SUSTAINABLE CITIES: THE ROLE OF URBAN DESIGN IN CREATING 'PEOPLE'S CITIES'

Janaka Wijesundara,
University of Moratuwa
Email: jwijesundara@uom.lk

Abstract

Today some cities of western countries have experienced the signs of becoming less popular and in extreme cases, the people have abandoned them because of the mismatches of socio-economic aspirations, incompatible values and the absence of meaningful life. The feeling of frustration, distress and higher crime rates are apparent in those cities. The desires to socially interact, live safely, be an active part of the city, and stand for their identity are priorities of people at all time. In this, urban design involves with a vital role in creating environments that support community sustainability by successfully integrating urban spaces into businesses, living and leisure.

Cities in South Asia are formed with unique socio-cultural living models. However with the effects of globalization, these cities got started to loose with their community identity, people's confidence, their aspirations and the distinctiveness. Environmental and social problems within the cities are growing, especially in developing countries. The contemporary planning and development trends have made these cities a rather typical space with lesser diversity and spirit. The quality of life of the people of the cities is questionable. The observations prove that generally, the Sri Lankan contemporary urban centers, being stereotyped, do not foster the communication between urban space and city users, and thus fails to happen to be a livable space. In this, what sustainable city strategies can offer? Can effective urban design bring answers for managing the livability issues? What are the current trends of Sri Lankan city?

This paper reviews the eco-city living concepts, specially focusing the urban design ideas and strategies for sustainable urban developments in viewing the social dimensions of the city. This will also review the contemporary public realm development trends in the Sri Lankan city.

Keywords: Eco-city, urban design, city people, sustainable cities, sense of place

1. Introduction

The concept of eco cities is introduced as a popular strategy in dealing with sustainable issues in cities. Though the term "eco-city" emerged during the latter part of the 1980s, the ideas related to the concept of eco-city such as "Garden City" or "Green City" concept have been around for many years. During the past, the meaning of eco-city has changed, with the expanding concerns of environmental issues, and with changing priorities in national and international environmental policy (Glasbergen P. and Blowers A, 1996). During the 1960s and 1970s, the objective of the eco-city was simply to make the air, water, and soil clean again. At present in the 21st century, the realization of eco-city requires the integration of multiple environmental objectives such as mitigation of climatic change, bio-diversity conservation, and sound material cycles with the objectives of economic growth and livability in cities.

However in the context of today's sustainability, the community sustainability, particularly the people's dimension, mostly associated with community values, the cultural identity, social uniqueness, ethnic distinctiveness, sense of place, people's friendly streets, and the community belongingness have been severely affected within the process of globalisation (Butterworth Iain, 2000). This situation has resulted high crime rates and violence in cities, for example as observed in number of cities in USA recently (Buzzle, 2012). Though those cities deliberate having environmentally and economically sustainable concepts, they may not be seen as 'people's cities'. Those built environments create segregation and self-segregation, contributing to social exclusion Rogers Richard (1997). This has impacted the overall achievement of the sustainability. Maureen Williams writes: "Socially sustainable communities have the capacity to deal with the change and to adapt to new situations, attributes that are now becoming increasingly essential in a globalized world" (Maureen Williams, 2003).

In that, how the eco city concepts and strategies should address such issues? What would be the role of urban design in impacting with the community sustainability, livability and the continuity of social and cultural bearings?

2. Need of Sustainable city strategies; South Asian context

Demographics show that the number of urban dwellers in South Asia over the last quarter-century, has more than doubled to almost 500 million while in India alone, the number of city dwellers has grown by 122 million. South East Asian cities experience numerous issues in terms of their large population, services and basic necessities, infrastructure, housing shelters, community disparities, living standards, traffic, transportation and jobs. In Delhi around 600,000 households with a population of around 3 million (and ever on the increase) inhabit shanties on prime public land, amounting to about 4,000 hectares (Anil Laul, 2002). Pakistan which has 50% of people residing in towns of 5,000 people or more has 1.6% annual population growth rate.

