

A New Role for Urban Planning in a Changing Environmental Climate

Naison D. Mutizwa-Mangiza
Chief, Policy Analysis Branch
United Nations Human Settlements Programme (UN-Habitat)

The Planning Convention: Planning in a Changing Climate
Royal Town Planning Institute, London, 17-9 June 2009

A. Introduction

Within the United Nations system, the United Nations Human Settlements Programme (UN-Habitat) is the focal point for the Habitat Agenda, adopted by Governments in 1996 in Istanbul, as well as for the Millennium Development targets on slums, drinking water and sanitation. Sustainable urbanization has been at the core of UN-Habitat's work for the last two decades or so and the theme of its current Medium-term Strategic and Institutional Plan (2008-2013), as well as its World Urban Campaign, is *Sustainable Urbanization*.

This presentation focuses on the effectiveness of urban planning as a tool for dealing with the unprecedented challenges facing twenty-first century cities and for enhancing the environmental, social and economic goals of sustainable urbanization. It draws on UN-Habitat's latest issue of the *Global Report on Human Settlements*, titled *Planning Sustainable Cities*¹, to be published in September 2009. There is a realization that, in many parts of the world, urban planning systems have to change, as they are now often contributors to urban problems rather than functioning as tools for human and environmental improvement.

B. Current and Emerging Urban Challenges

Future urban planning must address the factors shaping twenty-first century cities, including: firstly, the environmental challenges of climate change and cities' excessive dependence on fossil fuel driven cars; secondly, the demographic challenges of rapid urbanization, shrinking cities, ageing and increasing multicultural composition of cities; thirdly, 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, unplanned peri-urbanization and the increasing spatial scale of cities; and finally, institutional challenges related to governance and changing roles of local government.

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. Cities located along the world's coastlines have come under increasing threat from extreme weather events. Between the 1950s and 1990s, there was a 50 per cent increase in extreme weather events associated with global warming. Twenty-one of the 33 cities which are projected to have a population of 8 million or more by 2015 are located in vulnerable coastal zones and are increasingly vulnerable to sea-level rise. Around 40 per cent of the world's population lives less than 100 kilometres from the coast, within reach of severe coastal storms. Recent research shows that 13 per cent of the world's urban population lives in low elevation coastal zones,

¹ See Chapters 1, 2 and 3, in particular. UN-Habitat is grateful to Vanessa Watson, who prepared the initial drafts of Chapter 1 (Urban Challenges and the Need to Revisit Urban Planning) and Chapter 11 (Towards a New Role for Urban Planning). UN-Habitat is also grateful to Ambe Njoh, who, together with Vanessa Watson, prepared the initial draft of Chapter 3 (The Emergence and Spread of Contemporary Urban Planning). Chapter 2 (Understanding the Diversity of Urban Contexts) was prepared by Ben Arimah, on the basis of a preliminary draft by Ambe Njoh.

defined as less than 10 meters above sea level.² In effect, close to 100 million people around the world live less than one metre above sea level. If sea levels rise by just one metre, many large coastal cities such as Buenos Aires, Los Angeles, Rio de Janeiro, New York, Mumbai, Dhaka, Osaka, Tokyo, Lagos, Alexandria, Shanghai and Cairo will come under threat.

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 4 out of every 10 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.

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. 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 one billion people, or 32 per cent of the world's current urban population lives 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.

Economic challenges

Processes of globalisation 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

² Romero Lankao, P. (2008), "Cities and Climate Change: Review of Current Issues and Trends", draft report prepared for the Global Report on Human Settlements 2011, p.52.

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 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 how to respond to 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 up-market 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 which 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 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 multi-level 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 multi-lateral 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 re-scaling to the city-region level and introducing multi-level 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 many 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 which 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.

Urban challenges in different world regions

While the above are globally shared urban challenges, individual regions and countries have their own set of characteristics determining their patterns of urban growth and specific urban development challenges.

