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Note verbale dated 25 June 2008 from the Permanent Mission of Bahrain to the United Nations addressed to the President of the Economic and Social Council

The Permanent Mission of the Kingdom of Bahrain to the United Nations presents its compliments to the President of the Economic and Social Council and has the honour to request that the report of the Western Asia regional preparatory meeting on sustainable urbanization for the annual ministerial review of the Economic and Social Council, held in Manama on 1 and 2 June 2008 (see annex), be circulated as a document of the Council for consideration at its substantive session of 2008, under item 2 (c) of the provisional agenda.

At the regional preparatory meeting, the subject of sustainable urbanization was examined from the perspective of the countries of Western Asia as a contribution to the theme of the 2008 annual ministerial review, "Implementing the internationally agreed goals and commitments in regard to sustainable development". The Government of the Kingdom of Bahrain believes that the report will constitute a valuable contribution to the discussions on the theme at the annual ministerial review of 2008.

* E/2008/100.



Annex to the note verbale dated 25 June 2008 from the Permanent Mission of Bahrain to the United Nations addressed to the President of the Economic and Social Council

Report of the Western Asia regional preparatory meeting on sustainable urbanization for the annual ministerial review of the Economic and Social Council

Summary

As part of the annual ministerial review process of the Economic and Social Council, a Western Asia regional preparatory meeting on the theme “Sustainable Urbanization” was held in Manama on 1 and 2 June 2008, hosted by the Government of the Kingdom of Bahrain. Organized as a multi-stakeholder event, with the participation of high-level representatives in an expert capacity, the consultations consisted of plenary meetings and panel discussions, which were attended by nearly 90 delegates.

The participants examined emerging trends, challenges and potential solutions in the areas of urban infrastructure and access to services, green architecture for sustainable urbanization, and financing (including through Islamic banking) and technology transfer for sustainable development. In the course of the discussion, population growth, social integration, youth unemployment, the global food crisis, climate change, unsustainable patterns of consumption and production, and water scarcity were highlighted as major regional challenges in the context of sustainable urbanization.

Key policy messages

The following major messages emerged from the discussions:

(a) To address the challenges of urbanization, governments must develop country-specific approaches that reflect their development priorities.

(b) Planning for sustainable urbanization requires an integrated policy approach that involves all relevant stakeholders, including national governments, city and municipal governments, community representatives, NGOs and members of the private sector.

(c) To improve decision-making and management, capacity-building is essential for local authorities and municipal planners, as well as community members. Accurate statistics must also be collected and made available to policy-makers.

(d) Governments must leverage new investment in urban infrastructure to cope with population growth and increasing urbanization. Municipalities require more and better instruments to raise capital.

(e) Encourage Islamic banks and other commercial banks to increase their role in financing projects that will contribute to sustainable development, including through providing “green credit” and venture capital to promote sustainable urbanization. Islamic banks and other commercial banks are encouraged as well to develop financial products of relevance to low-income customers, including government-backed mortgages and micro-loans.

(f) Governments must ensure that drinking water is available to slums and meets quality standards.

(g) Immediate action must be taken by all stakeholders in the region to address unsustainable patterns of consumption of water, including implementing conservation practices in agriculture and cutting losses in water delivered by utilities and in industrial use.

(h) Governments, in partnership with the private sector, should support research and development to utilize appropriate and affordable technologies to mitigate and adapt to climate change, as well as technical programmes to build capacity in cleaner technologies and environmentally sound practices.

(i) Architects, developers and other actors in the construction industry, with support from governments, should scale up and scale out the quantity and types of green building solutions, incorporating traditional knowledge and materials as well as new technologies, especially to ensure sustainable housing for the poor. They should also pursue socially responsible policies and practices, particularly with labour employed for construction and maintenance of buildings.

(j) Governments should provide an enabling environment to encourage the spread of green architecture. However, this should be promoted as part of overall planning for sustainable urbanization.

(k) The ESCWA region should adopt a common green rating tool under the neutral guidance of a Green Building Council.

I. Introduction

At the 2005 World Summit, Heads of State and Government mandated the Economic and Social Council to hold annual ministerial-level substantive reviews as part of its high-level segment, in order to review progress made in the implementation of the outcomes of United Nations conferences and summits and to assess its impact on the achievement of the goals and targets of those conferences and summits. In 2008, the second annual ministerial review addresses the theme “Implementing the internationally agreed goals and commitments in regard to sustainable development”.

On 1 and 2 June 2008, the Government of the Kingdom of Bahrain, under the patronage of His Highness Shaikh Khalifa Bin Salman Al-Khalifa, the Prime Minister, and with the support of the United Nations Department for Economic and Social Affairs, the UN-HABITAT and ESCWA, hosted a Western Asia regional preparatory meeting on the theme “Sustainable Urbanization” to provide input to the 2008 review.¹

The meeting provided an opportunity for Western Asian countries to contribute to the review, including by sharing best practices and lessons learned related to sustainable urbanization that could aid in advancing and expanding activities to achieve the internationally agreed development goals (see enclosure).

The meeting brought together nearly 90 delegates, including representatives of governments from Western Asia and other regions, and experts from of the United Nations system and other international organizations, non-governmental organizations (NGOs), academia and the private sector. The delegates examined emerging trends, challenges and potential solutions in the areas of urban infrastructure and access to services, green architecture for sustainable urbanization, and financing (including through Islamic banking) and technology transfer for sustainable development.

