption of planning institutions and processes. In particular, urban planning needs to be institutionally located in a way that allows it to play a role in creating urban investment and livelihood opportunities through responsive and collaborative processes as well as coordination of the spatial dimensions of public-sector policies and investment.

To ensure that participation is meaningful, socially inclusive and contributes to improving urban planning, a number of minimum conditions need to be satisfied, including: a political system that allows and encourages active citizen participation; a legal basis for local politics and planning that specifies how the outcomes of participatory processes will influence plan preparation and decision-making; and mechanisms for socially marginalized groups to have a voice in both representative politics and participatory planning processes.

The Global Report identifies a number of promising trends for bridging the green and brown agendas, including:

- the development of sustainable energy in order to reduce cities' dependence on non-renewable energy sources;
- the improvement of eco-efficiency in order to enable the use of waste products to satisfy urban energy and material needs;
- the development of sustainable transport in order to reduce the adverse environmental impacts of dependence on fossil fuel-driven cars; and
- the development of 'cities without slums' so as to address the pressing challenges of poor access to safe drinking water and sanitation as well as vulnerability to natural hazards.

The report recommends a three-step process for effectively responding to urban informality: first, recognizing the positive role played by urban informal development; second, adopting revisions to policies, laws and regulations to facilitate informal-sector operations; and, third, strengthening the legitimacy of planning and regulatory systems. Two aspects are particularly important in this process: embracing alternatives to the forced eviction of slum dwellers and informal entrepreneurs, for example regularization and upgrading of informally developed areas; and the strategic use of planning tools such as construction of trunk infrastructure, guided land development and land readjustment.

Strategic spatial plans linked to infrastructure development can promote more compact forms of urban expansion focused around public transport. In this context, linking major infrastructure investment projects and mega-projects to strategic planning is crucial. An infrastructure plan is a key element of such strategic spatial plans. In this, transport–land-use links are the most important ones and should take precedence, while other forms of infrastructure, including water and sanitation trunk infrastructure, can follow.

Most urban planning systems do not have monitoring and evaluation as an integral part of their operations. The Global Report suggests that urban planning systems should integrate monitoring and evaluation as permanent features, along with clear indicators that are aligned with plan goals, objectives and policies. Urban plans should also explicitly put in plain words their monitoring and evaluation philosophies, strategies and processes. The outcomes and impacts of many large-scale plans are difficult to evaluate because of the many influences and factors that are at play in cities over time. For this reason, it makes more sense to focus on site plans, subdivision plans and neighbourhood plans, all of which are smaller in scale and more conducive to monitoring and evaluation.

A final message of the Global Report is that curricula in many urban planning schools need to be updated. This is particularly the case in many developing and transition countries where curricula have not been revised to keep up with current challenges and issues. Planning schools should embrace innovative planning ideas, including the ability to engage in participatory planning, negotiation and communication, understanding the implications of rapid urbanization and urban informality, and the ability to bring climate change considerations into planning concerns. In addition, it should be recognized that planning is not 'value-neutral' – for this reason, urban planning education should include tuition in ethics, the promotion of social equity and the social and economic rights of citizens, as well as of sustainability.

The Global Report is published at a time when there is keen global interest in the revival of urban planning, within the context of sustainable urbanization. I believe the report will not only raise awareness of the role of urban planning in striving for sustainable cities, but also offer directions for the reform of this very important tool.

Anna Kajumulo Tibaijuka
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1 The HS-Net Advisory Board consists of experienced researchers in the human settlements field, selected to represent the various geographical regions of the world. The primary role of the Board is to advise UN-Habitat on the substantive content and organization of the Global Report on Human Settlements.

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LIST OF ACRONYMS AND ABBREVIATIONS

AESOP	Association of European Schools of Planning
APERAU	Association for the Promotion of Education and Research in Management and Urbanism
BOT	build–operate–transfer
BRT	bus rapid transit
CAP	community action planning
CBO	community-based organization
CCTV	closed-circuit television
CDS	City Development Strategy
CO_2	carbon dioxide
CSO	civil society organization
EPM	environmental planning and management
ESPON	European Spatial Planning Observation Network
EU	European Union
FDI	foreign direct investment
g	gram
GDP	gross domestic product
GIS	geographic information systems
GNI	gross national income
GPEAN	Global Planning Education Association Network
GPN	Global Planners Network
GTZ	Deutsche Gesellschaft für Technische Zusammenarbeit
GUO	Global Urban Observatory
ha	hectare
HDI	Human Development Index
HIV-AIDS	human immunodeficiency virus–acquired immunodeficiency syndrome
ICLEI	International Council for Local Environmental Initiatives
ILO	International Labour Organization
IMF	International Monetary Fund
IPCC	Intergovernmental Panel on Climate Change
ITDG	Intermediate Technology Development Group
km	kilometre
kWh	kilowatt hour
LECZ	low-elevation coastal zone
LRT	light rail transit
m	metre
MDG	Millennium Development Goal
MW	megawatt
NGO	non-governmental organization
OECD	Organisation for Economic Co-operation and Development
PPP	purchasing power parity
PUA	participatory urban appraisal
SCP	Sustainable Cities Programme
SDF	spatial development framework
SUDP	Strategic Urban Development Plan
TOD	transit-oriented development

