



Economic and Social Commission for Asia and the Pacific

Committee on Environment and Development

Second session

Bangkok, 22-24 February 2012

Item 6 (d) of the provisional agenda

**Trends and progress in the field of environment
and development: emerging and persistent
issues in sustainable urban development**

**Emerging and persistent issues in sustainable urban
development**

Note by the secretariat

Summary

The scale and pace of urbanization in Asia and the Pacific is unprecedented. Cities and towns of the region are not only engines of economic growth, but also serve as centres of culture and creativity. However, in the drive to achieve economic development, countries of the region have externalized environmental and social costs. As a result, urban centres in the Asia-Pacific now face interconnected challenges regarding environmental sustainability, poverty and increasing vulnerability to climate change and other natural and man-made disasters and crises. A move towards a more inclusive and sustainable future would involve the region's urban settlements becoming more green, equitable, inclusive and more resilient. They would also have to close development gaps related to legal and fiscal frameworks, technologies, financing and human and institutional capacities through more integrated, participatory and adaptive approaches to urban governance and management. ESCAP can play a crucial role in assisting countries in achieving sustainable urban development by undertaking normative, analytical and technical cooperation activities and by serving as a platform for policy dialogue and the exchange of experiences and best practices.

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I. Introduction

1. Asia and the Pacific is a vast and diverse region with a total population of 4.1 billion as of 2008. It includes population giants and small island States. Overall, the annual population growth rate has declined drastically, with an estimated 1.0 per cent decrease in 2008 for the ESCAP region as a whole. Some countries in the region have reached high levels of economic development. Others are classified as least developed countries.

2. The diversity of the region makes it difficult to make generalized statements. Regional and subregional averages can hide wide disparities in terms of demographic, economic, social and environmental conditions. Nevertheless, many countries of the region have a number of common challenges that require urgent attention. Chief among these challenges are urbanization and urban development.

3. Urbanization, economic development, environmental degradation and poverty are closely interlinked. Cities and towns have large, dense and diverse populations, which result in economies of scale and agglomeration and lead to specialization of labour, increases in productivity, innovation and economic growth. Infrastructure and services are cheaper to provide, making urban areas attractive to people in search of higher income and better access to services. Goods produced in urban areas have a much greater demand elasticity compared to those produced in rural areas, making it difficult for rural areas to sustain population growth. Thus, rural-

urban migration is caused by both “pull” and “push” factors and may result in a transfer of poverty from rural areas, as an increase in the urban population is not necessarily accompanied by employment generation or the development of infrastructure. Economic development has also resulted in deteriorating environmental conditions in Asian cities because, to a great extent, the environmental costs of economic development and urban growth have been externalized.

II. An urbanizing region in an urban world

4. A majority of the world’s population has been living in urban areas since 2009, with similar results expected in Asia and the Pacific by 2025. At present, about 43 per cent of the region’s population lives in urban areas, with an annual urban population growth rate of 2.3 per cent. What is unique about urbanization in Asia and the Pacific is its scale and pace. By 2025, it is expected that the region’s population will be 2.3 billion, an increase of about 700 million people in 15 years.¹

5. A unique feature of urban growth in Asia and the Pacific is the growth of mega-cities (cities with a population of more than 10 million). Of the 21 mega-cities in the world, 11 are in Asia and the Pacific, and this includes 6 of the world’s 10 largest cities. These mega-cities are often surrounded by extended urban regions that transcend metropolitan administrative boundaries. Such mega-urban agglomerations encompass several urban and rural local governments and sometimes extend over provincial boundaries. The Bangkok Metropolitan Region, for example has an area of 7,761 square kilometres, with a population of over 10 million, spread over the Bangkok Metropolitan Administration and five surrounding provinces,² while the Jakarta-Bogor-Tangerang-Bekasi region (Jabotabek) has a total population of over 21 million and a land area of 6,418 square kilometres.³ It should be noted, however, that 60 per cent of the urban population of the region lives in cities of a million or less. Problems and challenges facing these cities and towns often attract less attention than those of mega-cities because mega-cities have much greater political capital.

III. Cities as engines of economic growth and social progress

6. In general, countries with advanced economies tend to be highly urbanized while least developed countries tend to have low levels of urbanization. While many countries in the region have a long history of urban settlements, the pace of urbanization increased with increased global trade and the opening up of Asian economies, particularly in the 1980s and 1990s. At around that time, many developed countries started opening their markets to global trade, increasing the demand for cheap products from Asia and the Pacific. Larger cities began to benefit from the opportunities provided by economic globalization. Coastal cities with ports particularly flourished. Asia began to be known as the workshop of the world. In the

¹ United Nations, *World Urbanization Prospects: 2009 Revision*, United Nations, New York, 2010.

² See <http://web.nso.go.th/en/survey/keystat/keystat08.pdf>.

