Integrated Solutions for Livable and Sustainable Cities – Is Urban Change Possible?

During the first week of July a record number of 15,000 community leaders, experts and delegates from around the world, among them 100 mayors and governors, ministers and government officials gathered in Singapore to attend three major global events addressing the pressing urban challenges of today- the World City Summit, the Singapore International Water Week and the CleanEnviro Summit Singapore.

The focus on finding integrated solutions stems from a rising recognition of the complexities of urban growth and the necessity of implementing new networking and collaboration platforms in the field of city planning, water management and environmental governance. Addressing more than 5000 public sector, trade and professional visitors Mr. Andrew Tan, Chief Executive Officer of the National Environment Agency introduced the challenges that prompted the creation of a CleanEnviro Summit annexed to the World City Summit: “With the increasing number of mega-cities in Asia coupled with growing population and affluence in these cities, waste volumes are expected to increase exponentially in the next ten years. According to a study done by the World Bank this volume is expected to double to 2.2 billion tons by 2015. This will put immense pressure on the existing waste management infrastructure and will pose serious public health and environmental consequences, and undermine the basic foundations of Asia’s growth – safe, clean and livable cities.”

The other adjoining conference – the International Water Week was opened against the continuing backdrop of another looming crisis – the increasing water scarcity worldwide. By 2030, water supply could face a 40% shortfall, with the world’s food needs growing by as much as 50%. With the global industrial water

Dr. Kjell Skjellstad, Professor Emeritus, University of Oslo, Department of Musicology, Norway
sector ranking second in water consumption, consuming an estimated 25% of the global water demands, key industries in the oil and gas, mining, food and beverage and chemical sectors are being forced to seek innovative solutions to improve water sustainability across societies at large.

The 2012 Singapore World City Summit, based on the theme of ‘Livable and Sustainable Cities - Integrated Urban Solutions”, offered, according to the program, a platform for dialogue and learning through sharing of best practices. To promote and showcase model cities ‘best practices and innovative urban solutions, the Lee Kuan Yew World City Prize was created in 2010 with the Spanish City of Bilbao awarded as the first Prize Laureate for its significant urban transformation over 25 year (see JUCR vol. 1).

After careful review and selection from 62 submissions representing 27 countries the 2012 Prize was awarded to the City of New York through its Mayor, the Honorable Michael R. Bloomberg and the Departments of Transportation, City Planning and Parks and Recreation for defining “a bold vision” for the city’s future. “Building on the foundation of crime reduction and other urban initiatives of earlier administrations, the leadership of Mayor Bloomberg and his commissioners have altered the landscape and notably renewed confidence and optimism among New Yorkers for their city’s future.” The citation goes on to praise the comprehensive scheme of creating a green city contained in the project PlaNYC.

Six other cities were elected for special mention, among them Ahmedabad in the Indian state of Gujarat, acclaimed for its program of urban regeneration, including water treatment, water drainage, urban transport, pollution control and housing for the poor. An estimated 2 million people, or close to a third of the city population were living in slums. Ahmedabad’s strategy for the urban poor included an ambitious plan now being implemented to construct 100 000 two room houses on free land with all infrastructures.

Deeds to new occupants are given in the name of the wife to promote gender equality, with only 15 % of the construction cost to be paid back in the form of a long term loan. In addition a youth occupational training program has so far
resulted in 20,000 well-paid jobs for slum youth.

Another urban regeneration program has been developed in the greater Cape Town area of South Africa short-listed for exceptional recognition through a process of intense consultation with the residents of Khayelitsa, a township or rather a sprawling suburban settlement of 700,000 inhabitants with endemic unemployment and with the highest murder rate in Western Cape Province. Murder, robbery and intra-family violence often went unreported. A project VPUU – Violence Prevention through Urban Upgrading (2006 – 2014) aimed at upgrading public areas, providing new facilities for recreation, institutions of learning and sports facilities, all based on the cooperation of local residents has this far (2012) led to a 33% reduction in the murder rate.

Half of the citizens now confirm they feel safer in their environment. Families benefit from the basic services that are provided and not least from the reduction of gender-based violence. At the Singapore presentation the project chair Michael Krause asked the pertinent question: With a funding of only 60 million Euros, mainly through the German Development Bank would this remarkable process of urban upgrading be possible without broad community involvement?

Returning to the grave and steadily increasing problem of waste disposal discussed at the opening of the CleanEnviro Summit, a remarkable inclusive solution was presented by Ilmar Reepalu, the Mayor of Malmoe, a city in southern Sweden with about one million inhabitants. Whereas 97.6% of city waste were disposed of in landfills during the 60s, landfills today only account for 2.4%, the rest being converted into electricity (10% of city needs), providing biogas for all running city buses and central heating for 60% of all city homes.

Figure 2. An indoor vertical agriculture unit.

A companion to World City Prize – the Lee Kuan Yew Water Prize 2012 was at a special ceremony awarded to Professor Mark van Loosdrecht for his development
of Anammox, an innovative biological process to remove pollutants from used water. The process uses bacteria to convert the pollutant ammonia into harmless nitrogen, a short-cut of the natural nitrogen cycle. This short-cut means that less energy is required to complete the cycle, offering water utilities a cost-effective, low-energy and sustainable means to treat waste water.

It is a sobering thought that by 2005 1,800 million people will be living in countries with absolute water scarcity, and that industry already is consuming twice as much water than is used by households. A major investor like the Norwegian sovereign wealth fund are now putting pressure on companies to quantify and reduce their water risks, while the public is expecting companies to use water in a sustainable way as a public commodity. It all boils down to implementing corporate social responsibility. As it was pointed out at the 3. July Keynote Plenary, time is rapidly running out. The proportion of people living in our cities is expected to grow to 75% by 2050. All the while water use has been growing at more than twice the rate of population increase in the last century. Accelerating urban population growth will put extreme pressure on our cities. While business, government and the public sector work along different timelines in finding solutions to urgent urban problems, time is in fact running out for concerted action to prevent our cities from becoming living nightmares.

Exploring and implementing integrated solutions will require radically greater corporate social responsibility, not least within developing nations. It is time to recognize that many of the recent achievements celebrated within the sector of urban development have been made possible only through the loss of social cohesion and cultural continuity. And on this arena the experiences gained through 10 years of our Urban Research Plaza points to alternative avenues toward successful urban sustainable development. Integrated solutions will have to be based on social responsibility and cultural sensibility.

We strongly believe that on the social arena city administrators and corporate managers will have to seek new and creative solutions, developing a global partnership toward fulfilling the UN Millennium development goals, first and foremost ensuring environmental sustainability, providing for the eradication of extreme poverty and hunger, achieving universal primary education and promoting gender equality.

On the cultural arena, awarding the first World City Prize to Bilbao at the World City Summit in 2010 indicated a readiness to accept the creative sector as a key player in promoting inclusive urban regeneration and city vibrancy. Many of the success stories of urban transformation displayed as models at this year’s World City Summit were only possible through sustained cooperation with the arts community based on a shared vision of active citizenship unfolding within a creative urban space. On behalf of the JUCR Editorial Board I hereby invite our readers to submit similar stories from their own environment. Thank you.