UK	United Kingdom of Great Britain and Northern Ireland
UMP	Urban Management Programme
UN	United Nations
UNCED	United Nations Conference on Environment and Development
UNCHS	United Nations Centre for Human Settlements (Habitat) (now UN-Habitat)
UNDESA	United Nations Department of Economic and Social Affairs
UNDP	United Nations Development Programme
UNEP	United Nations Environment Programme
UN-Habitat	United Nations Human Settlements Programme (formerly UNCHS (Habitat))
UNICEF	United Nations Children's Fund
US	United States of America
WHO	World Health Organization

KEY FINDINGS AND MESSAGES

KEY FINDINGS: CURRENT AND FUTURE URBAN CHALLENGES

Future urban planning must take place within an understanding of the factors shaping 21st-century cities, especially the demographic, environmental, economic and socio-spatial challenges that lie ahead. It also needs to recognize the changing institutional structure of cities and the emerging spatial configurations of large, multiple-nuclei or polycentric, city-regions.

Demographic challenges

The global urban transition witnessed over the last three or so decades has been phenomenal and is presenting planning and urban management with challenges that have never been faced before. While the period 1950–1975 saw population growth more or less evenly divided between the urban and rural areas of the world, the period since has seen the balance tipped dramatically in favour of urban growth. In 2008, for the first time in history, over half of the world's population lived in urban areas and, according to current projections, this will have risen to 70 per cent by 2050. Almost all of this growth will take place in developing regions. Between 2007 and 2025, the annual urban population increase in developing regions is expected to be 53 million (or 2.27 per cent), compared to a mere 3 million (or 0.49 per cent) in developed regions.

It is predicted that many new megacities of over 10 million people and hypercities of over 20 million will emerge during the next few decades. The bulk of new urban growth, however, will occur in smaller, and often institutionally weak, settlements of 100,000–250,000 people. In contrast, some parts of the world are facing the challenge of shrinking cities. Most of these are to be found in the developed and transitional regions of the world. But more recently, city shrinkage has occurred in some developing countries as well.

A key problem is that most of the rapid urban growth is taking place in countries least able to cope – in terms of the ability of governments to provide, or facilitate the provision of, urban infrastructure; in terms of the ability of urban residents to pay for such services; and in terms of resilience to natural disasters. The inevitable result has been the rapid growth of urban slums and squatter settlements. Close to 1 billion people, or 32 per cent of the world's current urban population, live in slums in inequitable and life-threatening conditions, and are directly affected by both environmental disasters and social crises, whose frequency and impacts have increased significantly during the last few decades.

Environmental challenges

One of the most significant environmental challenges at present is climate change. It is predicted that, within cities, climate change will negatively affect access to water and that hundreds of millions of people will be vulnerable to coastal flooding and related natural disasters as global warming increases. Moreover, it will be the poorest countries and people who will be most vulnerable to this threat and who will suffer the earliest and the most. High urban land and housing costs currently are pushing the lowest-income people into locations that are prone to natural hazards, such that four out of every ten non-permanent houses in the developing world are now located in areas threatened by floods, landslides and other natural disasters, especially in slums and informal settlements. Significantly, such disasters are only partly a result of natural forces – they are also products of failed urban development and planning.

A second major concern is the environmental impact of fossil fuel use in urban areas, especially of oil, and its likely long-term increase in cost. The global use of oil as an energy source has both promoted and permitted urbanization, and its easy availability has allowed the emergence of low-density and sprawling urban forms – suburbia – dependent on private cars. Beyond this, however, the entire global economy rests on the possibility of moving both people and goods quickly, cheaply and over long distances. An oil-based economy and climate change are linked: vehicle emissions contribute significantly to greenhouse gas emissions and hence global warming. Responding to a post-oil era presents a whole range of new imperatives for urban planning, especially in terms of settlement density and transportation.

Economic challenges

Processes of globalization and economic restructuring in recent decades have impacted in various ways on urban settlements in both developed and developing countries, and will continue to do so. Particularly significant has been the impact on urban labour markets, which show a growing polarization of occupational and income structures (and hence growing income inequality) caused by growth in the service sector and decline in manufacturing. There have also

been important gender dimensions to this restructuring: over the last several decades women have increasingly moved into paid employment, but trends towards 'casualization' of the labour force (through an increase in part-time, contract and home-based work) have made them highly vulnerable to economic crises. In developed countries, the last several decades have also seen a process of industrial relocation to less developed regions as firms have attempted to reduce labour and operating costs.