II. Proceedings of the regional preparatory meeting

A. Opening session and keynote addresses

The meeting was opened by H.E. Sheikh Khalid bin Ahmed bin Mohamed al Khalifa, Foreign Minister, Kingdom of Bahrain. In his welcoming remarks, the Foreign Minister highlighted the importance of the issues that the meeting was addressing. Population growth, urbanization, infrastructure and services, the environment, and science and technology all have to be addressed to ensure a

¹ Please see <http://www.un.org/ecosoc/newfunct/amrregional2008.shtml> for the background note, programme, statements, presentations and list of participants.

healthy, sustainable urban environment that promotes well-being, dignity and development for all human beings in Western Asia and other regions. He expressed confidence that the meeting will allow the diverse and knowledgeable participants to engage in a valuable exchange of experience and expertise, as well as encourage bilateral cooperation.

H.E. Sheikh Mohammed bin Mubarak al Khalifa, Deputy Prime Minister, Kingdom of Bahrain, delivered a keynote address. He highlighted the challenges governments are presently facing in the economic, social and environmental fields, among the most urgent being the food crisis, population growth and urbanization. Cities can have a vital role in quickening the pace of economic and social growth if appropriate plans are in place to resolve housing and basic utility problems, as well as the increasing challenges and consequences of urban growth. Addressing such challenges requires the participation of all stakeholders and the support of the international community.

The Deputy Prime Minister noted that the region is making significant progress in urbanization and development, yet it suffers from scarcity of water resources. Addressing this challenge requires technology transfer, new research and development (R&D), and international cooperation. Financing of technology transfer and R&D is necessary, and the role of Islamic banks is vital.

He welcomed this opportunity to share knowledge, exchange experiences, assess implementation of urban policies and strategies and other development goals, and discuss solutions. Such meetings serve to enhance dialogue and exchange of regional and international experiences on means and mechanisms to implement the MDGs, and create better understanding of sustainable urbanization choices and directions. He also expressed confidence that the discussion would contribute to the ECOSOC Annual Ministerial Review.

Following the keynote address by the Deputy Prime Minister, a number of high-level officials from the United Nations system and other regional organizations delivered opening remarks.

H.E. Mr. Léo Mérorès, President, United Nations Economic and Social Council, described the mandate and purpose of the ECOSOC Annual Ministerial Review. He introduced the 2008 theme on sustainable development and stated that this meeting will help crystallize the challenges faced by the Western Asia region in respect to sustainable urbanization.

Ambassador Mérorès cited urbanization as the defining feature of the 21st century. It has the potential to be a positive force for economic and social development despite the fact that cities are home to 1 billion slum dwellers. How well governments handle urbanization will have a significant affect on progress towards

many of the MDGs. The region's record in promoting sustainable urbanization is mixed due to disparities among countries. Some are struggling with slum upgrading and prevention, while others are at the forefront of green architecture.

In his statement, H.E. Mr. Abdul Rahman bin Hamad al-Attiyah, Secretary-General, Cooperation Council for the Arab States of the Gulf (GCC), called attention to the efforts that have been undertaken to improve the welfare and prosperity of humanity in the region. The United Nations plays a major role, especially in improving conditions for slum dwellers. Gulf countries in particular have supported endeavours to eradicate poverty, provide decent housing and ensure human welfare to all their citizens. Nonetheless, challenges hamper achieving sustainable urbanization, such as water scarcity and poor management of information. He emphasized that efforts to achieve sustainable urbanization require a clear, balanced and effective programme undertaken by all stakeholders, in coordination.

Mrs. Anna Tibaijuka, Executive Director, United Nations Human Settlements Programme (UN-HABITAT), stated that recent history has shown that slum growth is practically synonymous with urban growth. Ensuring universal access to water and sanitation, and equitable access to waste collection and affordable energy is one of the more effective means of improving the living conditions of the urban poor and a fast-track means of attaining all of the MDGs in urban areas, including goals on poverty, health and gender equality. Mrs. Tibaijuka said that one of the consequences of the combined impact of urbanization and globalization is a change in consumption and production patterns: as cities grow and integrate in the global economy, people alter the way they use land, water, energy and other natural resources. To reverse the impact cities have on climate change, smarter and greener urban development and growth is urgently needed. Any lasting solution to mitigating climate change will have to address the way cities are planned and managed.

Attaining sustainable urbanization will depend on the proper mix of good planning, enabling policy frameworks and financial instruments that ensure growth with equity – only then can technology play its full role. Mrs. Tibaijuka concluded by proposing that the ECOSOC consider “sustainable urbanization and the reduction of urban poverty” as a cross-cutting pillar in its deliberations so that the urban dimension will be incorporated in all the Council's analysis and recommendations.

Mr. Bader Omar Al-Dafa, Executive Secretary, United Nations Economic and Social Commission for Western Asia (UNESCWA), reaffirmed the relevance of the challenges associated with sustainable urbanization to the region and warned that rapid urbanization continues to pose great challenges, including insecure land tenure, inadequate drinking water and sanitation, and pressure on urban centres

from refugees. Urban policies and national development strategies must be holistic to ensure that the expansion and upgrading of urban infrastructure and the provision of services address the needs of the urban poor. Decentralization and enhancing the role of local authorities may be important steps to improving urban governance. He stressed the need to pay attention to rural development; examine the interlinkages and interdependence of urban and rural development. Mutual commitment and a coordinated response are necessary to collectively confront the challenges of sustainable urbanization.