³ See <http://www.unu.edu/unupress/unupbooks/uu11ee/uu11ee15.htm>.

beginning, emphasis was on low value added and low technology yet highly labour-intensive industries, such as textiles and garments, which benefited from low production costs, in particular low labour costs. Factories provided employment for semi-skilled workers, who often migrated from rural areas. As a result, urban areas grew rapidly.

7. As globalization proceeded, the competition for low value added production became more intense. As a result, cities in more economically advanced countries moved to attract manufacturers of higher value added products requiring higher labour skills, such as computers, automobiles and other consumer durables.

8. As production processes became more complex and supply chains became increasingly scattered, improvements to infrastructure became increasingly necessary so that the right parts could arrive at the right time and production could proceed unhampered. Demand for better infrastructure and services from investors, both local and foreign, led to a shift towards investing in urban infrastructure to make cities more efficient in terms of transport and telecommunication and so forth in the late 1980s and the 1990s. This trend started in East Asia, then moved to South-East Asia and is now moving to South Asia. However, the pace of investment usually lagged behind, creating congestion and other inefficiencies.

9. In many cities, manufacturing is no longer the dominant sector in the urban economy, nor is it the largest employer of urban labour. Automation has reduced the demand for labour. The service sector has started to dominate the economy in a growing number of countries. Once the workshops of the world, many cities in the Asia-Pacific region are now undergoing a shift towards service industries. Agriculture gave way to industry; industry is now giving way to the service sector.

10. The shifts from manufacturing to services, from low to high value-added activities and from semi- to highly skilled work have had consequences for urban employment. The service sector has been growing continuously since the 1990s: in 1991, it had a share of 25.8 per cent of total employment, but by 2007 its share had increased to 36.4 per cent.⁴

11. In most of the Asia-Pacific region, the informal economy is an integral part of the urban economy. Rather than competing with each other, the formal and informal sectors are, by and large, integrated through direct and indirect linkages. This coexistence has become a distinctive feature of the economy and the labour market in many Asia-Pacific cities.

12. The size of the informal sector, its contribution to the economy and its influence on urban growth is difficult to measure due to a lack of systematic data collection and analysis. What is clear is that the informal economy is vast and heterogeneous. The sector helps to provide employment for the millions of urban poor who are unable (or unwilling) to have jobs in the formal sector.

13. There are several causes for the existence of the informal sector, chief among them are rules and regulations that make it unnecessarily

⁴ Economic and Social Commission for Asia and the Pacific, *Statistical Yearbook for Asia and the Pacific 2009* (United Nations publication, Sales No. E.10.II.F.1).

difficult for small and microenterprises to function in a formal economy. It is wrong to assume that informal sector markets are not regulated; they often are: not by the State but by non-State actors sometimes linked to organized crime.

14. Some parts of the informal sector are characterized by low wages, dangerous and insecure working conditions and long working hours. Operating in the informal sector means that employers and workers are vulnerable to harassment by law enforcement agents that come to visit not so much to enforce the law but to extract informal payments. Income earned in the informal sector may not be sufficient to pull the urban poor out of poverty, but it enables them to survive in the city.

15. At the other end of the spectrum are the highly skilled workers of the financial and knowledge sectors of the service economy. They can work from any country, and “quality of life” is therefore a premium attraction for them. Companies must be able to rely on a stable political and economic environment, a solid banking system, an adequate regulatory system and strict law enforcement, quality medical facilities, schools, universities, research institutes, hotels, shopping centres, recreational and cultural facilities. Thus, quality of life and urban liveability become important parts of the competitiveness of cities.

16. Many cities in Asia are therefore investing in the development of museums, up-market shopping centres, theatres, theme parks and concert halls as well as the renovation of historic buildings. Such facilities attract not only skilled professionals but also domestic and international tourists. General tourism and the meetings, incentives, conventions and exhibitions (MICE) sector have become an important source of income for cities and towns in the Asia-Pacific region.

17. Many cities feel the need to modernize in order to compete with world cities. Such cities as Singapore and Bangkok risk losing their unique traditions, and begin to look more and more like any other city in the world. With constantly rising land prices, preserving cultural heritage is difficult. Many cities regret too late the losses incurred.

18. The structural shift in the urban economy from manufacturing to the service industry also has consequences for the physical development of urban areas. Large formal sector manufacturing enterprises are forced to locate in the urban periphery, often along transport infrastructure, creating new urban strips or corridors, as housing and commercial enterprises often develop around them.

19. Globalization has definitely benefited large sections of the urban population in Asia and the Pacific by providing employment and income. However, there was a consequence. In order to keep production costs low, there was a prevalence of lax labour and environmental laws, poor law enforcement relating to the discharge of emissions and the treatment of waste. The urban population did not share the impact equally. The poor continue to bear the brunt of the impact through their low incomes, unhealthy working conditions and poor living conditions.