The global economic crisis that began in 2008 has accelerated economic restructuring and led to the rapid growth of unemployment in all parts of the world. One important result of these economic and policy processes on urban labour markets has been rapid growth of the urban informal economy in all regions of the world, but particularly in developing countries. Here, informal sector jobs account for more than 50 per cent of all employment in Africa and the Latin America and Caribbean region, and a little lower in Asia. There are also important gender dimensions to informality: women are disproportionately concentrated in the informal economy and particularly in low-profit activities. Among the most significant challenges that urban planning has to address in the next few decades, especially in developing countries, are increasing poverty and inequality, as well as to the rapidly expanding urban informal sector.

Socio-spatial challenges

Urban planners and managers have increasingly found themselves confronted by new spatial forms and processes, the drivers of which often lie outside the control of local government. Socio-spatial change seems to have taken place primarily in the direction of the fragmentation, separation and specialization of functions and uses within cities, with labour market polarization (and hence income inequality) reflected in growing differences between wealthier and poorer areas in both developed and developing country cities. Highly visible contrasts have emerged between upmarket gentrified and suburban areas with tenement zones, ethnic enclaves and ghettos, as well as between areas built for the advanced service and production sector, and for luxury retail and entertainment, with older areas of declining industry, sweatshops and informal businesses. While much of this represents the playing out of 'market forces' in cities, and the logic of real estate and land speculation, it is also a response to local policies that have attempted to position cities globally in order to attract new investment through 'competitive city' approaches.

In some parts of the world, including in Latin American and Caribbean cities, fear of crime has increased urban fragmentation as middle- and upper-income households segregate themselves into 'gated communities' and other types of high-security residential complexes. 'Gated communities' have multiplied in major metropolitan areas such as Buenos Aires, São Paulo, Santiago, Johannesburg and Pretoria.

In many poorer cities, spatial forms are largely driven by the efforts of low-income households to secure land that is affordable and in a location close to employment and other livelihood sources. This process is leading to entirely new urban forms as the countryside itself begins to urbanize. The bulk of rapid urban growth in developing countries is, in fact, now taking place in unplanned peri-urban areas, as poor urban dwellers look for a foothold in the cities and towns in locations where land is more easily available, where they can escape the costs and threats of urban land regulations, and where there is a possibility of combining urban and rural livelihoods.

Institutional challenges

Formal urban planning systems are typically located within the public sector, with local government usually being the most responsible tier. Within the last three decades, and closely linked to processes of globalization, there have been significant transformations in local government in many parts of the world, making them very different settings from those within which modern urban planning was originally conceived about 100 years ago.

The most commonly recognized change has been the expansion of the urban political system from 'government' to 'governance', which in developed countries represents a response to the growing complexity of governing in a globalizing and multilevel context, as well as the involvement of a range of non-state actors in the process of governing. In developing countries, the concept of governance has been promoted as a policy measure, along with decentralization and democratization, driven largely by multilateral institutions such as the World Bank and United Nations agencies. These shifts have had profound implications for urban planning, which has often been cast as a relic of the old welfare state model and as an obstacle to economic development and market freedom.

In addition, urban planning at the local government level has also had to face challenges from shifts in the scale of urban decision-making. As the wider economic role of urban centres and their governments has come adrift from their geographically bounded administrative roles, so the need to move towards rescaling to the city-region level and introducing multilevel and collaborative governance has become increasingly apparent in many parts of the world.

Another global trend has been in the area of participation. Since the 1960s, there has been a growing unwillingness on the part of communities to passively accept the planning decisions of politicians and technocrats that impact on their living environments. However, within cities in both developed and developing countries, 'delivering consensus' is becoming more difficult, as societal divisions have been increasing, partly as a result of international migration and the growth of ethnic minority groups in cities, and partly because of growing income and employment inequalities that have intersected with ethnicity and identity in various ways. In developing countries, urban crime and violence have also contributed to a decline in social cohesion and an increase in conflict and insecurity in many cities.

KEY FINDINGS: URBAN PLANNING RESPONSES AND TRENDS

Emergence and spread of contemporary urban planning

Contemporary urban planning systems in most parts of the world have been shaped by 19th-century Western European planning, commonly known as master planning, or modernist urban planning. Its global diffusion occurred through several mechanisms, especially colonialism, market expansion and intellectual exchange. Professional bodies and international and development agencies also played an important role. Frequently, these imported ideas were used for reasons of political, ethnic or racial domination and exclusion, rather than in the interests of good planning.

In many developed countries, approaches to planning have changed significantly. However, in many developing countries, the older forms of master planning have persisted. In some countries, master planning is still found to be useful, sometimes due to the very rapid rate of state-directed city-building, and sometimes because it serves the interests of elites who often emulate modern Western cities and whose actions inevitably marginalize the poor and the informal in cities.

