UN-HABITAT and Climate Change Mitigation

UN-HABITAT made a presentation on "Climate Change mitigation trough Urban Planning and Development" at a mitigation workshop held during the twenty-sixth sessions of the Subsidiary Body for Scientific and Technological Advice (SBSTA) and the Subsidiary Body for Implementation (SBI) of the United Nations Framework Convention on Climate Change (UNFCCC). The presentation, given by Mr. Guenter Karl on behalf of UN-HABITAT's Executive Director Mrs. Anna Tibaijuka, is summarized below.

Climate Change Mitigation through Urban Planning and Development

Urban planning has become increasingly important since, in 2007, 50% of the global population is considered to be living in urban areas. Urban planning has a direct impact on climate change because well-planned cities provide a better foundation for sustainable development than do unplanned cities. Urban areas are major emitters of greenhouse gasses (GHG), therefore having a significant impact on climate change. As expressed in the Habitat Agenda under the Global Plan of Action: Strategies for Implementation, UN-HABITAT believes that in order to deal with climate change effectively urban development through proper urban planning is the key. The Agenda, adopted by all member states of the UN, states Habitat's commitment to sustainable energy use and sustainable transport, key issues in climate change mitigation as well as key elements of urban planning. As a result of this mandate, UN-HABITAT must work with Habitat Agenda partners to use urban planning and development as a mitigation measure for climate change.

Besides the overall umbrella entry point of urban planning and development, there are four other entry points to deal with sustainable urban development. These are transportation, home and office buildings, industrial production and poverty reduction. Each of these entry points are major causes of greenhouse gases and therefore climate change. If each entry point is well planned, they can each greatly impact on climate change mitigation.

Transportation offers huge opportunities for advancement. Encouraging carpooling and the use of energy-efficient vehicles through incentives/disincentives (ex: offering parking lots near office buildings to those who use these transport methods) is one strategy that will reduce GHG emissions. Mass and alternative transportation options are a second strategy that will reduce the reliance on personal vehicles. These options will also encourage people to move closer to the downtown area so they can have access to these opportunities, thus reducing the need for personal vehicles and reducing travel times.

Encouraging people to move away from areas outside the city, reduces the urban sprawl, increases the density in city centers thereby increasing the need for well planned

construction and renovation of buildings in these areas. Buildings, both commercial and residential are another major cause of climate change. The use of legislation to create environmental standards that all new buildings must meet is one method of reducing the impact. Unfortunately it is the older buildings that are the major cause of emissions therefore it is necessary to create incentives for renovating and upgrading these buildings. Incentives could include encouraging the use of recycled building materials, the purchase of energy efficient appliances and technologies or offering free home/office energy audits.

Free energy audits and other such incentives also could be part of the solution for industry. Industrial production emits significant amount of GHGs and educating and informing industry where there are energy losses that could turn into gains is a viable option for mitigating climate change. This could include waste heat recovery that could be reused as a source of energy. Encouraging the use of energy efficient systems by showing the longer run financial benefits or through incentives can also induce industry to opt for sustainable business practices. Disincentives are another means of mitigating of climate change within the industrial sector, for example, increasing charges or fines for the use of unsustainable practices and for exceeding emission levels.

Poverty reduction is the final entry point into sustainable urban development under the umbrella of urban planning. As long as there is poverty, there is a percentage of the population that, no matter what incentives/disincentives are given, will not see the environment as a priority. They have no choice but to use the cheapest energy options, for example, which are usually the most environmentally harmful (ex: charcoal). Approaches that can be used to mitigation climate change within this percentage of the population include educational and training initiatives on the environment and sustainable urban development. Though they may not have an option at that moment, as poverty is reduced, they will be better able to make the proper decisions. The major concern is the poverty itself and without its reduction, mitigation of climate change will never be realized. It is therefore imperative that Habitat Agenda partners continue their work on poverty reduction through the many mechanisms in place and by partnering with one another to develop new means of tackling the poverty reduction issue.

Developing countries are a stakeholder in climate change mitigation that needs special emphasis. Currently they are emitting 25% of the GHG emissions but receive as much if not more of the implications as the developed countries. Therefore it is imperative that developing countries are included in the discussions and strategies on climate change as they will become increasingly important as they continue to develop and grow. This fact has not been fully recognized. With their resource limitations they are unable to take the necessary steps needed for mitigation. Developing countries need support in their efforts and to be given incentives to use sustainable technologies and practices during this high growth period. They have a unique opportunity, if they plan correctly, to avoid the mistakes made by the developed countries. The technology and information is available and if they are able to use these mechanisms, they will be able to develop sustainably from the outset and avoid having to restructure and rebuild in the future.

Government's role in climate change mitigation is different at different government levels. At the national level, they must create policies, incentives and disincentives that encourage sustainable urban development. They must also incorporate environmental education/training in all elements of the educational system, from primary school through to adult education programs (continuing education). The local level's role includes enforcing policies and regulations (ex: restricting urban sprawl). It is local government who must set the future growth strategies through urban planning. They have the ability to create mass/alternative transportation systems.

The private sector must be involved in the mitigation of climate change as well. Though they must stay within the rules and regulations set by government, this is not their only role. They must continually research and create alternatives to the harmful technologies and products/services currently on the market. A profitable approach that the private sector should use is the creation of business opportunities that promote sustainable urban development and the use of technologies/products/services that reduce their impacts and save them money. Partnering with the public sector will make the transition to sustainable business practices much easier and more successful.

Youth are a large percentage of the population, especially in the developing countries, therefore must be a major stakeholder in the mitigation of climate change. It is the youth that will be around as the effects of climate change are felt more significantly. Their role includes educating others on climate change and possible mitigation measures. They must pressure the private sector through their purchasing power, demanding that the private sector take notice of the impact they are having and take action to prevent this impact. They must also pressure the governments and the private sector through lobbying for greater environmental standards and measures. Finally, as they join the labor force, they can create sustainable businesses and encourage sustainable activities within their businesses/personal lives.

UN-HABITAT's roles include enabling the Habitat Agenda Partners to implement the mandate of the Habitat Agenda, adopted by 196 UN member countries, on sustainable energy use and transportation systems. UN-HABITAT is mandated to address the issue of climate change in the context of urban planning and development. However, it needs other Habitat Agenda Partners in order to achieve progress in that area, therefore its major role is catalyze partnerships with UNFCCC, UNEP, local authorities, youth and other relevant stakeholders to mitigate climate change and encourage urban planning.

Well-planned cities are an efficient us of space and energy. They cluster large groups of people together, reducing the need for transportation and infrastructure to provide the basic services that the population requires. All stakeholders have roles they can play to encourage the activities within the four entry points, transportation, home/office buildings, industrial production and poverty reduction. Some of these roles include the creation of incentives/disincentives, education and training on climate change mitigation strategies and the research, creation and promotion of new technologies that improve the environment. Many technological solutions however, are available for climate change mitigation, especially in developed countries. The problem is that these technologies are

not being used on a wide enough scale to generate a significant impact. These technologies need to become affordable and practical in order to receive widespread application. Developing countries must be given special emphasis. They must be given the opportunity to use these technological solutions and the lessons learned from the past and must be supported in their efforts by developed countries. Partnership among stakeholders is therefore a basis for the mitigation of climate change. UN-HABITAT is prepared to pay special attention to this issue and encourages Habitat Agenda partners to approach them with ideas for partnering on the sustainable urban development and urban planning aspects of the climate change issue.