Developing countries

Looking at global trends more closely, about 90 per cent of the new demand resulting from rapid urbanization between now and 2030 will occur in 48 countries, with most of it being in East and South Asia. Within the developing regions of Sub-Saharan Africa, Asia, the Middle-east and North Africa, as well as Latin America and the Caribbean as a whole, the major urban challenges are, and will continue to be:

- how to address the urbanization of poverty and increasing inequality (especially in Latin America);
- how to deliver urban land at scale in order to meet increasing demand for housing (especially in Africa and Asia), linked to networks of public infrastructure and recognising the need to mitigate the impacts of and adapt to climate change;
- how to address the phenomenon of urban informality, in terms of land delivery and housing, transport and livelihoods;
- how to address rapid and chaotic peri-urbanization and the emerging phenomenon of extended urban corridors;
- how to meet the needs of the youth, who constitute the majority of the urban population; and
- how to address the shortage of skills in the human settlements or built environment sector.³

Transition countries

In contrast to the developing countries, the transition economies face different challenges in urban development. Previous public patterns of provision of housing and infrastructure have been disrupted by the political and economic changes following the collapse of the Soviet Union. These systems had provided a

³ Attahi, K. (2008), 'Revisiting urban planning in Sub-Saharan Francophone Africa', draft regional study prepared for the Global Report on Human Settlements 2009; Irazábal, C., C-Y Wong, A. Farol and J. Noah (2008), 'The status of urban planning and planning practice in Latin America and the Caribbean', draft regional study prepared for the Global Report on Human Settlements 2009; Okpala, D.O. (2008), 'Regional overview of the status of urban planning and planning practice in Anglophone (Sub-Saharan) African countries', draft regional study prepared for the Global Report on Human Settlements 2009; Yuen, B (2008), 'Revisiting urban planning in East Asia, South-east Asia and the Pacific', regional study prepared for the Global Report on Human Settlements 2009.

minimum quality of housing and infrastructure in most countries. The major challenges for the coming years in transition economies will be:

- how to address the problems resulting from slow (or even negative) population growth and ageing, including shrinking cities and deteriorating buildings and infrastructure;
- how to address problems of urban sprawl and preservation of inner-city heritage buildings arising from the growing demand for housing and facilities by an emerging wealthy class and from international investors;
- how to address severe environmental pollution from the socialist era industries and, more recently, from the rapid growth of vehicle ownership; and
- how to strengthen local authorities, to whom many responsibilities have been transferred but without the necessary financial resources.⁴

Developed countries

Cities in developed countries have occupied an increasingly important place in their respective national economies. In recent decades, their economies have become knowledge-based and shifted towards financial services, which have tended to be located in large cities. However, the recent sub-prime mortgage lending crisis and collapse of a number of major investment banks have had significant negative impacts on urban home ownership and employment. In the foreseeable future, the major urban challenges in developed countries will include:

- how to resolve the very recent mortgage and housing markets crisis;
- how to address increasing socio-spatial inequalities and urban fragmentation resulting from globalization and competitive city investment policies, as well as from the changing structure of labour markets that has left many urban residents unemployed and impoverished;
- how to reduce the large ecological footprints of cities caused by car-dependence, huge waste production and urban sprawl;
- how to mitigate the effects of and adapt to climate change; and
- how to resolve the problems associated with slow population growth, ageing and shrinking of cities.⁵

C. A New Role for Urban Planning in Sustainable Urban Development

Even though urban planning has changed relatively little in most countries since its emergence about one hundred years ago, a number of countries have adopted some innovative approaches in recent decades. These include:

- *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 as to 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 aiming to counter the effects of land speculation; and
- *Planning aimed at producing new spatial forms*, such as compact cities and new urbanism, both of

⁴ Hirt, S. and K. Stanilov (2008), ‘Revisiting urban planning in the transitional countries’, regional study prepared for the Global Report on Human Settlements 2009.

⁵ Garau, P. (2008), ‘Urban planning trends in the North’, draft regional study prepared for the Global Report on Human Settlements 2009.

which are a response to challenges of urban sprawl and sustainable urbanization.