The most obvious problem with modernist planning is that, being based on spatial interventions that assume a far higher level of social affluence than is the case in most developing countries, it fails to accommodate the way of life of the majority of inhabitants in rapidly growing, and largely poor and informal cities, and thus directly contributes to social and spatial marginalization. Furthermore, it fails to take into account the important challenges of 21st-century cities such as climate change, oil dependence, food insecurity and informality; and to a large extent, it fails to acknowledge the need to meaningfully involve communities and other stakeholders in the planning of urban areas.

A number of new and sometimes overlapping approaches to urban planning have been identified in the Global Report, the principal ones being:

- *Strategic spatial planning*, which does not address every part of a city but focuses on only those aspects or areas that are strategic or important to overall plan objectives;
- *Use of spatial planning to integrate public-sector functions*, including injection of a spatial or territorial dimension into sectoral strategies;
- *New land regularization and management approaches*, which offer alternatives to the forced removal of informal settlements, ways of using planning tools to strategically influence development actors, ways of working with development actors to manage public space and provide services, and new ideas on how planning laws can be used to capture rising urban land values;
- *Participatory processes and partnerships at the neighbourhood level*, which include 'participatory urban appraisal', 'participatory learning and action' and 'community action planning', including 'participatory budgeting';
- *New forms of master planning*, which are bottom up and participatory, oriented towards social justice and aim to counter the effects of land speculation; and
- *Planning aimed at producing new spatial forms*, such as compact cities and new urbanism, both of which are a response to challenges of urban sprawl and sustainable urbanization.

These new approaches to planning have many positive qualities, but also aspects that suggest the need for caution in terms of their wider use. There is still too much focus on process, often at the expense of outcomes. There is also a strong focus on the directive aspect of the planning system and neglect of the underlying regulatory and financing systems, and how these link to directive plans. Planning is still weak in terms of how to deal with the major sustainable urban challenges of the 21st century: climate change, resource depletion, rapid urbanization, poverty and informality.

Institutional and regulatory frameworks for planning

A variety of new agencies have become involved in urban planning – for example, special 'partnership' agencies that focus on particular development tasks, metropolitan and regional development agencies, as well as agencies created through initiatives funded by external aid programmes. This has been partly in response to decentralization of authority from national governments to cities, regions and quasi-governmental organizations, as well as to different forms of privatization.

The legal systems underpinning planning regulation are being modified in many countries to allow greater flexibility and interactions. This situation is encouraging two related responses. One is an increase in litigation as a way of resolving planning disputes. The other is a counteracting movement to avoid litigation through developing negotiation and collaborative practices.

The presence of large-scale land and property developers (often linked to competitive city policies) is expanding substantially, creating challenges for national and local planning practices that are seeking to promote greater equity and environmental sensitivity in urban development.

In many large urban complexes that have resulted from metropolitanization and informal peri-urbanization processes, there is an increasing mismatch between administrative boundaries and the functional dynamics of urban areas, leading to problems in coordinating development activity and integrating the social, environmental and economic dimensions of development.

Approaches to the formulation and implementation of plans have moved from assuming that a planning authority could control how development takes place, to recognizing that all parties (including the private sector and civil society organizations) need to learn from each other about how to shape future development trajectories.

Participation, planning and politics

In most developed countries, formal procedures for public participation in planning decisions have long existed. Well-established representative democratic political systems in these countries enable citizen participation in urban planning processes. Yet this remains tokenistic in some developed and transition countries.

A technocratic blueprint approach to planning persists in many developing countries, inhibiting the direct involvement of citizens or other stakeholders in decision-making. Attempts to adopt participatory planning processes and revise planning legislation accordingly have been minimal in many developing countries.

In spite of this, a growing number of cities are adopting participatory approaches to planning due to the widespread recognition that technocratic approaches have been largely ineffective in dealing with the challenges of urbanization. A variety of innovative approaches for participatory planning, from the local to city level, have been developed in recent years, often with support from international programmes, such as the UN-Habitat-supported Urban Management, Sustainable Cities and Localizing Agenda 21 programmes.

At the local/community level, *participatory urban appraisal* (PUA), which draws on tools and methods of participatory rural appraisal, has been used to identify needs and priorities. PUA provides information inputs into decision-making rather than itself being a decision-making tool. It has therefore been complemented by *community action planning* (CAP), which develops actionable ideas and implementation arrangements based on the information generated through PUAs. A good example of CAP is the *women's safety audit*, which has been employed to address the safety of women in the planning and design of safer neighbourhoods.

At the city level, *participatory budgeting* has enabled citizen participation in municipal budgeting and spending, while *city development strategies* (CDSs) have enabled communities to participate in the prioritization of urban development projects. A CDS uses participatory processes to develop an action plan for equitable urban growth. To date, over 150 cities worldwide have been involved in developing CDSs.