IV. Cities and environmentally unsustainable development

20. Asian cities are facing three broad types of environmental risks: poverty; industrial development; and prosperity and mass consumption. An analytical framework has been developed to describe the environmental evolution of cities.⁵ It distinguishes four stages of urban environmental development: (a) the poverty stage; (b) the industrial development stage; (c) the mass consumption stage; and (d) the sustainable city stage.

21. The driving forces behind the poverty stage are high levels of rural-urban migration, low per capita income, the inability of local government to manage its urban resources, and insufficient investment in urban infrastructure. As a result, large sections of the urban population live in slums and squatter settlements without access to an adequate water supply or sanitation. Motorized and non-motorized modes of transport compete with each other on congested urban roads, often in the presence of a dysfunctional public transport system.

22. Due to poor environmental conditions, residents are vulnerable to infectious diseases. The impact of this type of problem is usually local and is often limited to the city.

23. Environmental problems associated with the early stages of industrialization and economic growth include air pollution from industries and transport (sulphurous oxides, particulate matter) and water pollution from heavy metals and industrial solid wastes. The driving forces behind these problems are rapid industrialization, prioritization of economic growth over environmental management, the application of outmoded or obsolete technologies, a lack of control over environmental emissions and poor enforcement. The spatial range of impact of this category of risks is local as well as regional, as pollution spreads to soil, water and air beyond the city.

24. Urban environmental issues associated with prosperous lifestyles based on mass production, mass consumption and mass disposal relate to rapid and unsustainable consumption of natural resources, particularly energy, water and food, as well as large-scale pollution and waste generation. Due to the lack of an extensive mass transit system, individual ownership of automobiles increases, driving up energy consumption. This is compounded by extensive use of air conditioning or heating in commercial and residential buildings. The carbon footprint increases dramatically. The impact of this category of risks is not just local, but regional and global as well.

25. As noted in the study of the urban environment in East Asia,⁵ some East-Asian cities underwent these stages sequentially. For most Asian cities, the cycles of these stages have shortened to such an extent that, for all practical purposes, they are occurring simultaneously, often affecting different sections of the population and different parts of the urban

⁵ Xuemei Bai and Hidefumi Imura, "A comparative study of urban environment in East Asia: Stage model of urban environmental evolution", in *International Review for Environmental Strategies*, vol. 1, No. 1, 2000 (Hayama, Japan: Institute for Global Environmental Strategies), pp. 135-158. Available online at <http://enviroscope.iges.or.jp/modules/envirolib/view.php?docid=405>.

agglomeration. Cities and urban areas are rarely homogeneous. Different sections of the urban population face different sets of environmental problems. Many urban residents live in extreme poverty despite rapid economic growth and are excluded from the benefits of urban development. Elsewhere in the city, the rich and the highly skilled middle class, demanding better lifestyles, indulge in mass consumption and pollution, while others move into subdivisions or work and live in buildings that are eco-efficient and sustainable. At the same time, industrial production continues but may be moved from the city core to the periphery, along transport corridors, in areas where rural, residential land is interspersed with industrial land and where environmental regulations are still lax. Cities in Asia and the Pacific generate about 300 million tons of garbage and account for about 67 per cent of all energy and 71 per cent of all greenhouse gases. The carbon footprint of Beijing, according to one estimate, is slightly lower than that of London.⁶

V. Urban poverty

26. Despite rapid economic growth and some efforts to foster social development, rural and urban poverty remains a serious problem in the region. Some countries have made major advances in reducing poverty, but others are lagging behind. In China, poverty declined from 60.2 per cent in 1990 to 15.9 per cent in 2005, brought about by rapid growth of the economy. Pakistan also reduced its poverty levels from 64.7 per cent in 1991 to 22.6 per cent in 2005. Mongolia, on the other hand, saw poverty increase from 18.8 per cent in 1995 to 22.4 per cent in 2005.⁷ However, recent data shows that as many as 44 million people may have been driven into poverty⁸ due to the recent food, fuel and financial crises, which seem to be repeating.

27. On average, urban residents have better living conditions than the rural population, because of the wider availability and better quality of basic services from the public and private sectors. However, aggregate statistics do not reflect the realities of urban poverty. Where urban health indicators can be disaggregated by different parts of the city or town, data shows that large numbers of people in Asia-Pacific cities, in particular those living and working in the informal sector, are in poor health due to income poverty, a poor diet, cramped and unhygienic living conditions, unsafe working conditions, polluted air, the use of contaminated water and inadequate sanitation facilities.

28. In this respect, it is important to understand that poverty is not only defined as a lack of income. Poverty is also a lack of access to basic services, ranging from water supply and sanitation to education and health care, and a lack of influence in decision-making that affects lives and livelihoods. These aspects of poverty are also closely interrelated: inadequate water supply and sanitation lead to poor educational results and

⁶ UN-HABITAT, *Global Report on Human Settlements: Cities and Climate Change*, Earthscan, London, 2011; Table 3.5, page 37. Available on line at www.unhabitat.org/downloads/docs/GRHS_2011_full.pdf.