Mr. Thomas Stelzer, Assistant Secretary-General for Policy Coordination and Inter-Agency Affairs, United Nations Department of Economic and Social Affairs (UNDESA), outlined some of the broad challenges of sustainable urbanization, including the unprecedented scale and pace of growth, and the impact of cities on the environment. He underscored that improving the lives of slum dwellers bears an enormous potential to achieve the MDGs. Moreover, green architecture may put the world on a more sustainable consumption and production path. Allowing developing countries to leapfrog to the urban development of the future could have groundbreaking impact on attaining sustainable development. Sharing technologies and know-how, as well as mobilizing public and private resources, are critical to reaching this goal.

In her keynote address, H.E. Dr. Fatima al Belooshi, Minister of Social Development, Kingdom of Bahrain, stressed that social development is an integral part of sustainable urban development that must focus on human beings and ensure a good life for all. The Kingdom has made significant progress in its social development and has enjoyed rapid economic development as well. It has liberalized and diversified its economy, and has become a financial services hub in the Middle East. The country has met all the MDG targets and is now pursuing the MDG+ objectives. Challenges remain, including maintaining the national identity in an era of globalization, and dealing with population growth and an aging society.

The policies of the Ministry of Social Development are built upon the principles of social investment and social protection. The Ministry has implemented many initiatives in cooperation with a number of partners, including: providing financial services for poor families, developing rehabilitation programmes, combating human trafficking, protecting children, providing programmes for people with special needs and promoting women's rights.

Dr. Badria Al Jeeb, Assistant Undersecretary of Social Welfare and Rehabilitation and Training, Ministry of Social Development, Kingdom of Bahrain, reported on the role of the Ministry in contributing towards sustainable urbanization through social services. In the past several years, the Ministry has undergone significant change, including decentralizing the service delivery and expanding its coverage to

all people in the country. It now concentrates on human development and emphasizes the interaction between the State and the individual.

Dr. Al Jeeb described many of the innovations the Ministry has introduced to its work. Among the projects described were homeless shelters; children's and youth clubs; and centres for family counselling, the handicapped and the elderly. A comprehensive strategy to help poor families break the cycle of poverty has been launched, which included developing a policy to reduce the price of electricity for 10,000 needy people; paying benefits to families that fall below the national poverty line; providing housing, education and healthcare; and promoting employment. It also launched a telephone hotline for individuals to communicate their needs directly.

Dr. Nabeel Mohamed Abu Alfatih, Acting Undersecretary of Housing, Ministry of Housing, Municipalities and Environment, Kingdom of Bahrain, stated that it is imperative for nations to institute sustainable urbanization for the sake of future generations. In doing so, many factors – including demographic, social and economic – need to be balanced. This requires good planning to implement policies that meet the needs of all members of society. Since independence, the Kingdom has been proactive in pursuing sustainable urbanization as a major part of its planning for sustainable development.

The country's constitution incorporates all the elements of sustainable social development, including citizen's rights to housing, which the Kingdom guarantees. The Government is responding to the growing demand for houses with significant investment. It is also redesigning its housing system for low-income families to ensure good quality and quantity of services and the proper use of scarce resources (such as land and water) to ensure long-term sustainability. He stated that the public and private sectors must work in partnership to provide housing for all. Dr. Alfatih concluded by emphasizing that decisions taken now will determine the social development of future generations.

B. Panel 1: Providing urban infrastructure and access to services

The panel on providing urban infrastructure and access to services aimed to highlight regional successes and challenges in providing water, sanitation, energy, mass transit, waste management and other vital services.

In the moderator's opening statement, Mrs. Anna Tibaijuka stressed that social inclusiveness is fundamental to realizing sustainable urbanization. Social inclusiveness is predicated on all residents of a city or town having access to basic services. This requires investment and equitable social policies and strategies. Basic services must be affordable. Mrs. Tibaijuka underscored that providing urban infrastructure requires appropriate economic, financial and fiscal policies.

The first panellist, Ms. Mona Serageldin, Vice-President, Institute for International Urban Development, United States of America, stated that the Middle East and North Africa (MENA) region has made great strides in improving access to basic infrastructure since the 1970s, citing notable cases in Egypt, Tunisia and Morocco. Almost all countries in the MENA region will meet all or some of the MDGs, but this alone does not guarantee achieving sustainable urbanization.

In fact, current patterns of urbanization in the region are far from sustainable. In the richer countries, resource consumption is high and their ecological footprints exceed sustainable levels. In the rest of the region, cities face growing challenges related to water shortages, pockets of poverty, traffic congestion, high costs of urban land and housing, environmental pollution and frustration amongst unemployed youths. In all MENA countries, water consumption is too high and unsustainable. In non-oil-producing countries, existing water systems are not maintained, leading to losses of as much as 30% of total consumption, but action is rarely taken until the situation reaches crisis proportion. With urban land value doubling every three to four years, slum upgrading cannot prevent the formation of new informal settlements that consume scarce agricultural land. Moreover, affordability of housing has been eroded for middle income families and runaway land markets have encouraged laxity and corruption in local enforcement of development regulations. Globalization (with a shift toward knowledge-based economies) and demographic factors are also having a significant impact on urbanization in the region.