Bridging the green and brown agendas

Rapid urban growth in the past 50 years has meant that managing the built (or human) environment, while coping with environmental pollution (especially waste) and degradation, has become a significant challenge in the cities of developed countries and has overwhelmed many cities in the developing world. Fewer than 35 per cent of the cities in developing countries have their wastewater treated; worldwide 2.5 billion and 1.2 billion people lack safe sanitation and access to clean water, respectively; and between one third and one half of the solid waste generated within most cities in low- and middle-income countries is not collected. Most of this deprivation is concentrated in urban slums and informal settlements.

Innovations to achieve green and brown agenda synergies are under way all over the world. These are manifest in the following overlapping trends identified in the Global Report:

- developing renewable energy in order to reduce cities' dependence on non-renewable energy sources;
- striving for carbon-neutral cities so as to significantly cut and offset carbon emissions;
- developing small-scale, distributed power and water systems for more energy-efficient provision of services;
- increasing photosynthetic spaces as part of green infrastructure development in order to expand renewable sources of energy and local food;
- improving eco-efficiency in order to enable the use of waste products to satisfy urban energy and material resource needs;
- increasing sense of place through local sustainable development strategies so as to enhance implementation and effectiveness of innovations;
- developing sustainable transport in order to reduce the adverse environmental impacts of dependence on fossil fuel-driven cars; and
- developing 'cities without slums' so as to address the pressing challenges of poor access to safe drinking water and sanitation as well as environmental degradation.

Although the sustainable urban development vision has been embraced by cities all over the world, none are yet able to simultaneously and comprehensively address the different facets of the sustainable urban development challenge and to fully demonstrate how to integrate the green and brown agendas.

Urban planning and informality

The effectiveness of urban planning is a key determinant of the prevalence of informality in cities. Accordingly, urban informality in developed countries is limited, given their well-developed planning systems. In contrast, a substantial and increasing proportion of urban development in developing countries is informal due to limited planning and governance capacities.

Affordable serviced land and formal housing remains inaccessible to most urban residents in cities of developing countries, especially low- and middle-income groups. Therefore a significant number of them live in housing that does not comply with planning regulations. A staggering 62 per cent of the urban population in sub-Saharan Africa lives in slums, compared to 43 per cent in South Asia. Much of future urban growth in developing country cities is expected to take place in peri-urban areas and expanded metropolitan regions where informal development is widespread.

About 57 per cent of all employment in the Latin America and Caribbean region is informal. About 60 per cent of all urban jobs in Africa are in the informal sector and, in francophone Africa, 78 per cent of urban employment is informal, while the sector currently generates 93 per cent of

all new jobs. In Central Asia, the informal sector is responsible for between 33 and 50 per cent of the total economic output. Even in the countries of the Organisation for Economic Co-operation and Development (OECD), the informal economy accounts for about 16 per cent of value added.

In many countries, informality is regarded as both undesirable and illegal, leading to ineffective government responses such as elimination and neglect. However, because of the failure of such policies to either eliminate the sector or improve the livelihoods of informal entrepreneurs, there has been some rethinking and renewed attempts to develop alternative policy responses to informality. For instance, legal provisions against evictions, regularization and upgrading of informal settlements and land-sharing arrangements are some of the approaches that have been used to avoid the harmful effects of forced eviction of both informal settlement/slum dwellers and informal economic entrepreneurs.

Strategic use of planning tools, including public investment in trunk infrastructure to influence patterns of development, guided land development using strategic planning, land pooling or readjustment and the gradual extension of detailed planning and development control, have also enhanced the effectiveness of responses to informality.

Partnerships with informal economic actors to manage public space and provide services have helped to address the challenges of informality in some cities. This involves recognizing informal entrepreneurs' property rights, allocating special-purpose areas for informal activities and providing basic services.

Planning, spatial structure of cities and provision of infrastructure

Since the late 1970s, the 'unbundling' of infrastructure development – through forms of corporatization or privatization of urban infrastructure development and provision, and developer-driven urban development – has tended to drive patterns of urban fragmentation and spatial inequality in many countries. The period since the 1980s has seen a major growth of urban mega-projects, including infrastructure projects. This has been linked to the new emphasis on urban competitiveness and urban entrepreneurialism.

Although the private sector has tended to focus on more profitable aspects of infrastructure development, privatized provision of services has also occurred in poorer communities. While these processes sometimes extend services to areas that would not otherwise have them, they also impose considerable costs on the poor.

The structure of road networks and public transport systems shapes the spatial organization of many cities, and has been a crucial element in attempts to restructure cities spatially. However, the accessibility–value relationship has meant that lower-income groups have had little choice of where to live and work. In addition, the availability of trunk lines for water and sewerage and transmission lines for electricity in particular areas reduces development costs and has also influenced patterns of growth. This type of bulk infrastructure is also increasingly seen as a key element in shaping patterns of spatial development, after road and public transport networks.