⁷ Economic and Social Commission for Asia and the Pacific, *Statistical Yearbook for Asia and the Pacific 2009* (United Nations publication, Sales No. E.10.II.F.1).

⁸ See <http://go.worldbank.org/5BKI470BC0>.

poor health, which in turn affect productivity and the ability to earn an adequate income. Often, exclusion is linked to the status of the person as a rural-urban migrant, a resident of an informal settlement, a member of an ethnic group.

29. A very visible aspect of urban poverty in cities in Asia and the Pacific is the proliferation of slums and squatter settlements. Land in urban areas is under pressure as a result of economic growth and population increases. High demand for land by private companies for offices or production centres raises the market prices of land, and while employment of the poor is linked to places with intensive economic activity, land in such locations, even if there are provisions for residential use, is beyond their reach.

30. Few countries in Asia and the Pacific have set aside land for housing the poor. In most countries, land is viewed as a commodity and the right to use it can be bought and sold on the free market. This leaves the poor only two options: the expensive and time-consuming option of commuting from a faraway place where land is affordable, or the unauthorized occupation of vacant land and the development of slums. Housing of the poor often also develops in places unfit for habitation due to environmental conditions. About 30 to 35 per cent of the region's urban population lives in slums and squatter settlements.⁹

31. Access to a safe and reliable water supply and sanitation is critical for health, social status, dignity and basic security, in particular for women and children. According to official statistics, 96.4 per cent of the urban population in the region had access to basic levels of safe drinking water supply in 2008,¹⁰ but those statistics do not take the quality or quantity of the water supplied into account. For the poor, access is often through public standpipes where water is available for only a few hours per day, often resulting in long waiting times and the need to store water, which may affect its quality. Moreover, an intermittent supply of water can lead to contamination of the water in the pipes due to a decline in pressure. Only 66.1 per cent of the urban population in the Asia-Pacific region has access to safe sanitation, while 8.0 per cent of urban residents in the region must resort to open defecation, which poses health hazards in addition to being an affront to human dignity.¹¹

32. As land and housing near places of employment tend to be costly, affordable transport for the poor is another important urban service. Most current transport systems in Asia-Pacific cities do not take into account the specific needs of the poor. As many transport services in the region have been privatized, transport fees are meant to recover costs rather than ensure that low-income people can move from one place to another. As a result, high transport costs make it untenable for low-income households to live on the urban fringe, where land and house prices are lower.

⁹ Ibid.

¹⁰ Joint Monitoring Programme for Water Supply and Sanitation (JMP), *Progress on Sanitation and Drinking Water* (Geneva and New York: World Health Organization and United Nations Children's Fund, 2010). Available online at <http://www.unicef.org/media/files/JMP-2010Final.pdf>.

¹¹ Ibid.

33. Access to modern and sustainable energy services is critical for the poor to participate in the urban economy and to improve living standards. An inadequate energy supply may affect the ability of children to study at night. It may also affect the ability of the urban poor to undertake income-generating activities at home or at workshops in informal settlements. Families without access to electricity or gas may turn to coal or charcoal, which will have a negative environmental impact both within and outside the home.

34. Along with rapid economic growth, inequality is rising in Asia and the Pacific. Urban development is largely driven by local, national and international companies in and around particular urban centres. Rising inequality is attributed to policies that focus on growth by promoting market liberalization, economic and political stability, foreign direct investment and the development of economic infrastructure. This results in cities and towns with highly skilled workers employed in the knowledge-based economy and low-income workers employed in the large informal-sector economy. The latter earn enough to live in the city as long as they can find housing in informal settlements with inadequate infrastructure and can buy food, water and transport from the informal sector. What is lacking are mechanisms that enable the poor to benefit from economic growth and make the process of economic growth in the region less exclusionary.

VI. Cities and climate change

35. A major emerging threat confronting urban settlements in the Asia-Pacific region is the impact of climate change. The size, location and elevation of Asia-Pacific cities make them especially vulnerable to the impacts of climate change in the form of frequent extreme weather events, such as droughts, floods, cyclones and heat waves.

36. Although climate change affects different places in different ways, urban areas will be especially vulnerable because of the high concentration of people, the high thermal mass of buildings and the relatively low vegetation cover. Climate change will reduce the supply of clean water and the area of productive land. Furthermore, it will expose cities to an increased risk of storm damage and flooding.

37. Most of the cities in the tropical and subtropical climate zones are low-lying and prone to severe flooding and storm damage. Climate change is expected to bring about a significant rise in sea level. An estimated 54 per cent of Asia's urban population lives in low-lying coastal zones.¹² Particularly vulnerable are cities located in deltas and on or near low coastal plains. Much of their area would be inundated by even a small rise in sea level. The relocation of eco-refugees will be a significant challenge, requiring the building of new urban settlements that will further reduce the land available for food production. In some Pacific island countries, entire populations, both rural and urban, will need to be relocated.