Ms. Serageldin said governments have realized that there is no substitute for social outreach and community involvement in efforts to achieve sustainable urbanization. Local authorities lack adequate technical and financial resources to fully assume the responsibility of planning for sustainable development, thus explaining the continuing role of national agencies. Yet, these agencies need to provide opportunities for meaningful participation by citizens.

Focusing on waste management, Ms. Laila Iskandar, Chairperson, Community and Institutional Development, Egypt, brought attention to the consumption patterns of the rich and the poor. In Egypt, the poor have effectively created livelihoods out of processing the refuse of the rich by adopting a home-grown model different from those of the developed world (which generally bury or burn their garbage), in which waste is sorted into two streams: food and everything else. The food is composted and exported to meet growing demand, and the rest is sifted for reuse and recycling. She repeatedly emphasized the importance of “home-spun” and “culture-specific” solutions to the challenges of urbanization.

Operating small enterprises out of their homes, the poor entrepreneurs have a recovery rate of 80%, which far exceeds the efficacy of services provided by municipalities or the private sector, while simultaneously providing employment

and income. Ms. Iskandar, thus, called attention to the “human infrastructure” of cities and lauded the poor for being able to overcome badly designed systems. Already, her organization was taking steps to transfer the waste-processing technology and know-how to the poor within Egypt and abroad so that more communities can benefit. She emphasized that, while recycling can help to sustain natural resources, it is imperative to limit consumption levels.

She asserted that municipalities must learn how to manage slums, rather than raze or ignore them and that granting land tenure is essential. The challenge is to design cities in which the poor can work and live in dignity.

Ms. Zahwa Mohamed Al Kuwari, Director, Department of Environmental Planning, Public Commission for the Protection of Marine Resources, Environment and Wildlife, Kingdom of Bahrain, described some of the policies that Bahrain has implemented to ensure sustainable development. In the 1980s, the Government had developed a national environment strategy with the cooperation of all sectors to safeguard the natural environment under the growing pressure of urbanization through preventive measures and by imposing penalties for actors that harm the environment. Under the plan, all new projects are subject to environmental licensing and undergo environmental assessment.

Having been successfully implemented, the strategy has realized improvements in air quality and other pollution. The Government is working toward fulfilling national and international agreements regarding climate change and environmental protection and is in the process of preparing a second national declaration on sustainable development. The Government has achieved its success by balancing the economic, social and environmental aspects of development.

During the interactive discussion that followed the panelists’ presentations, the global food crisis, unsustainable patterns of consumption and production, water scarcity, climate change, population growth, social integration and youth unemployment were highlighted as major regional challenges in the context of sustainable urbanization.

With the region being a net importer of food, the present food crisis is having a heavy impact. Low-income families are forced to eat less nutritious diets or skip meals, and children are in some cases being withdrawn from school so that they can work instead. Action is necessary to scale up food assistance programmes and social safety net programmes. The World Food Programme called for international solidarity and commended the Gulf Cooperation Council members for their generous contributions in the region.

Participants discussed the seriousness of the region-wide water shortage that has resulted from over-consumption, especially in agriculture. In this respect, the rural-

urban link is very apparent. Yet, with the existing food crisis, no plan is tenable that would reduce crop production, including pricing of water. Instead, different practices need to be implemented, including drip irrigation and recycling wastewater. It was stressed, however, that conservation is less costly than reuse technologies. Utilities can also work to cut water losses. The quality of drinking water must be considered with reporting on access.

Poverty remains one of the greatest enemies to the environment. The disproportionate impact of climate change on the urban poor was noted.

Because sustainable development requires the participation of all citizens, improving education and raising public awareness is imperative to empower them. The specific responsibility of local authorities in implementing policies and programmes was highlighted. Some participants pointed to successful practices by competent local authorities and said that their support and engagement is the best way to secure sustainability of an initiative. Yet it was observed that many local authorities need more training and experience, and are sometimes characterized by corruption. It was also observed that sometimes, when local authorities fail to deliver services, NGOs have filled the gap and financed infrastructure for poor neighborhoods.

Indeed, financing remains a formidable challenge; addressing the needs of the growing population will require substantial investment in cities and their infrastructure. Municipal budgets cannot cope with the scale of the need, and they require more and better instruments to raise capital.

It was emphasized that there was no one-size-fits-all solution to problems of infrastructure and services. Each country has particular challenges and needs that require demand customized solutions.

C. Panel 2: Green architecture for sustainable urbanization

Considering cities' impact on the environment, the panel on green architecture for sustainable urbanization examined how innovations in architecture and urban planning and in related technologies can help attain more sustainable urbanization.

Mr. Thomas Stelzer, Assistant Secretary-General for Policy Coordination and Interagency Affairs, UNDESA, opened the panel discussion, reminding participants that climate change and urbanization are strongly connected. Seventy five per cent of global energy consumption occurs in cities and eighty per cent of all greenhouse gas emissions that cause global warming come from urban areas. He recalled that rates of urbanization are accelerating. However, urbanization should not be viewed with suspicion; it offers many opportunities. For instance, urban centres support large populations in high concentration, which limits adverse impact on the natural environment. Mr. Stelzer asked speakers to address the

questions of whether smart growth can help cities in the region leapfrog to more sustainable urban settlements and if the requisite technologies are available; to describe the benefits that have so far been realized from deploying green architecture in Western Asia; and to consider whether lessons learned can be applied to less-affluent cities.