Monitoring and evaluation of urban plans

Monitoring and evaluation of the implementation of urban plans has become part of practice in the more progressive planning departments of cities and regions in developed countries. However, in the transitional and developing countries, very little progress has been made so far in embracing monitoring and evaluation as integral parts of the urban planning process.

In developing countries, the most extensive application of monitoring and evaluation has occurred as part of development programmes that are funded by international agencies, managed by state organizations and implemented by local authorities. There is less evidence of community/official urban plan-level monitoring and evaluation in developing countries. There are typically few resources for planning generally, and especially for plan enforcement or monitoring.

Because the importance of monitoring and evaluation can be difficult to appreciate in local governments that face complex, energy-sapping urban challenges, not many urban authorities have fully embraced this important management tool. In addition, monitoring and evaluation can produce negative as well as positive results. The latter situation is often embraced by local decision-makers, while the former is frequently ignored, downplayed or even rejected.

Planning education

There are about 550 universities worldwide that offer urban planning degrees. About 60 per cent (330 schools) of these are concentrated in ten countries. The remaining 40 per cent (220 schools) are located in 72 different countries. In total, there are at least 13,000 academic staff in planning schools worldwide. While developing countries contain more than 80 per cent of the world's population, they have less than half of the world's planning schools.

Urban planning education in most countries has moved from a focus on physical design towards an increased focus on policy and social science research. Graduates from planning schools focusing on physical design find themselves increasingly marginalized in a situation where planning processes progressively require knowledge of issues related to sustainable development, social equity and participatory processes.

Despite awareness of the importance of gender in planning practice, it is not a core part of the syllabus in many urban planning schools. While about half of all planning schools teach social equity issues in their curricula, only a minority of these specifically teach gender-related issues.

There are significant regional variations in terms of the relative importance given to technical skills, communicative skills and analytic skills in planning curricula. The variations are linked to the prevalence of policy/social science approaches, as opposed to physical design. For

example, while planning schools in Asia rate analytical skills as most important, followed by technical skills and then communication skills, the focus varies substantially in Latin America. Overall in Latin America, technical, rationalist perspectives are the norm, with skills such as master planning, urban design and econometric modelling being more common than those of participation or negotiation.

KEY MESSAGES: TOWARDS A NEW ROLE FOR URBAN PLANNING

Broad policy directions

Governments, both central and local, should increasingly take on a more central role in cities and towns in order to lead development initiatives and ensure that basic needs are met. This is increasingly being recognized and, to a large extent, is a result of the current global economic crisis, which has exposed the limits of the private sector in terms of its resilience and future growth as well as the ability of the 'market' to solve most urban problems. Urban planning has an important role to play in assisting governments and civil society to meet the urban challenges of the 21st century. However, urban planning systems in many parts of the world are not equipped to deal with these challenges and, as such, need to be reformed.

Reformed urban planning systems must fully and unequivocally address a number of major current and emerging urban challenges, especially climate change, rapid urbanization, poverty, informality and safety. Reformed urban planning systems must be shaped by, and be responsive to the contexts from which they arise, as there is no single model urban planning system or approach that can be applied in all parts of the world. In the developing world, especially in Africa and Asia, urban planning must prioritize the interrelated issues of rapid urbanization, urban poverty, informality, slums and access to basic services. In developed, transition and a number of developing countries, urban planning will have to play a vital role in addressing the causes and impacts of climate change and ensuring sustainable urbanization. In many other parts of the world, both developed and developing, urban planning should play a key role in enhancing urban safety by addressing issues of disaster preparedness, post-disaster and post-conflict reconstruction and rehabilitation, as well as urban crime and violence.

A particularly important precondition for the success of urban planning systems is that countries should develop a national perspective on the role of urban areas and challenges of urbanization, articulated in some form of national urban policy. This is not a new idea, but, as the world moves to a situation in which urban populations dominate numerically, it is more important than ever before that governments accept that urbanization can be a positive phenomenon and a precondition for improving access to services, economic and social opportunities, and a better quality of life. In this context, a reformed urban planning will have to pay greater attention to small- and medium-sized cities, especially in developing countries where planning often focuses on larger cities. Countries will also need to integrate various aspects of demographic change in their urban planning policies, particularly the youth bulge observed in many developing countries, shrinking or declining cities, as well as the rapidly ageing population and increasingly multicultural composition of cities in developed countries.

Capacity to enforce urban planning regulations, which is seriously lacking in many developing countries, should be given very high priority and should be developed on the basis of realistic standards. The regulation of land and property development, through statutory plans and development permits, is a vitally important role of the urban planning system. Yet, in many countries, especially in the developing world, outdated planning regulations and development standards are, paradoxically, one of the main reasons underlying the failure of enforcement. They are based on the experience of the much more affluent developed countries and are not affordable for the majority of urban inhabitants. More realistic land and property development standards are being formulated in some developing countries, but this effort must be intensified and much more should be done to improve enforcement as well as the legitimacy of urban planning as a whole.

