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Dialogue on the special theme for the twenty-second session of the Governing Council

Report by the Executive Director

Promoting affordable housing finance systems in an urbanizing world in the face of the global financial crisis and climate change

Summary

The present theme paper has been prepared by the secretariat to guide the discussions between Governments during the high-level segment of the twenty-second session of the Governing Council and during the dialogue between Governments, local authorities and other Habitat Agenda partners on promoting affordable housing finance systems in an urbanizing world in the face of the global financial crisis and climate change.

The paper reflects both the outcome of the fourth Session of the World Urban Forum, held in Nanjing, China, in November 2008, and the UN-Habitat medium-term strategic and institutional plan for the period 2008-2013 approved by the Governing Council in its resolution 21/2.

The objective of the present paper is to assist Governments, local authorities and other Habitat Agenda partners to prepare their contributions to the discussions at the twenty-second session through the exchange of ideas, issues and policy options and, in so doing, to inform further and facilitate the secretariat in carrying out its work programme.

The paper proposes that the discussions during the high-level segment and the dialogue focus on the following two dimensions of the theme:

- (a) Affordable housing finance in the context of the current global economic crisis;
- (b) Effects of climate change on financing affordable housing and infrastructure.

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I. Introduction and background

A. Introduction

- 1. As the twenty-first century unfolds the world is witnessing not only the continuing and relentless pace of urbanization, with all its problems, but also five other linked and complicating phenomena:
 - (a) Food shortages and fluctuating food prices;
 - (b) Fluctuating energy prices;
 - (c) Water shortages and water-critical cities;
 - (d) Effects of climate change;
 - (e) Crisis in international financial markets and the resulting economic recession.
- 2. Although the financial crisis is affecting countries to varying degrees, there is little doubt that the global economic recession resulting therefrom will affect developing countries the most and that the poorest segments of the populations of such countries will bear the brunt of the suffering.
- 3. We must therefore ask what can be done at a practical level to counteract these challenges and mitigate their effects. The dialogue that is to take place during the twenty-second session of the Governing Council of the United Nations Human Settlements Programme (UN-Habitat) provides an opportunity to bring these questions to the fore and to inform the work of UN-Habitat further.
- 4. During the twenty-first session of the Governing Council, in 2007, dialogue and debate focused on the role of urban planning and financing urban development. The present theme paper can be seen as a logical sequence as it looks at financing for affordable housing and infrastructure in more detail.

B. Background

- 5. 2007 marked a turning point in human history: for the first time, half of humanity was living in towns and cities. It is projected that by 2030 this figure will rise to two-thirds. In a time of unprecedented, rapid and irreversible urbanization the cities growing the fastest are those of the developing world.
- 6. The combination of rapid urbanization, poor planning and a lack of affordable housing and affordable housing finance has resulted in the proliferation of slums and informal settlements. In many rapidly urbanizing countries slums and informal settlements have become the predominant form of urban housing. Recent studies have shown that the majority of the 1 billion slum-dwellers worldwide are worse off than any other segment of the urban or rural population when it comes to their health, education and nutrition. Living for the most part in precarious and flood-prone locations, the urban poor in general, and slum-dwellers in particular, constitute the single largest risk group in terms of vulnerability to the effects of climate change.
- 7. Improving the living conditions of the urban poor is therefore not just a human settlements issue; it has become a key determinant in attaining the health, nutrition and education-related Millennium Development Goals in urban areas and a critical dimension to any climate change adaptation strategy.
- 8. The global economic crisis will cause major costs in the near future, while at the same time the prospect looms of climate change that might cause even greater humanitarian and financial problems if not handled properly. The two challenges are interlinked better financing for housing and infrastructure improvement leads to more opportunities for economic growth while enabling cities to plan for environmental efficiency and thus to be in a position to mitigate the effects of climate change and reduce the costs of climate-change-induced crises.
- 9. The current financial and economic crisis has short-term negative implications for the availability of public development funds and the willingness of financial institutions, the source of domestic capital, to engage in low-income housing and infrastructure finance. In addition, the global economic downturn will lead to fewer employment opportunities in developing countries, especially for low-income people. This will negatively affect the ability of low-income people to afford housing.