Nonetheless, the records confirm that urbanization in South Asia is yet to begun and which is the least urbanized region in the world with its 30% of urban population (Yue Li, 2012). In the future years to

come, it is predicted that South Asia will have a much faster urbanization rate than any other region of the world, with the exception of East Asia. This rapid urbanization can be a powerful engine in accelerating poverty alleviation. In addition to this, the vibrancy of cities, socio-economic dynamics, and the kinetics of cities will be an enormous lead for this.

In spite of this, most cities in the region are struggling to cope with even the current level of urbanization which has impacted on the unique living patterns of city people. During the past, though planners, administrators, sociologists and architects have attempted to tackle with the urban issues intermittently, the only way to embark upon it is to comprehend it completely and above all, to have a holistic approach, together with the backing of a multidisciplinary team of professionals with a strong community participatory planning and development process. In this, one has much to learn from the past and the underlying principles of "living with nature" as practiced in the Asian traditional cultures and described in ancient texts, known as the "Vastu Vidya" and "Artha Shastra" (Shamasastry, R. 1915). These forms of principles and guidelines for Sustainable Development, though mystified, exist in most developing countries, specially South East Asia and have a strong understanding of climatology, behavior of building materials and their appropriate application, respect for the natural elements and most importantly, the control of human aspirations (Anil Laul, 2002).

It is also noticeable that some South Asian cities have dramatically transformed during the past few decades. They have acquired a completely radical face mostly pursuing the western urban design and development models that seem very flashy and distant from their inherent features of social and cultural milieus and tropical environmental conditions. For instance, some parts of Kuala Lumpur and Singapore are seen with such changes. The planning and urban design principles, built form designs, scale, street characters, facades, textures of transformed cities seem alien to their social contexts. In developing countries the increasing dominance of Western values and economic systems has threatened the sustainability of traditional production systems (Glasbergen P. and Blowers A, 1996). There the social dimension will have to be one of the most important criteria that provide a sound base for the sustainability of cities. The connections between social and environmental change needs to be well-regarded in its local, social and cultural context.

3. Urban design and creating livable cities

Typically Eco City, also termed as Sustainable City, will be walkable city which is supported with efficient public transit systems and provided with mix of uses and services. People will have a range of housing options and live in safe and clean environments. The energy required by the city is produced by renewable energy sources and at all levels precautions are taken to minimize the emissions. It also a city of human scale, public space for everyday life, cultural identity and social diversity, sustainable lifestyles and a city managed by the city inhabitants (Ecocity Builders, 2012).

One of the key features of a sustainable city is that it can feed itself with minimal dependence on the surrounding countryside. The sustainable development requires a balance between environmental, social and economic sustainability, and the features referred to here should be acceptable to the people and should be in harmony with their economic development aspirations. The World Bank defines eco-cities as "cities that create economic opportunities for their citizens in an inclusive, sustainable, and

resource-efficient way, while also protecting and nurturing the local ecology and global public goods, such as the environment, for future generations" (World Bank, 2009).

Urban design aims to produce good quality and livable (responsive) urban environment. It can bring-in improvements to socio-economic and physical environments. As of today, the consideration of ecological issues in urban design is worldwide becoming a common requirement than before (Martokusumo, W, 2011). Together with the aspect of gestalt and socio-culture, ecological dimensions play a significant role in implementing sustainable urban design. A "livable city" means vastly different things for many people. In Hong Kong it might mean that one's family is in a comfortable apartment while he entertains in the exciting commercial world in a glass tower overlooking the harbor. Livability in a North American city, like Dallas, might imply living near an expressway and running the car in most days. For some, it is the possibility of lucky and lucrative business opportunities and plenty of entertaining places. Yet generally the things needed to make a city 'livable' would be the size of the city, density, sensibility, attitude, security, chaos, accessibility, human scale, mixed use, public spaces (Byrne David, 2009). It must be the people visible in cities - not the tall buildings, cars, highways, communication towers. Some of the key urban design considerations promoting social sustainability and livability of cities are;

a) Make people – their habits, routines, actions and needs for a high quality everyday life more visible in the planning process.
b) Develop data to be referred by decision makers in making choices that affect people in cities.
c) Re-imagine the role of the street, as not only corridors of mobility flow but also as a place for the flow of social, financial and political resources as well as a place of knowledge exchange. Make the street again become a valued meeting place, as it seen in older city parts.
d) Make public spaces as a platform of encouraging interaction and the exchange of ideas and networks.
e) Develop a new growth model for urban expansion that is based on streets
f) Develop new funding streams for public realm expansions realized through large public and private ventures with an equally extensive but more diversified, contextual, and incremental form of growth and expansion.
g) Apply site specificity and context when designing cities with buildings.
h) Re-discover the human scale in cities – old and newly built.
i) Learn from modern vernacular form in terms of density, proximity and scale and not purely aesthetic.