Laying the foundation for discussion, panellist Dr. Ali Abd Alraouf, Associate Professor of Architecture, University of Bahrain, examined recent trends related to cities and sustainability in the Gulf countries. In the past five to 10 years, Gulf cities have undergone radical change, manifested in three paradigms: (1) “Dubai-ization,” characterized by an eruption of new, private shopping malls, gated communities, corporate headquarters and other high-profile, “iconic” projects; (2) “knowledge-fiction”, the creation of knowledge cities in Gulf countries, which aim to foster creativity and facilitate a knowledge economy and subsequent economic growth; and (3) “sustainable-ization” or movement towards environmentally friendly buildings and cities. Dr. Alraouf warned that the Dubai model is untested, and we have yet to observe the consequences on social life and the identities of local communities. He also cautioned against creating “sustainable bubbles,” isolated from the greater society, which might be more marketing tool than credible concept.

Dr. Alraouf underscored that architects do not focus only on individual buildings but are interested in the bigger cityscape. Green architecture has taken the form of ultra-modern technology in iconic buildings, but mass production of green buildings is needed to go beyond the elite and increase the impact. There are also lessons to be learned from traditional building techniques that can be reinterpreted for modern times with great benefit. To secure the future of sustainable urbanization, the coming generations of architects and city planners must be educated to approach architecture as a tool by which quality of life can be enhanced. Incentives for developers, increased awareness by decision makers and improved capacity of local authorities are also needed to ensure that urban planning and architecture progresses sustainably.

Mr. Nicholas Bailey, Director Design Studio, WS Atkins and Partners Overseas, Middle East and India Region, Kingdom of Bahrain, presented a number of green projects within the region, describing the design elements and technologies that make the buildings more environmentally friendly. In the course of the presentation, he explained that active elements of green design, such as wind turbines and solar panels, are costly and generally produce relatively little gain. Passive elements, such as better windows and insulation, cost less but have greater impact. Most important is the form and orientation of housing – its proximity to work, shopping, and other common destinations. Architects, developers and other entities affect the design of buildings, but governments and their policies determine, to a great extent, the form and orientation.

Mr. Bailey also underscored that in urban design there is greater resource use in commuting and transportation than in construction and operation of buildings and that traffic congestion is a major issue for urbanization.

Mr. Samuel Keehn, Environmental and Sustainability Manager, Energy Management Services, United Arab Emirates, spoke of the need to broaden the scope from “iconic” buildings to make every building sustainable, including by retrofitting existing buildings. There is a substantial cost to building “green” and, it is not presently within the means of low- or middle-income families. He believes that it could become affordable in the future if demand was to increase and technology was to be further developed, but this remains a challenge to be overcome.

Policy on green architecture has developed differently in different markets; in some it has developed from the bottom up, and in others from the top down. Secondary policies, such as tariffs on water and electricity, subsidies for environmentally friendly technologies, land-use policies and alternative transportation options also affect planning and building decisions. Mr. Keehn reiterated that using individual vehicles as the primary mode of transportation is not sustainable, and it is imperative that master planning promotes alternatives to driving.

Mr. Parasuraman R. Ramachandran, Founding Vice-Chair of the World Green Building Council, Founding and Immediate Past Chairman of the Indian Green Building Council, and CEO of BMTC Dubai, described the role of the building industry in promoting sustainable urban development. He noted that conditions vary between developed economies (characterized by significant built space and high government regulation) and developing economies (where government and industry involvement has been lower and where markets for sustainable architecture are less developed). In India, the industry had taken it upon itself to adopt voluntary sustainability principles in order to operate in a socially responsible manner. As a result of its efforts, the total footprint of environmentally friendly buildings in the country has vastly increased.

Mr. Ramachandran acknowledged the overlap between poverty, affordable housing and sustainable architecture. He asserted that affordable housing, slum clearance and urban development should be subsets of green architecture, not vice versa. Although building and construction is a for-profit activity, it must involve all stakeholders – architects, designers, contractors, product manufacturers, governments and legislators – to ensure that it is also a sustainable activity. Comprehensive green rating tools provide an international benchmark of sustainability that enables comparison among buildings.

Regulators have an important role to play in governing policy and generating the framework within which the industry operates, as well as advocating for green standards, educating the industry and public on sustainability issues, and providing subsidies and incentives. Green Business Councils are themselves non-profit and guided by a cross-section of stakeholders. Mr. Ramachandran recommended that the region adopt a common green rating tool under the neutral guidance of a green building council located within the region.

In the ensuing discussion, participants emphasized the need for green architecture to be made available to the poor, stating that most green buildings to date have been erected for the rich. The challenge is to adapt sustainable features of the high-rise for the urban slum to accommodate low-income people. Mr. Keehn described efforts in the United States to develop affordable (to middle-class consumers), green, prefabricated housing, yet stressed that there must be sufficient demand from consumers (or government subsidies) for this to reach scale. Advocacy, pro-green policies and civil society support can help to generate demand. Much more work would have to go into developing sustainable housing for slum dwellers. However, it was noted that the carbon footprint of low-cost housing is presently small and that large high-rises were responsible for a much larger percentage of energy use. It was noted that new technologies are available to make the construction process – and not only the resulting building – more environmentally friendly.