10. The medium- and long-term impacts of climate change present similar profound challenges for the establishment of sustainable systems for housing and infrastructure finance. Both adaptive and preventive measures in cities and towns will require substantial funds and will place further strain on already limited resources for financing low-income housing. The development of systems for affordable housing must therefore take into account the financial implications of climate change and preventive and adaptive measures to respond to the problem.

II. Mandate

- 11. In its resolution 63/221 of 19 December 2008, entitled "Implementation of the outcome of the United Nations Conference on Human Settlements (Habitat II) and strengthening of the United Nations Human Settlements Programme (UN-Habitat)", the General Assembly invited the Governing Council of UN-Habitat to keep under review developments in housing finance in view of the current financial crisis and further decided to explore the possibility of convening a high-level event of the General Assembly on the subject. ¹
- 12. The present theme paper is intended to stimulate dialogue between Governments, local authorities and other Habitat Agenda partners during the twenty-second session of the Governing Council that will lead to responses to contemporary challenges and that will have the following objectives:
- (a) To highlight the short- and long-term implications of the current economic crisis and climate change for the financing of affordable housing and infrastructure and related policy efforts;
- (b) To develop strategic responses to the problems, building on the recommendations of the Habitat Agenda, the Millennium Development Goals, the Johannesburg Plan of Implementation and the outcome of the high-level plenary meeting of the sixtieth session of the General Assembly (2005 World Summit outcome);
- (c) To mobilize the commitment of Governments and Habitat Agenda partners in tackling these issues at the international, national and local levels.
- 13. While the present theme paper focuses on cities and communities in developing countries, many of its observations and recommendations are of global relevance because urban poverty, economic growth and the financing of infrastructure and services represent major challenges for many urban areas in developed countries and countries with economies in transition.

III. Challenges and opportunities arising from the current global financial crisis

A. Impacts of the financial crisis on promoting financing for affordable housing and infrastructure

- 14. The current global crisis in the financial sector has serious implications for economies around the world. Even in advanced economies, national Governments are struggling with the task of stabilizing the banking sector in the face of declining consumer and investor confidence. Although the current crisis in the financial sector has its roots in the sub-prime mortgage markets in developed countries, it will have far-reaching implications for financial markets and economies all over the world, including the global partnerships for development. These emerging trends will affect the work of UN-Habitat in a number of ways.
- 15. On the one hand there will be reduced availability of global development funds and domestic public and private resources in developing countries resulting from the global economic downturn. Another challenge is a public that is highly critical of models for enabling access to housing finance for low-income groups. On the other hand the lessons learned in developed countries present opportunities to promote the financing of affordable housing and infrastructure in developing countries.

B. Implications for development efforts and availability of funds for development assistance

- 16. A first negative impact of the financial crisis in the short term relates to the funds available for development support in general. The current extraordinary and unplanned expenditures of Western Governments for bank bail-outs and guarantees will result in extremely tight public budgets in the coming years. The recession resulting from the scarcity of credit will further exacerbate the situation by causing declining tax revenues for national Governments. These factors will make it unlikely that contributions for international development efforts will increase in the near future. There might even be a decline. This uncertain funding situation for development partners may also have negative consequences for the programmatic budgets available to the United Nations family for activities in housing and urban development.
- 17. The financial and economic crisis will also negatively affect flows to developing countries of private investment, which has been a major contributor to economic development in recent years. These include personal remittances, which have become a significant source of investment capital for many developing countries.
- 18. The most significant negative consequences, however, will result from what is termed the "credit crunch" on businesses and employment opportunities in developing countries. While these impacts may hit developing countries with a time lag, the decline of economic activity is almost inevitable. Furthermore, most Governments will have limited funds with which to initiate economic recovery plans and market stimulus packages such as those that have been enacted in Europe and the United States of America.
- 19. In combination, these factors will result in slower growth or stagnation and job losses and fewer employment opportunities in many developing countries, which will in turn mean that there will be less public money for housing and infrastructure and less capacity on the part of businesses and individuals to invest in affordable housing.