38. There are many other factors that impact rural areas and will affect urban populations. The loss of agricultural land due to climate-related

¹² UN-HABITAT, *State of the World's Cities, 2008/2009 Harmonious Cities*, UN-HABITAT, Nairobi, 2008.

impacts, such as floods and droughts will also affect food security in cities. Predictions suggest a significant impact on food security in India and China as desertification increases. As is often the case, the impact of environmental degradation and climate change will affect the urban and rural poor disproportionately. Actions to adapt to climate change and actions to reduce poverty cannot be separated.

VII. Towards inclusive and sustainable cities

39. Cities in Asia and the Pacific need to simultaneously sustain economic development, ensure environmental sustainability, reduce poverty and disparities and prepare themselves against climate change and other natural and man-made disasters and crises. This requires action on three interconnected fronts:

- (a) Increasing eco-efficiency and the greening of urban development;
- (b) Increasing inclusiveness and equity;
- (c) Increasing resilience to climate change and other crises.

40. Addressing these issues effectively necessitates a “systems” approach, recognizing the interconnections and synergies between the various urban subsystems and the influences that they have on each other. Through such an approach, several development gaps would need to be bridged. These include: (a) gaps related to the legal and fiscal frameworks; (b) financing of urban development; (c) technologies and innovations; and (d) institutional and human resources capacities.

41. As stated earlier the urban economy comprises a spectrum from the informal to the formal. Strategies and approaches would need to be developed to address the whole spectrum, not just the formal sector of the economy. However, such strategies would need to take into consideration the fact that, in many instances, formalizing the informal sector could prove counterproductive.

VIII. Legal and fiscal frameworks

42. Legal and regulatory as well as fiscal measures can be introduced to internalize environmental and social costs. Legal measures could be introduced to change market incentives and signals and bring about a change in the behaviour of consumers and producers. Examples include: (a) the move towards cleaner fuels for public vehicles in Delhi, India; (b) passenger occupancy requirements for individual automobiles in downtown Jakarta; (c) a ban on the use of plastic bags in Dhaka; (d) State regulation of motorcycle taxis in Bangkok; and (e) the setting of a minimum wage in urban areas.

43. Fiscal measures need to be introduced to charge the right amount for providing natural resources, particularly water and energy. This can be done through measures such as progressive pricing, which actively subsidizes the poor and penalizes overuse and wastage. For example, water at a level necessary to meet basic needs could be provided for free, while more intensive use or wastage could incur progressively higher charges. Similar policies could be enacted regarding electricity. Congestion pricing for

automobiles entering downtown areas is another example of fiscal measures taken to internalize environmental costs. Such policies have been introduced in many countries already and need to be strengthened and more effectively enforced.

44. Penalizing the overuse and wastage of natural resources, particularly water and energy, would encourage businesses and households to conserve resources and adopt eco-efficiency measures. Actively making urban infrastructure, particularly water, transport and buildings, more eco-efficient would also reduce the carbon footprint of the city without unnecessarily affecting the poor.

45. Fiscal measures can also be used to directly benefit the poor and the marginalized by, for example, creating social protection systems, such as pension funds and health insurance for the self employed in the informal or micro-enterprise sector or by promoting community-based savings and credit schemes that can be used to channel government subsidies and funds to the organized poor.

46. Regulatory and fiscal measures would probably need to be supplemented by increased social marketing and education campaigns, particularly in partnership with civil society and private businesses to promote a more sustainable lifestyle. Examples of such campaigns abound in the region and lessons can be learned from the more successful ones. Targeting children and, through them, their parents could be an effective strategy. In this connection, the concept of “green schools” could prove to be an effective strategy.

47. There would be short-term costs to internalizing environmental costs. However, long-term benefits would outweigh the short-term costs. Governments need to enable markets to take the long-term benefits into account with the right regulatory and fiscal incentives. Moreover, such measures may make goods and services from a country less competitive. Governments may need to adopt principles of tax neutrality to find the right balance in maintaining short-term economic competitiveness vis-à-vis long-term sustainability.

48. Legislative and fiscal measures could also be used to increase inclusiveness. The Government of the Philippines, for example, has made participation of community groups and non-governmental organizations in local government mandatory. Similarly, the Government of India requires that 33 per cent of the electorate in local elections elect only women candidates. This has led to a great increase in the number of women in decision-making positions at the local level. In many countries, governments are starting to recognize the rights of the urban poor in slums and squatter settlements and are providing them with identification cards and municipal services.