Some interventions emphasized using traditional building techniques, technologies and materials in new buildings to improve their sustainability. The need to preserve the cultural heritage of cities was strongly stressed. Green certification schemes have been developed for existing buildings, encouraging owners to correct their patterns of over-consumption. City planning has to be tied to national planning processes, and this will be unique in every country.

D. Panel 3: Financing and technology transfer for sustainable development

Acknowledging the need for additional resources and means to promote sustainable urbanization, the panel on financing and technology transfer for sustainable development explored how governments and the commercial banking industry can mobilize resources and make available financial services to the urban poor. The panel also addressed the regional need for technology development and transfer.

Opening the panel, moderator Mr. Bader Omar Al-Dafa, Executive Secretary, UNESCWA, reiterated that mobilizing resources – public and private, domestic and international – and utilizing them effectively are priorities and pre-requisites for promoting sustainable development and sustainable urbanization. Islamic finance is one avenue with immense potential to shape developments in the Arab

region and other developing countries. Special attention should be paid to the urban poor, who are often marginalized both socially and financially.

Mr. Al-Dafa stressed the importance of South-South cooperation and public-private partnership in promoting technology transfer for sustainable development. The need to adopt and adapt suitable technology to meet regional challenges – especially those related to water scarcity and greenhouse gas emissions – is crucial. Sharing knowledge and best practices would be beneficial.

Panellist Mr. Khalid Hamad, Executive Director, Banking Supervision, Central Bank of Bahrain, stated that the application of basic principles of Islamic Shari'a bestow special significance on Islamic financial institutions. Islamic banks, *takaful* companies and investments funds constitute the primary players in steering regional investments in real estate, infrastructure, tourism, and the pharmaceutical, medical and telecommunication sectors. Their economic activities are not limited to the Arab region. Mr. Hamad indicated that Islamic banks have yet to explore more of the needs of people with low- to medium income; micro-finance and small-to-medium-size ventures are some areas that the financial industry sees as opportunities for development.

The Central Bank of Bahrain has nurtured the Islamic finance industry and facilitated appropriate supervisory and legislative foundations to assist its growth and development. Further, it has collaborated with the Islamic Development Bank and other stakeholders to create various support institutions necessary for the healthy development of the sector. The Central Bank also supported the development of the Bahrain Institute of Banking and Finance to provide banking and financial training and education in the region.

During the discussion, a participant noted that the Islamic financial industry has yet to develop the legal instruments to make it easy and inexpensive for the poor to procure loans. It was also suggested that governments or charities should be enlisted to provide guarantees on behalf of the poor. Mr. Hamad confirmed that such steps were being taken in Bahrain to introduce residential mortgages for certain qualifying individuals with the support of the Government. Banks alone cannot solve the problem of affordable housing; a joint venture between the public and private sectors is necessary to provide subsidized housing for the poorest. Efforts are underway to establish a microfinance bank in the Kingdom, and other organizations are being encouraged to offer microfinance facilities. Islamic banks are also being encouraged to reduce charges and fees to more reasonable levels.

A second panellist, Dr. Seyfeddin Muaz, Executive Vice-President, Royal Scientific Society, Jordan, provided a picture of the potential of the region to utilize and develop technology by presenting comparative statistics on R&D expenditure, scientific and technical journal articles published, patent applications

filed, share of high-technology exports in total manufacturing exports, adult literacy and internet penetration for the Arab region. He stated that the region, in general, must step up efforts to improve the quality of education and increase investment in science. Challenges that inhibit the use of technology in the region include a low literacy level and low enrolment in higher education, a high population growth rate, low R&D expenditure, non-competitive industry and knowledge-producing institutions, limited private sector R&D and innovation activities, weak linkages between industry and university, and brain drain.

Dr. Muaz recommended that, at the policy level, governments must develop eco-based strategies, ensure that the legislative framework promotes clean technologies, and provide incentives (tax cuts, subsidies, etc.) that encourage the adoption of environmentally friendly technologies. At the technical level, governments must support programmes that ensure capacity-building in cleaner technologies and environmentally sound practices, especially in improving the management of water use and increasing energy efficiency, and also develop technical capacity through cooperative programmes for technical knowledge transfer in cleaner production and cleaner technologies. Furthermore, building codes and technical standards are useful tools that should be adopted to control construction and secure funding.

Awareness-raising at the professional level and intensive training for youth may also strengthen the region's capacity to absorb technologies and develop home-grown innovation. There should also be support for entrepreneurship and the creation of incubators to nurture ideas and creativity. He advised that, rather than try to compete in R&D with developed countries, the region should focus on building the capacity to successfully transfer technologies to meet local needs and to concentrate on developing expertise on issues and challenges most relevant to the country or region. Nations in the region could learn from others that have developed strong science and technology policies, such as Malaysia and the Republic of Korea.

Action is also necessary on the financial level. Dr. Muaz emphasized that funding must be made available through government budgets and development partners, as well as by establishing green funding mechanisms by Islamic banking institutions, such as green credit and venture capital to fund good ideas and R&D. National and regional award systems may also encourage the development of sustainable technologies.