C. Constraints for the work of international agencies in housing and infrastructure finance

- 20. At the root of the current financial crisis is a practice in primary mortgage lending that paid little attention to sound procedures for loan origination and administration. Multiple portfolio transfers and repacking of loan portfolios resulted in an overall lack of accountability and a situation in which the terms of the underlying loan agreements were not readily apparent. As a reaction to the sub-prime mortgage experience and the failure of complex financial instruments, efforts to enable access to housing finance for low-income segments of society face strong scepticism by the business community. This attitude may hinder the efforts of international development agencies to advocate and develop models at the global level for low-income housing finance and infrastructure.
- 21. Another challenge relates to the effect of the financial crisis on the domestic banking sector in developing countries. Although banks in most developing countries have not been involved in speculative practices, they will still have to face the consequences of reduced liquidity at the global level. Consequently, from the perspective of domestic finances for development in general and housing finance in particular, there is a danger that irresponsible banking practices that have occurred in developed countries might cause banks in developing countries to become overly cautious with regard to providing financial services to lower-income strata.

D. Opportunities arising from the current crisis for financing affordable housing and infrastructure in developing countries

- 22. Beyond the negative impacts of the current crisis, there are also several factors associated with housing and infrastructure in developing countries that present opportunities for enabling access to housing finance in particular and activities for income generation and poverty reduction in developing countries in general.
- 23. First, regardless of the speculative behaviour observed in recent years in developed countries, housing and related infrastructure investments will remain a key engine for economic growth and an important element for individuals to build household wealth. Given the backlog of affordable quality housing and basic infrastructure for large parts of society, investments in this sector will have high multiplier effects in developing countries.

- 24. Second, the experience of microfinance and the high repayment rates of small-scale borrowers show that the informal economic sector in developing countries has proven to be more stable and less vulnerable to economic shocks than the formal financial sector in the West.
- 25. With regard to the formal banking sector in developing countries, the current crisis in the financial sector emphasizes the need for sound regulation of the banking sector and full transparency with regard to the risks involved in lending and investing. It also shows that it is necessary to establish functioning systems for providing consumer advice and education on financial services. Consequently, the current crisis affirms efforts to establish effective human settlements financing systems, particularly through improving access to finance for housing and infrastructure for the urban poor.
- 26. The mobilization of private domestic resources in developing countries and efforts to develop sound policy frameworks, which have been key components of the UN-Habitat strategy in recent years, will remain a major task and will require continued funding. At the same time, the current crisis calls for higher scrutiny and accountability in the development of low-income housing projects and finance products, which is indeed extremely welcome as it justifies the detailed approach required for slum-dwellers' projects.

IV. Developing policy responses to current global challenges

A. Financing affordable housing and infrastructure in the context of sustainable urbanization

- 27. Efforts to promote affordable housing and infrastructure must be situated in the context of wider efforts to promote sustainable urbanization. Like few other areas of urban policy, affordable housing policy must take into account the following three considerations:
- (a) In the social context of sustainable urbanization, providing affordable housing options contributes to building inclusive cities. In practice, this means enabling equal access for all urban citizens to land, basic goods and social services including shelter, water, sanitation, energy (lighting and cooking) and education;
- (b) Building economically sustainable cities means establishing structures to ensure the long-term financial viability of city administrations and the businesses and residents located in urban areas. For local governments, such viability requires the sound management of their financial operations to safeguard their capacity to accomplish the basic task in local service and infrastructure delivery. On a wider scale, national and local governments will need to enable and promote economic activities by businesses and residents that will enable them to be self-reliant:
- (c) On the environmental side, sustainable urbanization policies would first aim to establish city patterns and a spatial organization that limits the environmental impact and energy consumption of human settlements. Particular activities in this regard are transportation policies that promote the use of non-motorized means of transportation and public transit to encourage personal car users to switch to these more environmentally friendly means of transport. Other important elements are regional planning that reduces the need for commuting. When considering the quality of individual physical structures, improved construction technologies and techniques that reduce energy consumption in building construction, heating and cooling must be promoted. Most energy-saving measures also have positive cost implications and provide direct social and economic benefits.