49. An important component of regulatory and fiscal reforms is the legislation and regulations that govern urban planning. If utilized effectively, urban planning provides unique opportunities to adopt “systems approaches” to addressing urban issues by integrating physical, socio-economic and environmental planning and identifying synergies and co-benefits. Cities in Asia often have dense cores with extended suburban areas that often grow along transport corridors. As urban development and urban

land uses occur in hitherto rural areas that have weaker planning, building and environmental regulations and enforcement capacities, new urban development is often unplanned and haphazard, with closely intermingled industrial, residential, commercial and agricultural land uses and without adequate infrastructure and services. Moreover, as development often occurs along transport corridors, large tracts of land that are farther away from the transport corridor are not developed. This results in “ribbon” or “strip” development, which is environmentally unsustainable and resource intensive. As urban development often extends over several provincial and jurisdictional boundaries, these urban areas pose new economic, social and environmental challenges and require a rethinking of urban planning, management and governance approaches and institutions. Strengthening and extending planning laws to cover suburban areas is crucial for sustainable urban development. China, Pakistan and Viet Nam are examples of countries in which there are local governments that have jurisdiction over both urban and suburban areas and can therefore enforce urban planning laws and regulations in those areas.

50. A major policy reform in this context is that of urban land use. The commoditization of urban land must be balanced by the recognition that the land is a public and environmental good. Planning and land-use restrictions need to be imposed in order to increase the social and environmental functions of land, such as provision of housing for the urban poor and the development of urban green spaces, parks and mass-transit corridors.

IX. Financing sustainable urban development

51. How urban development and management is financed is crucial to the inclusiveness and sustainability of cities. Key challenges that need to be addressed are reforming existing municipal finance systems to make them more effective; accessing new external sources of finance; and building stronger linkages between the formal urban development finance system and the financing systems of the urban poor.

52. In many countries of the region, while functions and executive authority have devolved to a local level, fiscal authority often remains with higher levels of government, leaving local governments unable to spend sizable amounts on urban development without authorization from higher levels of government. Even in countries where local governments have such authority, many of them lack the capacity to make full use of their powers. Reforming the municipal finance sector and building its capacities is therefore an important development strategy.

53. Making cities inclusive and sustainable will require an infusion of funds to finance investment in urban infrastructure and services, such as mass transit systems and water and sanitation systems. Although internalizing environmental costs will increase the funds available for investment in urban infrastructure, additional funds would still be required, at least in the short term. New sources of finance, such as the \$5 trillion in Asian foreign currency reserves, sovereign funds and remittances from expatriate workers, could be tapped to provide funding for sustainable urban development. A significant issue is the linkages between the formal financial system and the financial system of the poor. There are several good examples of attempts to develop these linkages, such as the Baan Mangkong Programme in Thailand or the financing facilities provided by

the National Housing Bank of India for community and microfinance institutions.

X. Green technologies and innovations

54. While cities are major contributors to unsustainable development in countries of the region, solutions to urban problems will also come from cities because they are centres of knowledge and technological and process innovations. The region is full of innovative technologies, approaches and practices that show the way towards an inclusive and sustainable future. The challenge is to systematically identify, document, analyse, adapt and upscale such innovative solutions. This would require the creation of a fiscal, regulatory and institutional environment that allows individuals, businesses, communities and civil society organizations and even government agencies to find innovative solutions. It would also require research and training institutes to identify and analyse the reasons for their success and to assist governments in upscaling such technologies and innovations.

55. Many countries are developing eco-cities that try to minimize resource consumption and waste generation. These are indeed welcome developments, as such experiments often develop new technologies and innovative processes and approaches in creating new and green jobs.

56. The introduction of new technologies, production processes or innovative practices often means that those with access to information, knowledge and capital benefit while those without are left behind. Often, new technologies are much more expensive because the development costs have to be factored in. In both instances, the poor often lose out. Therefore, policies that minimize the impact on the poor would have to be developed and implemented.

57. However, new technologies do not always have to be complex and expensive. Research into appropriate technologies which can benefit the poor should also be encouraged, particularly in public universities and institutions.

58. As a regional commission that is rapidly becoming a hub for knowledge and policy advice, ESCAP can assist member countries in identifying, documenting, analysing and replicating innovative practices and policies. It can also provide technical advice and support to assist countries in upscaling such practices.

XI. Human resources and institutional capacities

59. A significant constraint to achieving inclusive and sustainable development is the lack of human resources and institutional capacities, not only among governments but also among other major stakeholders, such as civil society organizations, research and training institutions and the private sector. Within the governmental sector, local governments, in most instances, have the weakest human resources and institutional capacities as they have the weakest financial and executive powers.

60. Human resources capacity development would require programmes and actions on three fronts: attitudinal changes, knowledge and skills. A considerable amount of literature has been written on building capacities in both government and in civil society, and several programmes have been launched both inside and outside the United Nations systems to build capacities, but results have been mixed. Lessons learned show that a sustained effort over many years is needed, coupled with the building of institutional capacities that provide government officials with adequate compensation and enable them to put their newly acquired skills and knowledge into practice.