Innovative urban environments that sustain urban growth can be achieved by;
a) Setting up hybrid urban environments that bring different business types and activities together with the neighboring public realm
b) Businesses that represent and brand themselves in public through interacting architecture
c) Creating a mix of businesses, housing and culture in a vibrant and novel environment
d) Create possibilities for places of work in public spaces through innovative street designs and the creation of informal meeting spaces
e) Providing accessible facilities that can reduce the costs for businesses and
f) Providing possibilities for connections with other such shared facilities.

4. Sri Lankan Cities and Sustainability

In Sri Lanka, majority of cities have been built as political cum religious hubs since historic times. Although the cities have evolved from their historic nature to industrial and post industrial, the Sri Lankan city form virtually remains politically or religious centered. In Sri Lanka, the cities got started to expand and populated due to the urban migration from rural areas that emerged mainly during 1960's and expanded in 1980's (Mongabay). Currently Sri Lanka has 22% of urban population and around 85% of rural population from the total population (World Bank). While the country is experiencing a population increase rate of 1.6% in year 2011(World Bank), the proliferation of slums and increasing shanty population significantly contributes to the built form and social landscape of cities.

The majority of current generation of Sri Lankan city inhabitants, specially in Colombo, is originally from rural and suburban backgrounds thus their aspirations and living styles are differed to the western concepts of city living. Therefore the social and cultural perceptions of those people are mainly rooted to the rural or village milieu. At the same time many Sri Lankan cities got randomly expanded with suburban centers, like Boralasgamuwa, Nugegoda, Malambe, Thalawathugoda near Colombo, as polis of new immigrants to Colombo. It would be vital to see whether the things offered in them are complimentary to the community living. During past decades, it is seen that rather than developing the city in a planned manner, it is left to grow with lack of direction, on piece meal basis without conforming to the essence of its true values, reasons for its origin, its character, the socio-economic and cultural distinctiveness. Whereas the early suburbs of Colombo such as Slave Island, Kotahena, and Mattakuliya yet retain with such identities and seeing as vibrant community nodes of urban kinetics. There the streets are much colorful with high degree of people's presence, and quite interesting to see how they manage themselves with contemporary changes. Many sustainable community features that make a 'people's city' can be visible in these areas.

Bustling street Colombo Pettah –to be re-examined as a place of knowledge & cultural exchange

Planning of a new city or a complete redevelopment of an existing town is a rare happening in Sri Lanka. Presently there can be seen vast improvements to the infrastructure networks in the country as a whole, with a determined effort by the current regime and a massive urban area development in the city of Colombo. However we are yet to experience any strenuous effort towards the planning of a new city or a comprehensive upgrading of an existing town to make it conducive with the present needs and lifestyles of the people.

5. The recent trends; creating people's cities

The contemporary building and community development practices seen in many Sri Lankan towns across the country lack the holistic approaches which consider environment friendliness and contextual compatibility-specially lifestyles which are the key contributing factors in achieving sustainability in designs. The urban planning and development control is the prime responsibility coming under the Urban Development Authority (UDA, 1978), further to its regulatory functions. The urban area development efforts of UDA have been limited to the preparation and implementation of local development plans, regional land use and structure plans, mainly based on the demographic and physical data of the region. Although there have been physical development plans prepared for Greater Colombo Region, there have not been any comprehensive urban design exercise done for the towns outside Colombo, going beyond the piece meal development of isolated buildings and facilities.