B. Responses by UN-Habitat in the context of promoting financing of affordable housing and infrastructure in developing countries

- 28. From the perspective of UN-Habitat, the current financial crisis does not cast doubt on the value of efforts to expand access to financial services for the poor in developing countries, but rather underlines the need for engagements that combine policy and advocacy activities with the provision of technical assistance and catalytic capital for demonstration projects in collaboration with communities. Expanded efforts are needed by organizations such as UN-Habitat to ensure that investments keep flowing to housing so that the living conditions of the poor continue to improve.
- 29. Future UN-Habitat efforts will include building on the experiences of other stakeholders such as the United Nations Capital Development Fund and the United Nations Advisors Group on Inclusive Financial Sectors, presentations on which were made at the Follow-up International Conference on Financing for Development to Review the Implementation of the Monterrey Consensus, held in Doha in

November–December 2008. Consistent with past and current efforts, emphasis will be placed on the following key areas:

- (a) Demonstration of sound procedures through experience with experimental activities in housing and infrastructure finance delivery that feature a strong internal credit culture and functional separation to enable independent lending decisions. Such procedures will result in development projects that are in line with international best practices in banking and technical implementation;
- (b) Normative engagement in partner countries with the aim of establishing policy frameworks that are conducive to public and private investment in housing and infrastructure;
 - (c) Global advocacy and dialogue.
- 30. These efforts are based on the following principles:
- (a) National policy and the mobilization of domestic public and private capital to advance housing and infrastructure finance, linking public affordable housing finance activities to private sector affordable housing development and finance, are important and should be emphasized;
- (b) Policy and advocacy activities should be combined with the provision of catalytic capital, i.e., capital that is lent to local domestic and regional financing institutions that in turn lend it for demonstration projects implemented in close interaction with communities and with complementary technical assistance;
- (c) There should be a focus on small-scale joint ventures for community-based slum upgrading and urban development financing implemented in the context of the work and affordable housing finance programmes of international partners and regional development banks;
- (d) Sound procedures should be mainstreamed in housing and infrastructure finance operations and projects.
- 31. The mainstreaming of sound procedures in demonstration projects and experimental activities in housing finance is being undertaken in the context of the UN-Habitat Slum Upgrading Facility, based on Governing Council resolution 20/11 (Strengthening the Slum Upgrading Facility of the United Nations Habitat and Human Settlements Foundation). UN-Habitat is also testing experimental reimbursable seed-capital operations and other innovative financial operations in accordance with resolution 21/10 on strengthening the Habitat and Human Settlements Foundation and experimental financial mechanisms for pro-poor housing and infrastructure.
- 32. The central objective of the Slum Upgrading Facility is to work with domestic financial institutions and community organizations to mobilize local domestic capital for slum upgrading and related infrastructure activities through a blending of grants, capacity-building and technical assistance for poor urban communities and municipalities. The objective of testing experimental reimbursable seeding operations and other innovative mechanisms is to experiment on a small scale with experimental loan operations and other innovative mechanisms for enabling access to housing finance and to strengthen institutional capacity to leverage the contributions of communities, local authorities, the private sector, Governments and international financial institutions. Both initiatives are implemented in close cooperation with existing international development actors in housing finance.
- 33. Since providing financial services to the poor can be a risky undertaking from the perspective of conventional banking practice, UN-Habitat requires sound analysis and transparency with regard to the risks involved. This enables informed and sound decisions, serving both the interest of the lender and borrower. Building on the prudence of informal communities in developing durable solutions to serve their own needs will be a key element. Experience so far shows that pre-investment activities are central for developing the right products and projects for low-income dwellers. Important elements are to combine provision of loans with technical assistance and capacity-building and to apply sound procedures and due diligence to the selection of borrowers and implementing partners.
- 34. In resolution 63/221 the General Assembly requested UN-Habitat, within the framework of its experimental reimbursable seeding operations for housing finance, and in close collaboration with international and regional financial institutions, to document and disseminate lessons learned, bearing in mind the provisions of resolution 21/10 of the Governing Council of UN-Habitat and fully taking into account the recent housing finance crisis, as well as other relevant factors.

35. In the light of the above-mentioned General Assembly resolution one response to the current crisis might be to establish a global network for housing and infrastructure finance experts and create an online database to document and exchange experiences on innovative models for low-income housing and infrastructure finance applied by UN-Habitat and other organizations worldwide.