61. Governmental organizations would need to become more oriented towards learning from their own experiences and those of others. Another important issue is the creation of institutional space where different levels of government, civil society organizations, private sector organizations and research and training institutions can interact with each other, exchange views, discuss potential solutions and develop consensus on the best method for moving forward. This is particularly true when one takes into consideration the fact that there is a major disconnect between the short-term political cycles and the longer-term time frames required to address the challenges facing cities. Approaches such as strategic visioning of a common urban future, scenario-building exercises and urban forums can go a long way towards developing strategic future visions that transcend short-term political considerations.

62. The roles of public administration academies and local government training institutes are crucial. Networks such as the Regional Network of Local Government Training and Research Institutes (LOGOTRI) could have a major role to play in developing capacities. Similarly, national and regional networks of local governments that promote south-south/north-south exchanges, such as United Cities and Local Governments and the Regional Network of Local Authorities for the Management of Human Settlements (CityNet), are important vehicles for the exchange of experience and knowledge. Similar learning networks in the civil society sector have done much to develop capacities among civil society organizations and therefore need to be further strengthened.

XII. Improving urban governance

63. As discussed above, the challenges and strategies facing cities and towns of Asia and the Pacific are closely interrelated. Eco-efficiency and internalizing ecological costs will directly contribute to climate change mitigation and adaptation. Investing in slum upgrading and introducing community-based savings and credit systems in poor communities would not only increase their resilience to climate change but also reduce their poverty and enable them to benefit from economic growth.

64. Addressing these interconnected challenges requires greater coordination and integration among government institutions that look at cities and human settlements systemically. To ensure that the poor and other marginalized groups are not excluded, more inclusive and participatory governance systems are necessary. Finally, in an uncertain future, more adaptive approaches to managing cities are needed so that people can quickly learn from previous experiences and the experiences of others and adapt those lessons to current circumstances.

A. Integrated and coordinated approaches

65. Government institutions are usually organized on a sectoral basis. They often do not coordinate with each other or the local government responsible for managing the urban area. Moreover, urban areas often extend along transport corridors, often crossing several local government boundaries. This can mean that several national, provincial and local agencies involved in managing an urban agglomeration are often at cross-purposes with each other. This makes the functioning of government opaque and less adaptive as there is little systemic learning and the response to changing situations is often too slow.

66. Moreover, officials of national and provincial line departments are often not answerable to the local populations they serve but to their superiors at the national level. This further erodes incentives to collaborate and coordinate with each other and to be accountable to either the local government or to the people of that area. Achieving sustainable development of urban areas would require strong local governments that can coordinate various sectoral departments of government and can identify and develop synergies from collaborative actions. This would require strengthening local governments by devolving executive and financial powers and building their capacities to execute their current responsibilities as well as their added responsibilities. It also means strengthening civil society to ensure that local governments are accountable. Without these three elements, decentralization is unlikely to contribute to inclusive and sustainable urban development.

67. Decentralization needs to be done in accordance with the principle of subsidiarity, which means that functions and activities should be done at the level where they can be most effective. Thus, functions that can be done most effectively at the local level—such as community development and street lighting—should not be done at a higher level. Conversely, functions that can be performed most effectively at a higher level, such as managing common services or infrastructure, should not be done at the local level. A good example of this is the Metropolitan Manila Development Authority, which handles functions such as urban transport, solid waste disposal — things that local governments in Metro Manila are ill suited to do individually.

68. Decentralization and strengthening of local governments has been advocated at least since the early 1990s, and many governments have taken steps in this direction. India and the Philippines have passed constitutional amendments recognizing this third tier of government. However, many of these efforts have been half-hearted. Where functions have been devolved, fiscal powers have been retained by the central Government as a means of controlling local government. In addition, many countries have not invested in capacity development for local governments. Moreover, where local government functions and fiscal powers have been devolved and some attempt at capacity development has been made, the benefits of decentralization have been captured by the local elite, with some local governments virtually becoming “family fiefdoms” due to a lack of transparency and the absence of a vibrant civil society that can keep government accountable.

B. Participatory governance

69. Strengthening civil society to hold government accountable requires access to actionable information. This is usually not available. If it is available, it is in forms that are not easily understood by the general public or even by policymakers. Civil society organizations such as the Urban Resource Centre, Bombay First and the Bangkok Forum perform a very valuable function by collecting and analysing information and then mobilizing action around that information. New social networks, such as Facebook, Twitter and Flickr, can facilitate civic action. In the aftermath of the recent riots in Bangkok, over 10,000 people turned up to help the local government clean up the affected area. The whole programme was organized through Facebook and Twitter.¹³ However, these new social media outlets have their downside as well. Electronic media and smart phones are said to have played a part in organizing and fuelling the rioting.¹⁴

70. Activism on the part of civil society together with judicial activism have forced many local governments to clean up or increase the eco-efficiency of their infrastructure. One example of such actions is the conversion of public transport vehicles to natural gas in New Delhi.