It is commendable that presently the Ministry of Urban Development and Finance has taken a lead role endeavoring Colombo to transform to a clean, safe and attractive city by exploiting the powers and resources of relevant development and planning authorities such as UDA, Road Development Authority, Land Reclamation and Development Board, Environmental Authority. Such an ambitious effort had never been taken place before. On the other hand, it is suspicious whether these efforts would bring full results as anticipate, particularly in the areas of urban sustainability, local's socio-economic improvement within the realm of identity, spirit of the place, life style and livability.

Re-discover the human scale of old streets – Slave Island in Colombo

Some recently completed and ongoing public realm improvement programs seem to have less contextual significances and seen as more of beautifications rather than their meaningful use and the authentic need by city people. Moreover they seem like fragmented solutions with inflated built concepts that are away from realities and local people's fashion. Typically public realm facility projects are to be realized as a result of the socio-economic growth of locality. Many

'Maintenance-free' street plants, Saint-Jean Avenue Honoré-Mercier Québec City, Canada

American cities today make all efforts to cut down the public realm maintenance costs, hence urban design does not promote creation of large extents of cut grass areas for cities and neighborhoods since it is not sustainable (Pinna S, 2012). Some Canadian cities, like Quebec City use maintenance-free urban landscape methods innovatively. In that context, it is uncertain for introducing more urban grass areas in the city while it makes city maintenance a burden. On the other hand, as tropical countries, our cities should have different landscape concepts mainly with flora and fauna which is not possible in western cities where grass is the only answer to maintain the urban surfaces green during winters.

The character and amenity improvement projects are to be based on meaningful planning and urban design concepts. City of Sri Jayewardenepura Kotte is a rare and unique situation of creating an ecological city – as an administrative capital which always to be a city where nature systems dominate. Predominantly around the Parliament along the lake it is supposed to be natural water's edge. However, it has now been transformed into a mediocre urban lakefront with cut grass areas, equidistantly aligned trees, and over-designed illumination with exposed light globes.

Sri Jayewardenepura Kotte –A city dominated by nature

Instead, would it have been more sensible to use shrubs and bushes as surface cover, trees in varieties conforming to create a more nature front with windows of vistas towards lake and parliament, and a low level illumination system that does not disturb the beauty of the nature? The car park area with huge concreted surfaces -very typical to North American style, has been placed at the most exciting corner of the lakefront. It could have been more sensible to maintain the green lakefront allowing full view across the lake by designing a car park strategically. Also setting up of specific design standards of public realm such as 'every urban street must have a sidewalk with trees' must be a task.

It shows that there is a clear gap between the preparation of local town plans and the detail strategic plans of city revival while strengthening the town's social and physical identity, which has to be bridged through a strenuous urban design visionary based on community values with the ensured implementation at the end.

6. Conclusions

It is seen that developing countries are faced with trade-offs between different objectives, such as poverty alleviation, economic growth and environmental protection, which does not predict well for the future of sustainable cities. The urban design visionary process also is not taking place necessarily. Institutional and regulatory limitations, such as lack of good governance, effective policy support in the form of financial subsidies or tax preferences, competition for limited resources and scarcity of efficient supervision, implementation strategies and enforcement mechanisms, also act as barriers. At the local level, detailed local planning and performance indicators are also absent.

It is realized that Eco city concepts should meet local economic, social and cultural priorities, and involve with stakeholders at all levels; local community, private and state sectors. The adoption of an integrated approach – within the eco-city as well as with its surrounding environment and the country side – is also necessary. Therefore any real solutions to the global environmental crisis and livability of the present era must necessarily begin with changes in lifestyle.The process of constant measuring, assessing on how the city performs for people and creating new tasks has embedded the values of a 'people first city' at every level.

While reconsidering city's role, rather than acting as an imposing authority-negatively, the city must perform cleverly responding to people's needs with an amicable attitude. Gehl (Gehl,J, 2012) finds an

example in a Denmark city where it confronted with the problem of pizza boxes over-flowing out of the bins near a popular pizza restaurant in a city, and rather than putting up signs saying 'No Pizza Boxes!', the city took an initiation of designing new bins with an extra-large pizza sized slat to accommodate them. It sees most importantly a fundamental re-calibration of the role of the architect, politician, planner and citizen is required. Gehl (Gehl,J, 2012) further stresses that for designers it will mean a greater focus on culture than on form and greater skill in facilitating than convincing, while for planners it will mean less control and more flexibility and an ability to provide a framework for messiness and diversity rather than a plan for uniformity and control. For politicians and civic administrators it will demand more attention to various forms of civic expression. This change will require that city people continue to demand more from the public realm and brave to imagine what streets and spaces can turn out to be rather than satisfying with the existing situation.