A participant underscored the urgent need for funding: an estimated \$300 billion to \$400 billion is needed to finance adaptation to and mitigation of climate change. Developing countries do not have the resources to buy or develop technologies to meet this challenge.

III. Conclusions and recommendations

Owing to economic, social and political disparities within the region, different approaches should be pursued to address the various priorities countries face in pursuing sustainable urbanization. Solutions to the challenges should be country-specific; it is not possible to simply import them from other regions of the world.

Sustainable urban development requires a holistic approach, entailing a good mix of legal frameworks, economic incentives, awareness and urban design. Investment is required so that governments can increase access to transport, provide secure land tenure, mobilize financial resources for sustainable development and bridge the gap between urban and rural areas, as well as among neighbourhoods within cities and towns. In this respect, the Islamic banking industry should take on a bigger role in promoting sustainable development. The private sector and infrastructure and service providers are urged to heed poor urban communities and to provide them with sustainable services and housing at prices they can afford. Cooperation and collaboration are essential to streamlining processes and reducing duplication of efforts among various stakeholders.

People are the foundation of good urban planning and effective long-term design for urban infrastructure, and they must be empowered to fulfill their role. Participatory planning and management of cities is imperative. Local authorities need to be involved as enablers, yet all partners must come together in a full and fair partnership to generate effective solutions. Local communities must be involved throughout the entire process of planning for and managing urban development, and their voices should also be heard at international conferences on related subjects.

There must be an improvement in institutional capacity to plan, monitor and coordinate sustainable development, including through public-private partnership. Accurate statistics and information (and concomitant capacity-building to gather and analyse the data) are necessary to provide a basis for informed urban planning and development.

All stakeholders in the region need to take action to address unsustainable patterns of consumption of natural resources, especially of water. Conservation practices need to be implemented in agriculture, including drip irrigation and recycling wastewater. Utilities should also work to cut water losses. While it is important to ensure an adequate quantity of water, governments must guarantee its quality as well.

The current food crisis reinforces the importance of rural-urban linkages. Immediate action is necessary to scale up food assistance programmes and social safety net programmes. In the medium to long term, Governments, in partnership

with the private sector, must develop eco-based strategies that support research and development to utilize appropriate and affordable technology to mitigate and adapt to climate change, which affects the poor first and most, especially women. Governments must support technical programmes that ensure capacity-building in cleaner technologies and environmentally sound practices. They should also promote entrepreneurship and the creation of incubators to nurture ideas and creativity. Urban agriculture initiatives could be an important part of the solution, by, among other things, turning urban waste into productive resources, positively impacting the greening of cities, improving the urban micro-climate, reducing the ecological footprint of the city, and contributing to food security and better nutrition.

Green architecture must be seen in the larger context of urban planning and not in terms of isolated projects. There is a need to both scale up and scale out the quantity and types of green solutions, especially to pay greater attention to providing the poor with environmentally friendly housing. Green buildings remain too costly to be accessible to a wide swath of the population; efforts should be taken to increase demand so that they may become more affordable. Traditional building techniques should not be overlooked. Direct mandates, an exchange of information between governments and private sector actors, and appropriate secondary policies would all help to encourage the spread of sustainable architecture. Rating tools play an important role in setting and publicizing green standards. Environmental assessment is also a useful tool to manage environmental impact.

Regional cooperation is essential to addressing many of the challenges associated with urbanization. The exchange of good practice and information among countries at the regional and sub-regional levels is essential. Pilot projects within cities would provide solid lessons and encourage other neighbourhoods and cities to follow.

All actors must not only address the challenges of today, but also plan for the future. Strategies at all levels must integrate policies in the economic, social and environmental fields in a coherent and sustainable manner. Plans must protect cities' cultural heritage.

In addition to these conclusions, attention was also drawn to the issue of violence against women. It was conveyed that women are disproportionately affected by urban violence, which enhances women's feeling of insecurity that, in turn, produces limitations on their mobility and autonomy. Urban strategies and gender-sensitive municipal planning that will improve women's safety need to be formulated by including a gender perspective in public security policy. Awareness-raising and training can serve to create an environment where citizens and government officials are sensitized to violence against women in urban settings.

A number of recommendations were offered for consideration by the Economic and Social Council and actors within the region:

To address the challenges of urbanization, governments must develop country-specific approaches that reflect their development priorities.

Planning for sustainable urbanization requires an integrated policy approach that involves all relevant stakeholders, including national governments, city and municipal governments, community representatives, NGOs and members of the private sector.

To improve decision-making and management, capacity-building is essential for local authorities and municipal planners, as well as community members. Accurate statistics must also be collected and made available to policy-makers.

Governments must leverage new investment in urban infrastructure to cope with population growth and increasing urbanization. Municipalities require more and better instruments to raise capital.

Encourage Islamic banks and other commercial banks to increase their role in financing projects that will contribute to sustainable development, including through providing “green credit” and venture capital to promote sustainable urbanization. Islamic banks and other commercial banks are encouraged as well to develop financial products of relevance to low-income customers, including government-backed mortgages and micro-loans.

Governments must ensure that drinking water is available to slums and meets quality standards.

Immediate action must be taken by all stakeholders in the region to address unsustainable patterns of consumption of water, including implementing conservation practices in agriculture and cutting losses in water delivered by utilities and in industrial use.