Specific policy directions

■ Institutional and regulatory frameworks for planning

In the design and reconfiguration of planning systems, careful attention should be given to identifying investment and livelihood opportunities that can be built on, as well as pressures that could lead to the subversion and corruption of planning institutions. In particular, urban planning needs to be institutionally located in a way that allows it to play a role in creating urban investment and livelihood opportunities, through responsive and collaborative processes. In addition, corruption at the local-government level must be resolutely addressed through appropriate legislation and robust mechanisms.

Urban planning can and should play a significant role in overcoming governance fragmentation in public policy formulation and decision-making, since most national and local development policies and related investments have a spatial dimension. It can do this most effectively through building horizontal and vertical relationships using place and territory as loci for linking planning with the activities of other policy sectors, such as infrastructure provision. Therefore, regulatory power needs to be combined with investment and broader public-sector decision-making.

To command legitimacy, regulatory systems must adhere to the principle of equality under the law, and must be broadly perceived as doing so. It is important to recognize that regulation of land and property development is sustained not just by formal law, but also by social and cultural norms. In designing planning systems, all forms of land and property development activity, formal and informal, must be taken into account and mechanisms for protecting the urban poor and improving their rights and access to land, housing and property must also be put in place.

The protective as well as developmental roles of planning regulation must be recognized in redesigning urban planning systems. Statutory plans and permit-giving regulate the balance between public and private rights in any development project, as well as providing the authority for conserving important community assets. Protective regulation is necessary for safeguarding assets, social opportunities and environmental resources that would otherwise be squeezed out in the rush to develop. Regulation with a developmental intent is necessary for promoting better standards of building and area design, enhancing quality of life and public realm, and introducing some stabilization in land and property development activity, particularly where market systems dominate.

Participation, planning and politics

Governments need to implement a number of minimum but critical measures with respect to the political and legal environment as well as financial and human resources, in order to ensure that participation is meaningful, socially inclusive and contributes to improving urban planning. These measures include: establishing a political system that allows and encourages active participation and genuine negotiation, and is committed to addressing the needs and views of all citizens and investment actors; putting in place a legal basis for local politics and planning that specifies how the outcomes of participatory processes will influence plan preparation and decision-making; ensuring that local governments have sufficient responsibilities, resources and autonomy to support participatory processes; ensuring commitment of government and funding agents to resource distribution in order to support implementation of decisions arising from participatory planning processes, thus also making sure that participation has concrete outcomes; and enhancing the capacity of professionals, in terms of their commitment and skills to facilitate participation, provide necessary technical advice and incorporate the outcomes of participation into planning and decision-making.

Governments, both national and local, together with non-governmental organizations, must facilitate the development of a vibrant civil society and ensure that effective participatory mechanisms are put in place. The presence of well-organized civil society organizations and sufficiently informed communities that can take advantage of opportunities for participation and sustain their roles over the longer term is vitally important if community participation in urban planning is to be effective. Mechanisms for socially marginalized groups to have a voice in both representative politics and participatory planning processes must also be established.

Bridging the green and brown agendas

In order to integrate the green and brown agendas in cities, urban local authorities should implement a comprehensive set of green policies and strategies covering urban design, energy, infrastructure, transport, waste and slums. These policies and strategies include: increasing urban development density, on the broad basis of mixed land-use strategies; renewable energy and carbon-neutral strategies, principally to reduce greenhouse gas emissions, as part of climate change mitigation measures; distributed green infrastructure strategies to expand small-scale energy and water systems, as part of local economic development that is capable of enhancing sense of place; sustainable transport strategies to reduce fossil fuel use, urban sprawl and dependence on car-based transit; eco-efficiency strategies, including waste recycling to achieve fundamental changes in the metabolism of cities; and much more effective approaches to developing 'cities without slums', at a much larger scale, focusing on addressing the challenges of poor access to safe drinking water and sanitation and environmental degradation in cities of the developing world.

Many green innovations can, and should, be comprehensively integrated into statutory urban planning and development control systems, including planning standards and building regulations. Introducing strategies for synergizing the green and brown agenda in cities will not be possible without viable and appropriate urban planning systems. Recent experience has also demonstrated the effectiveness of combining such a regulatory approach with partnerships between government, industry and communities in the development and implementation of local sustainability innovations and enterprises.

Urban planning and informality

Governments and local authorities must, unequivocally, recognize the important role of the informal sector and ensure that urban planning systems respond positively to this phenomenon, including through legislation. A three-step reform process is required for urban planning and governance to effectively respond to informality: first, recognizing the positive role played by urban informal development; second, considering revisions to policies, laws and regulations to facilitate informal sector operations; and third, strengthening the legitimacy and effectiveness of planning and regulatory systems on the basis of more realistic standards.