C. Normative work in partner countries for establishing policy frameworks conducive to affordable housing

- 36. Beyond operational activities in housing and infrastructure finance, UN-Habitat will continue to engage with other global organizations, partner Governments and the private sector in developing countries to establish policy frameworks that are conducive to investment in affordable housing and to apply innovative mechanisms for housing finance for low-income citizens. In particular, a key question is how developing countries can encourage expansion of the banking sector and outreach to the poor in housing finance while avoiding the negative and irresponsible practices that occurred in Western countries. Another strategic area is assistance to partner countries in the development of efficient public incentives for private sector investments in housing and infrastructure (Governing Council resolution 21/7).
- 37. General Assembly resolution 63/221 re-emphasizes the need for these activities. It calls upon UN-Habitat to strengthen efforts to coordinate and implement its normative and operational activities through the enhanced normative and operational framework elaborated in the medium-term strategic and institutional plan, reinforcing its normative activities, and invites all countries in a position to do so to support the activities of UN-Habitat in this regard.

D. Global advocacy for dialogue and economic recovery packages with a focus on housing and infrastructure investments

- 38. A third key response of UN-Habitat to the financial crisis is global advocacy and dialogue. At the recent fourth session of the World Urban Forum in Nanjing, China, UN-Habitat began to facilitate a dialogue with key stakeholders on the impact of the financial crisis with a special session on housing finance and national policy and systems. Based on the recent experience of the Central Bank of Thailand, this session concluded that real-time and transparent information on the financial environment helped to ensure the stability of domestic markets. The model presented may serve as a blueprint for a network of practitioners dealing with financing affordable housing and infrastructure.
- 39. Against the background of the current global debate on new international rules and agreements for financial markets, UN-Habitat will invite the World Bank and the International Monetary Fund to future meetings of such bodies as the Governing Council to engage in dialogue on the implications of a new international financial architecture on housing and infrastructure finance in developing countries and to stress the importance of the sector.
- 40. In the context of the United Nations family, UN-Habitat will also lobby at the international level to ensure that rescue packages for banks and other financial institutions are inclusive of guarantee or other support mechanisms for developing countries if such support is needed. While developed countries are currently preparing economic recovery packages with a strong focus on public infrastructure there are no such plans under way for developing countries, where they should be considered equally necessary. UN-Habitat will encourage the World Bank and the International Monetary Fund to initiate such programmes and to emphasize the mobilization of housing and infrastructure investments.

V. Questions for debate on affordable housing and infrastructure finance

- 41. A number of questions could be considered by the Governing Council as a means of framing the debate on the impacts of the financial crisis on financing affordable housing and infrastructure. Such questions could establish a common ground on the importance of past experiences in affordable housing and inspire the debate about the actions and policy responses that can be taken to tackle current challenges. With this in mind the Governing Council may wish to consider the following questions:
- (a) How do we continue to develop and disseminate financing methodologies for affordable housing and neighbourhood infrastructure?

- (b) Assuming that community-led housing finance schemes are working and that savings schemes are the bedrock of financing affordable housing but require better understanding and facilitation by Governments if they are to be scaled up, how can these initiatives be integrated into pro-poor housing finance policies?
- (c) Considering that there is no single solution and that local circumstances will determine to a large extent the variants of business plans for finance, how can universal standards and practices for due diligence, transparency and accountability be mainstreamed at the national and local levels?
- (d) If the global credit crunch is the result of a loss of confidence in lending practices, in the first place for housing and later generally, how do we restore confidence, assuming that building confidence is the first step in building housing finance systems and that there is a need for sound regulatory framework to build and maintain this confidence?
- (e) Can renewed confidence be built upstream at the municipal, district and national levels and thus contribute to fixing the global credit crunch as a means of building confidence generally?
- (f) No network currently exists for sharing knowledge and information on financing affordable housing and neighbourhood infrastructure. Who should rectify this and what can UN-Habitat do to help?