71. Lessons from successful campaigns and partnerships have shown that the single most important element was the existence of institutional space for the interaction, both adversarial and collaborative, between civil society, the private sector and the government. The absence of such space often leads to violence. Another crucial lesson is the empowerment of the poor through collective mechanisms and information, so that they are able to interact on more equal footing. For governance mechanisms and institutions to be inclusive and participatory, the weaker or excluded elements of society, such as the urban poor, need to be empowered. In that regard, many governmental and non-governmental organizations run programmes that seek to build collective mechanisms among the poor, such as community-based savings and credit schemes or cooperatives, and those programmes go a long way towards equalizing power relationships in society and making governance more inclusive.

C. Adaptive approaches

72. With globalization and climate change, the region is entering an unpredictable era. It is likely that cities will face natural disasters, crop failures, health epidemics and the impact of the global fuel and financial crises. However, the extent and timing of such events would be unpredictable. Governments would need to develop approaches that combine contingency planning with quick-response systems. The recent earthquake, tsunami and nuclear disaster in Japan have shown that doing this would not be easy. Increased emphasis would need to be placed on responsive approaches to governance, and there would need to be strategic units within governments that could mobilize and coordinate action not only within the government but also with other major stakeholders.

¹³ *Bangkok Post* Editorial, 20 June 2010.

¹⁴ <http://www.time.com/time/world/article/0,8599,2087337,00.html>

73. In this connection, it is crucial to have access to information and communications technologies capable of providing real-time information and enabling that information to be shared among different government agencies and other stakeholders. With the costs of such technologies falling constantly, instituting urban information systems is a cost-effective strategy for making governments more integrated, coordinated and responsive. However, issues regarding, for example, different standards and base maps would need to be resolved first.

74. Moreover, government institutions would need to become learning organizations capable of learning from their own experiences and the experiences of others. In this connection, the role of national and regional associations of local governments, local government training and research institutions, and local and national urban forums is important.

XIII. Conclusions

75. The challenges associated with the sheer magnitude and pace of urbanization, unsustainable and exclusionary economic and social development of urban areas, and the impending impact of climate change on Asian and Pacific countries are, indeed, daunting. However, there is no need to be overly pessimistic or apocalyptic about the future of cities in Asia and the Pacific.

76. Policy directions for achieving inclusive and sustainable urban development are becoming more apparent: bridging development gaps related to legal and fiscal frameworks; financing of urban development; urban planning and design; green technology and innovation; and human resource and institutional capacity development. In addition, cities would have to adopt integrated, coordinated, adaptive and participatory approaches to urban planning, development, management and governance.

77. As moving in those directions would require fundamental changes to the current development paradigm, strategies and approaches would need to be incremental and build upon what already exists, taking a “co-benefit” “no or low regret” approach. In other words, adopting policies that make sense from a developmental perspective, such as increasing eco-efficiency or tackling the issue of urban waste. A co-benefit of such strategies would be reduced carbon footprints. Similarly, adopting policies such as encouraging the public and private sectors to obtain insurance would increase their resilience to natural disasters and therefore would not be likely to entail regret.

78. In order for these policies to be implemented properly, governance at the local level would need to be strengthened in accordance with the principle of subsidiarity and by enhancing the ability of local governments to adopt systemic approaches and increasingly inclusive and adaptive approaches to governance. Investments would have to be made in strengthening local government capacities and in devolving executive and fiscal powers to the local level. The role of civil society in creating the political will necessary to bring about the changes needed and in holding government accountable would be crucial in this process.

79. In that regard, ESCAP could assist members and associate members in achieving inclusive and sustainable urban development in a number of ways:

(a) Undertaking normative and analytical research on emerging and cutting-edge issues and innovative practices through, among other things, the preparation of regional and subregional reports on the state of cities and policy briefs on specific emerging and persistent urban development issues, such as financing, mobility, planning, urban housing and land management, as well as bridging the urban divide;

(b) Catalysing high-level, high-visibility regional and subregional policy dialogues, urban forums or specially convened ministerial conferences;

(c) Identifying, analysing, documenting and disseminating information on policies, processes and technological innovations and undertaking action-oriented research and analysis to develop new approaches and models that can be replicated;

(d) Building the capacity of countries to adapt, replicate and upscale innovative practices;

(e) Promoting South-South and North-South cooperation through networking and the exchange of knowledge and experience.

80. Members and associate members may wish to discuss the issues outlined above and share their experiences and innovative practices in this regard.

81. The Committee may wish to provide the secretariat with guidance in its approach and programmes to promote inclusive and sustainable urban development in Asia and the Pacific.