More specific innovative and tried approaches to land development and use of space should be adopted and implemented if urban policy and planning are to effectively respond to informality. The first approach is pursuing alternatives to the forced eviction of slum dwellers

and forced removal or closure of informal economic enterprises. For example, regularization and upgrading of informally developed areas is preferable to neglect or demolition. The second approach is the strategic use of planning tools such as construction of trunk infrastructure, guided land development and land readjustment. The third approach is collaborating with informal economic actors to manage public space and provide services, including through recognizing informal entrepreneurs' property rights, allocating special-purpose areas for informal activities and providing basic services.

■ Planning, spatial structure of cities and provision of infrastructure

Strategic spatial plans linked to infrastructure development can promote more compact forms of urban expansion focused around accessibility and public transport. This will lead to improved urban services that are responsive to the needs of different social groups, better environmental conditions, as well as improved economic opportunities and livelihoods. The importance of pedestrian and other forms of non-motorized movement also requires recognition. Linking major infrastructure investment projects and mega-projects to strategic planning is also crucial.

To enhance the sustainable expansion of cities and facilitate the delivery of urban services, urban local authorities should formulate infrastructure plans as key elements of strategic spatial plans. Transport–land-use links are the most important ones in infrastructure plans and should take precedence, while other forms of infrastructure, including water and sanitation trunk infrastructure, can follow. The involvement of a wide range of stakeholders is essential to the development of a shared and consistent approach, but the infrastructure plan itself also needs to be based on credible analysis and understanding of trends and forces. The plan should also provide the means for protecting the urban poor from rising land costs and speculation, which are likely to result from new infrastructure provision.

Regional governance structures are required to manage urban growth that spreads across administrative boundaries, which is increasingly the case in all regions of the world. Spatial planning in these contexts should provide a framework for the coordination of urban policies and major infrastructure projects, harmonization of development standards, comprehensively addressing the ecological footprints of urbanization, and a space for public discussion of these issues.

■ The monitoring and evaluation of urban plans

Urban planning systems should integrate monitoring and evaluation as permanent features. This should include clear indicators that are aligned with plan goals, objectives and policies. Urban plans should also explicitly explain their monitoring and evaluation philosophies, strategies and procedures. Use of too many indicators should be avoided and focus should be on those indicators for which information is easy to collect.

Traditional evaluation tools – such as cost–benefit analysis, cost-effectiveness analysis and fiscal impact assessment – are still relevant, given the realities of local government resource constraints. Recent interest in performance measurement, return on investment and results-based management principles means that the use of these quantitative tools in urban planning practice should be encouraged.

All evaluations should involve extensive consultation with, and contributions by, all plan stakeholders. This can be achieved through, for example, participatory urban appraisal methods. Experience has shown that this can enhance plan quality and effectiveness through insights and perspectives that might otherwise not have been captured by the formal plan-making process.

Most routine monitoring and evaluation should focus on the implementation of site, subdivision and neighbourhood plans. The outcomes and impacts of many large-scale plans are difficult to evaluate because of the myriad of influences and factors that are at play in communities over time. It therefore makes more sense for monitoring and evaluation to focus on plans at lower spatial levels, i.e. site, subdivision and neighbourhood plans.

■ Planning education

There is a significant need for updating and reform of curricula in many urban planning schools, particularly in many developing and transition countries where urban planning education has not kept up with current challenges and emerging issues. Planning schools should embrace innovative planning ideas. In particular, there should be increased focus on skills in participatory planning, communication and negotiation. Updated curricula should also enhance understanding in a number of areas, some emerging and others simply neglected in the past, including rapid urbanization and urban informality, cities and climate change, local economic development, natural and human-made disasters, urban crime and violence and cultural diversity within cities. Capacity-building short courses for practising planners and related professionals have an important role to play in this.

Urban planning schools should educate students to work in different world contexts by adopting the 'one-world' approach. Some planning schools in developed countries do not educate students to work in different contexts, thus limiting their mobility and posing a problem for developing country students who want to return home to practice their skills. The 'one-world' approach to planning education is an attempt to remedy this and should be encouraged. A complementary measure is the strengthening of professional organizations and international professional networks. Such organizations and associations should be inclusive, as other experts with non-planning professional

backgrounds are significantly involved in urban planning. **Finally, urban planning education should include tuition in ethics and key social values, as planning is not 'value-neutral'.** In this context, tuition should cover areas such as the promotion of social equity and the social and economic rights of citizens, as well as sustainable urban development and planning for multicultural cities. Recognition and respect for societal differences should be central to tuition in ethics and social values, since effective urban planning cannot take place and equitable solutions cannot be found without a good understanding of the perspectives of disenfranchised and underserved populations.