VI. Challenges and opportunities for financing affordable housing and infrastructure arising from climate change

A. Impacts of climate change on promoting financing for affordable housing and infrastructure

- 42. Cities are facing various problems as a result of climate change, including natural disasters such as drought and flooding. Ninety per cent of disasters are now weather-related. This induces the migration of people which, in turn, contributes to the creation of slums in urban areas. Moreover there is a growing concern about the implications of climate change on human security and the availability of food and water. The challenges are not just a result of natural hazards, however: they also stem from deficient urban management, inadequate planning and construction, unregulated population density, exploitation of local environments and inadequate infrastructure and services.
- 43. The increasing number of natural disasters and changing regional climate patterns require a wide range of adaptive and mitigation measures. The costs of disasters for human settlements, people and properties are evident and immediate, and the poor and vulnerable in developing countries are the worst hit. This requires new thinking on humanitarian assistance with an emphasis on what is termed "building back better", or reducing the likelihood of shelter and infrastructure damage from a new disaster. Existing housing and infrastructure will require extensive modifications since the urban poor, particularly those in slums, will be highly affected by the negative implications of climate change and the social costs.
- 44. Excessive, often seasonal, rainfalls can contribute to flooding and overpower city sewerage systems. This can cause increased health service costs in cities by promoting the spread of diseases such as cholera, which are especially dangerous in densely populated areas. At the same time, long rainfalls increase the risk of landslides and floods, which destroy infrastructure and buildings and therefore have substantial cost implications.
- 45. The medium- and long-term impact of climate change on cities and the associated costs for urban development are therefore far-reaching. Mitigation and adaptive measures are costly in the short term when compared to inaction but in the long term the financial and humanitarian cost of negligence will be even higher. Although some disasters are inevitable the cost of future disasters can be reduced by properly approaching urban planning and housing development. Efforts to tackle the causes of climate change within the wider perspective of climate change will, however, require extensive resources in urban development and housing since cities as a whole are a major contributor to greenhouse gases. Investments will for instance be necessary for more energy-efficient buildings and public transportation infrastructure, together with improved urban planning to cope with the challenges and opportunities that arise with developing human settlements in the twenty-first century.

B. Policy responses by UN-Habitat

46. There is increased recognition that cities play a significant role in contributing to and addressing climate change. In the light of this the General Assembly provided as follows in resolution 63/221:

The General Assembly,

[...]

Encourages governments to promote the principles and practice of sustainable urbanization and strengthen the role and contribution of their respective local authorities in applying those principles and practice, in order to improve the living conditions of vulnerable urban populations, including slum-dwellers and the urban poor, and as a major contribution to mitigating the causes of climate change, adapting to the effects of climate change and reducing risks and vulnerabilities in a rapidly urbanizing world, including human settlements in fragile ecosystems, and invites the international donor community to support the efforts of developing countries in this regard.

- 47. Through its Cities in Climate Change initiative UN-Habitat is contributing to the strengthening of national and local government capacity to adapt to and mitigate the risks associated with climate change. UN-Habitat policy responses include undertaking policy analysis through national and city climate change assessment; developing policy tools for cities; promoting research and knowledge sharing; supporting cities in translating policies into strategies and actions; assessing affordable energy-efficient building materials; and identifying possible financing mechanisms and microinsurance demonstrations.
- 48. UN-Habitat continues to work with other United Nations entities by pointing out risks that cities face and highlighting best-practices for mitigating or preventing disasters. In line with the Climate Change Action Framework of the United Nations Chief Executives Board, UN-Habitat recognizes the need to build capacity in developing countries to assess investment and financial flows to respond to climate change; to help developing countries vulnerable to climate change to design better strategies for adapting and for understanding the costs involved; to assist developing countries in leveraging carbon finance for clean energy development and sustainable land use practices; to work with municipalities and enterprises to broaden public-private partnerships; and to support efforts to customize new insurance and re-insurance products for climate-change risk. Such efforts would further enhance the development of methodologies and tools for supporting national and local governments in their efforts to access financing for policy change at both the international and local levels and local authorities in their efforts to leverage new sources of financing for climate change strategies and actions. UN-Habitat also recognizes the need to mainstream energy efficient measures into existing national and local building norms and codes.
- 49. There are other policy responses that would support climate change adaptation and mitigation measures at the regional, national and city levels and substantial gaps in national and local government knowledge of both mitigation and adaptation measures that need to be filled through financing capacity-building initiatives.
- 50. In the context of the United Nations "Delivering as one" initiative, UN-Habitat advocates the following policy responses on adaptation factors:
- (a) Pre-assessments are imperative for effective adaptive interventions and early action and should be carried out routinely. They do not need to be costly. Price-based policy instruments are essential to successfully tackling climate change. Investments in greening housing, human settlements and infrastructure can be recouped in a few years if they are based on scientific assessments;
- (b) Long-standing mechanisms such as disaster relief payments and insurance programmes affect adaptive capacities and should be made more widely available;
- (c) Cities in coastal regions need to be protected from rising sea levels by dykes, especially in areas that are extremely prone to floods, such as delta and coastal regions. Although many technologies and financing for climate change mitigation exist, they are not affordable at the national and city levels and therefore are not being used extensively;
- (d) Regions that face low levels of rainfall are prone to problems such as water scarcity and stress, food shortages and forest fires. If groundwater levels are tapped excessively there is the danger of decreased capacity or depletion and saltwater intrusion in coastal areas, which makes well water