Governments, in partnership with the private sector, should support research and development to utilize appropriate and affordable technologies to mitigate and adapt to climate change, as well as technical programmes to build capacity in cleaner technologies and environmentally sound practices.

Architects, developers and other actors in the construction industry, with support from governments, should scale up and scale out the quantity and types of green building solutions, incorporating traditional knowledge and materials as well as new technologies, especially to ensure sustainable housing for the poor. They should also pursue socially responsible policies and

practices, particularly with labour employed for construction and maintenance of buildings.

Governments should provide an enabling environment to encourage the spread of green architecture. However, this should be promoted as part of overall planning for sustainable cities.

The ESCWA region should adopt a common green rating tool under the neutral guidance of a Green Building Council.

UNESCWA should incorporate the outcome of this meeting into its work and take a leading role to see through some of the proposed actions.

ECOSOC should consider “sustainable urbanization and the reduction of urban poverty” as a cross-cutting pillar in its deliberations so that the urban dimension will be incorporated in all the Council’s analysis and recommendations.

Enclosure

Presentations of best practices and new initiatives to promote sustainable urbanization

1. Mr. Ayman Abu Laban, Gulf Area Representative, United Nations Children's Fund (UNICEF), presented the Child Friendly Cities Initiative. The Initiative aims to encourage an approach to local development that promotes awareness of children's rights and increased commitment to their safeguard at local level. Strategies include supporting government efforts to strengthen local government and local governance in urban and rural areas. UNICEF has promoted in-depth reporting by city governments on the implementation of the initiative.
2. Dr. Muhammad Al-Sayrafi, Vice Chairman, Qatar Foundation, provided an overview of the project on 'Healthy and Environmentally Sound Housing' implemented by the Friends of the Environment of Qatar, the Qatar Foundation and the Government of Qatar. The project explores ways to integrate the issues of health and the environment in the area of housing and to create a holistic approach to housing, both public and private. The project is pursuing a number of deliverables, including: the Qatar codex for building standards and spatial planning, a global declaration or a convention on the same incorporating the principles expressed in the vision for the project, cutting-edge research and science delivered including best practices, a centre of excellence on healthy and environmentally sound housing, and a ten-year strategy to follow up some or all of the above.
3. Mr. Ghassan Samman, Head of Media and Foreign Affairs Department, Arab Towns Organization, Kuwait, focused on the partnerships that have been fostered by the organization, which has a membership of more than 400 towns in the Arab world. The organization works with governments, local authorities, the heads of municipalities and municipal councils, NGOs, universities and research centres, financial institutions, the United Nations and the private sector to promote sustainable urbanization. Together, the stakeholders develop and disseminate frameworks for good governance of cities and towns that promotes sustainable economic and social development, while also preserving cultural heritage. The Organization has created a fund through which it grants money to towns and cities to finance projects they could not otherwise afford.
4. Citing the increasing pressure being placed upon water resources in the region (with as much as 40% of the water demand in the Middle East stemming from the industrial and municipal sectors due to the present construction boom) as an impetus for his organization's work, Mr. Jeff Stephenson, Chief Operating Officer and Vice President of Oryx Enterprises, Qatar, presented a new construction technology that will enable the industry to save billions of gallons of water. The technology is a 100% environmentally friendly alternative to using water for

curing concrete that provides the same results as 14-day water curing without sacrificing quality, time or cost. It enables the world's contractors to produce high-quality, long-lasting concrete structures faster and easier without wasting water or creating waste and pollution.

5. Mr. Sayed Aqa, UN Resident Coordinator and UNDP Resident Representative, Kingdom of Bahrain, stressed the importance of good governance to promote sustainable urbanization, which necessarily includes participation by civil society, the media and other stakeholders. Governments have lately been shifting from provider of services to enabler of development, allowing other stakeholders to expand their roles. Mr. Aqa named a few examples of good practice, including efforts by the City of Nablus, West Bank, to improve the urban environment by relocating industry and upgrading the city centre; UNDP Nepal's 39 Public-Private Partnerships for the Urban Environment (PPPUE) active in five municipalities; and UNDP's Local Initiative Facility for Urban Environment (LIFE), a small grants programme that provides support for small-scale activities that address local urban environmental problems in developing countries.

6. Dr. Habib N. El-Habr, Director and Regional Representative, United Nations Environment Programme (UNEP), Regional Office for West Asia, showcased the Partnership for Clean Fuels and Vehicles (PCFV). The partnership comprises more than 100 organizations from the private sector, governments, NGOs and international organizations working together to promote better urban air quality in developing countries through cleaner fuels and vehicles. The Partnership has seen excellent progress, especially in the areas of the phase-out of leaded gasoline and the reduction of sulphur levels in fuels. The Partnership is working closely with the GCC in pursuit of its goals in the sub-region, as well as with national governments in several Western Asian countries.

7. Dr. Eduardo López Moreno, Chief, State of the World's Cities Section, Monitoring and Research Division, United Nations Human Settlements Programme (UN-HABITAT), provided a brief overview of several best practices from within the region that exhibit a rare combination of innovation, partnership and good governance. Among them were the Bahrain National Urban Observatory, the Special Human Settlements Programme for the Palestinian People, Egypt's National Urban Planning and Development Programmes and the Sustainable Ismailia Governorate Programme (Egypt).