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 way 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. Unfortunately, urban planning systems in many parts of the world are not equipped to deal with this and other urban challenges of the twenty-first century and, as such, need to be reformed.

Environmental policy directions: 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 waste water 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 underway all over the world. These are manifest in the following overlapping trends identified in the *Global Report on Human Settlements 2009*:

- 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.

The Global Report on Human Settlements 2009 makes three policy recommendations with respect to the role of urban planning in addressing the environmental dimension of sustainable urban development.

1. In order to integrate the green and brown agendas in cities, urban local authorities should implement a comprehensive set of green policies and strategies on 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; 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.

2. Many green innovations can, and should, be comprehensively integrated into statutory urban planning and development control systems, including planning and building standards and regulations. Introducing strategies for synergising 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.

3. 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.

Broader policy directions

If urban planning is to play a more effective role in sustainable urban development, a number of fundamental changes are necessary, in addition to the environmental aspects. Partly on the basis of the recommendations in the Global Report on Human Settlements 2009, and through the Global Campaign on Sustainable Urbanization, UN-Habitat will, in the next decade or so, be promoting a number of policy directions with respect to the role of urban planning in sustainable urban development. The main broader policy directions are described below.

1. 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 twenty-first century.

2. 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.

3. 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 size 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.

4. 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 must be intensified and much more should be done to improve enforcement as well as the legitimacy of urban planning as a whole.

Other specific policy directions

More specific policy directions will encompass institutional and regulatory frameworks, citizen participation in urban planning, urban informality, spatial structure of cities and provision of infrastructure, monitoring and evaluation of urban plans and urban planning education.

(a) Institutional and regulatory frameworks for planning

1. In the design and re-configuration of planning systems, careful attention should be given to identifying opportunities which can be built on, as well as pressures which could lead to the subversion and corruption of planning institutions. In particular, urban planning needs to be institutionally located in a way which 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.

2. 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.

3. To command legitimacy, regulatory systems must adhere to the principle of equality under the law, and must be broadly perceived as doing so. 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. It is also important to recognize that regulation of land and property development is sustained not just by formal law, but also by social and cultural norms.

4. 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.

(b) Participation, planning and politics

1. 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.

2. 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 organised civil society organisations 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 marginalised groups to have a voice in both representative politics and participatory planning processes must also be established.

(c) Urban planning and informality

1. 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: firstly, recognising the positive role played by urban informal development; secondly, considering revisions to policies, laws and regulations to facilitate informal sector operations; and, thirdly, strengthening the legitimacy and effectiveness of planning and regulatory systems on the basis of more realistic standards.

2. 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, regularisation 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 recognising informal entrepreneurs' property rights, allocating special purpose areas for informal activities and providing basic services.

(d) Planning, spatial structure of cities and provision of infrastructure

1. 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.

2. 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 means for protecting the urban poor from rising land costs and speculation, which are likely to result from new infrastructure provision.

3. 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.

(e) The monitoring and evaluation of urban plans

1. 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.

2. 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.

3. 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.

4. 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.

(f) Planning education

1. 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, and urban crime and violence. Capacity-building short courses for practicing planners and related professionals have an important role to play in this.

2. 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. This can be facilitated by 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.

3. 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. 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 found without a good understanding of the perspectives of disenfranchised and under-served populations.

D. Concluding Remarks

Globally, there is renewed interest in urban planning, within the context of sustainable urbanization. Over the next few years, among UN-Habitat's most important work will be raising global awareness of sustainable urbanization. This will include the role of urban planning in sustainable urbanization, as well as contributing to the reform of this very important tool. In doing so, UN-Habitat will work closely with relevant partners willing to be part of this process, including the Royal Town Planning Institute, the Global Planners Network and other professional associations. Of particular importance in this process will be the new World Urban Campaign, which focuses on Sustainable Urbanization. This was launched in late 2008 and will be implemented by governments, urban local authorities and non-governmental partners, with support from UN-Habitat.