unsuitable for drinking or irrigation. Emergency plans and improved water supply and saving systems are needed;

- (e) National and city-level decision makers need additional information about the vulnerability of major infrastructure, including energy systems, transport systems, communication networks and building stock. They also need support for developing adaptation strategies. Infrastructure and city planning should aim at reducing carbon dioxide output. This includes the promotion of public transport systems and the creation of incentives. The main tools here are tax levels and subsidies, together with the creation of physical infrastructure that promotes carbon dioxide efficiency. Cities should plan their growth so that people's workplaces are close to their homes.
- 51. Key policy responses on climate change mitigation factors include the following:
- (a) Cities will be required to participate in carbon finance, cap-and-trade mechanisms and global reporting initiatives as the world moves towards carbon-constrained economies. Large cities have a responsibility to mitigate climate change and to report on their efforts to do so;
- (b) Cities can contribute indirectly to the prevention of climate change by reducing greenhouse gas emissions and energy consumption in buildings, especially through the burning of fossil fuels, the consumption of energy during the use and maintenance of buildings, and the choice of building materials and construction technologies. Cities should create incentives for citizens to save energy and build in an energy-efficient and climate-friendly way, through the choice of proper building materials and construction technologies, the proper insulation of buildings and the promotion of renewable energy sources such as solar energy for lighting and water heating. UN-Habitat advocacy for long-term development thinking is integrated into humanitarian responses to ensure that climate change mitigation is part of shelter emergency response.

C. Opportunities to tackle the impact of climate change on financing for affordable housing and infrastructure

- 52. The prevention of greenhouse gas emissions through infrastructure investments and building insulation is costly. Therefore governments, national as well as local, may be reluctant to spend on measures that have long-term and low profile visibility as compared to more visible immediate-effect projects. Financing should be available to support national and city governments in developing countries to leverage carbon financing for clean energy development and sustainable land-use practices. Such measures are aimed at reducing the greenhouse gases and energy waste of cities, thereby counteracting climate change. Financing for such measures can also come from private sector banks and construction entities on a commercial basis. Therefore, besides the challenges arising from climate change on financing affordable housing and infrastructure, the current debate at the global level also presents opportunities for the work of UN-Habitat and other organizations to tackle the issue.
- 53. Consideration should be given to the innovative use of low-cost and carbon dioxide efficient building materials and construction technologies such as indigenous building materials and stabilized soil block construction in order to make green options more affordable. Overall, investments should enhance collaboration with municipalities, small and medium enterprises and other local stakeholders and promote broad engagement and competitiveness within cities that promote public-private partnerships.
- 54. The emerging systems of transferring carbon credits can also be applied in the urban sector to support energy saving investments in buildings and local infrastructure. While such measures can be targeted at addressing the enormous backlog in many developing countries, they can also be used to support necessary investments in developed countries. Carbon credit transfers can therefore be developed into a universal funding source for measures that reduce greenhouse gases in the urban sector. Examples are funds for upgrading existing buildings to reduce energy demand for lighting, cooling and heating, introducing new transportation options such as light rail or extensive networks of bicycle paths or establishing systems for water conservation, which lead to lower operations costs for utilities and expenses for consumers.
- 55. A debate on the financial impacts of climate change can also promote solutions, which do not require substantial resources but rather a change of behavioural patterns and policy practices. Particular examples are more efficient processes and models for construction and maintenance of buildings and infrastructure. At the city level, potential options are more compact and dense urban development patterns, which reduce the need for commuting and energy consumption of buildings, for instance through row-house designs versus detached houses.

- 56. Besides improving quality of life in urban regions, efficient infrastructure and environmentally sound city planning will also contribute to the competitiveness of cities and their ability to cope with growing populations and congestion problems arising from more residents and more cars. Every hour residents spend in traffic jams not only has environmental effects but also means lost time for the economy and lost personal resources and reduced quality of life. At the same time, clean development mechanisms and the greening of human settlements infrastructure can create new business opportunities.
- 57. In the context of global efforts, it has to be demonstrated to national and city governments that in the long term the reduced spending on energy will contribute to economic development of a region since more money can be spent on investments instead of energy consumption. The use of renewable energies also diversifies the energy portfolio of regions and cities and therefore its resistance to external effects such as unpredictable oil prices.
- 58. Overall, attaining substantial reductions in greenhouse gases emissions requires not only a strong sense of moral responsibility and political sensitivity, but also comprehensive application of economic and legislative instruments at the national and local levels, such as the review of building by-laws.

VII. Questions for debate on cities and climate

- 59. As suggested in chapter V, the Governing Council may wish to consider the following questions as a means of framing its discussion on developing policy responses to the implications of climate change for financing affordable housing and infrastructure:
- (a) In the context of housing and urban development, can economic development and environmental protection create synergies (employment, investment and sustainability) or does one hinder the other?
- (b) What changes are required in financial policies, institutional capacities, technology availability and education to better address the impact of climate change on housing and urban infrastructure?
 - (c) How should cities prioritize climate change investments given their limited resources?
- (d) Can on-site upgrading of slums contribute to reducing carbon dioxide emissions, thus mitigating the environmental impact of high-density areas of cities?
- (e) What are the market and public sector incentives that can efficiently prompt the relocation of slum dwellers and economic activities to less vulnerable parts of urban areas?
- (f) How can cities promote and encourage the use of affordable and sustainable building materials and construction technologies in order to mitigate the effects of climate change? Should public financial support for housing construction be linked to environmental standards?
- (g) How can cities more easily access financing from the Clean Development Mechanism and how can carbon financing be more efficiently applied to adaptation and mitigation projects in developing countries?
- (h) What are the possibilities for the private sector to finance the costs of adaptation and mitigation, especially in the form of improvements in urban infrastructure and informal settlements?

VIII. Conclusions

60. In conclusion, the response of UN-Habitat to the global economic crisis focuses on two actions. In the context of existing operational activities, a first key action is to strengthen efforts to demonstrate and disseminate knowledge about the importance of community-based pre-investment work, sound procedures and capacity-building in designing and implementing projects for financing affordable and environmental friendly housing and infrastructure through its experimental field activities such as its slum upgrading facility and experimental reimbursable seeding operations and other innovative financial mechanisms.

- 61. In terms of normative activities in countries and global advocacy, UN-Habitat will have to continue to advocate for policy frameworks that are conducive to public and private investment in affordable housing and basic infrastructure. In relation to potential economic recovery and reinvestment plans targeting economic decline in developing countries, UN-Habitat will stress the emphasis of housing and infrastructure investments as engines of growth and important means of poverty reduction.
- 62. With regard to promoting global advocacy UN-Habitat, through the Sustainable Urban Development Network, will provide a coherent framework that will enable global, regional and local partners to understand, contribute to and gain access to knowledge, tools and information on possible financing mechanisms to advance the efforts to achieve sustainable urban development.
- 63. To tackle the economic and financial implications of climate change, UN-Habitat must continue to engage with both national and local governments and provide the support necessary for strengthening their capacities to promote pro-poor clean and affordable technological options through education and training on climate change mitigation and adaptation strategies. This will include institutional capacity development to ensure that governance structures and systems have sufficient flexibility and are sufficiently forward-looking to embrace planning and resource allocation for climate change mitigation and adaptation.

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