After all, people feel affection for cities not only for their landmarks, beautiful sites, and the range of public buildings from shopping, community to religious, but also for the people's spirit, vibrant life, feeling of intimacy, safety and the culture of the place. At present the Sri Lanka is planning to embark with an urban revival program for a number of towns in the country. At this juncture it is a task to ensure such initiations are strongly backed with sustainable urban design and realization strategies with firm design standards understanding the kinetics of the society with a greater care of people's desires and aspirations. Undeniably those will be 'people's cities'.

References

Asian Development Bank (ADB), http://www.adb.org/Documents/Reports/Rebuilding-Sri-Lanka/Galle-team.pdf [accessed on 25/11/2011]

Bates Albert (2003), Eco-village Roots (and Branches), "Eco-villages – What Have We Learned?"

Butterworth Iain (2000), The Relationship between the Built Environment and Wellbeing: Victorian

Buzzle (2012), http://www.buzzle.com/articles/most-dangerous-cities-in-the-united-states.html

Byrne David (2009), A Talking Head Dreams of a Perfect City, Wall Street Journal, Asia Edition, September 2009, USA

Duxbury, N, and Gillette, E (2007), Culture as a Key Dimension of Sustainability: Exploring Concepts, Themes, and Models, Working Paper No 1, Centre of Expertise of Culture and Communities, Canada

Eco-city Builders (2012), Eco cities Emerging, Newsletter September 2012; http://archive.constantcontact.com/fs072/1100594362471/archive/1110850802703.html [accessed on 30/10/2012]

Edmund A. Leach (1959), "Hydraulic Society in Ceylon". *Past and Present,* No. 15, April 1959; p.23

Gehl, J (2012), http://gehlcitiesforpeople.dk/ [accessed on 22/10/2012]

Glasbergen P. and Blowers A. (1996), Environmental policy in an international context, Prospects for environmental change, Elsevier Butterworth-Heinemann, Oxford, MA

Goldsmith Edward and Hildyard Nicholas (1984), Chapter 24; The Social and Environmental Effects of Large Dams: Volume 1. Overview. Wadebridge Ecological Centre, Worthyvale Manor, UK in Communities Magazine, issue #117 - www.communities.ic.org [accessed on 02/06/2012]

Laul Anil (2002), Agenda 21 for sustainable construction in developing countries, position paper, http://www.sustainablesettlement.co.za/policy/postionpapers.html [accessed on 24/10/2012]

Martokusumo, W (2011), Sustainable urban design revisited: Some brief notes of ecological notions in creating livable city, http://urban-research.blogspot.com/2011/03/sustainable-urban-design-revisited-some.html [accessed on 30/10/2012]

Mongabay, http://www.mongabay.com/reference/country_studies/sri-lanka/SOCIETY.html [accessed on 30/10/2012]

Philip Snyder (2003), Living and Learning Centers, in Communities Magazine, issue #117 - www.communities.ic.org [accessed on 12/03/2012]

Pinna S. (2012), Energy and the "grass cutters", http://drpinna.com/energy-and-the-grass-cutters-7249

Rogers Richard (1997), Cities for a small planet, edited by Philip Gumuchdjian, faber and faber, London.

Shamasastry, R. (1915), Kautilya's Arthashastra, (1915 Shamasastry translation), Government Press Bangalore, India

UDA (1978), Urban Development Authority Act No.41 of 1978, Government Publication Bureau, Sri Lanka

UNEP (2002), FI Position Paper on the United Nations Conference on Sustainable Development (Rio+20) www.unepfi.org [accessed on 23/10/2012]

United Nations (2007), Indicators of Sustainable Development: Guidelines and Methodologies; United Nations publication, New York

Williams, Maureen (2003) January, *Sustainable development and social sustainability*. Hull, QC: Strategic Research and Analysis, Department of Canadian Heritage. Reference: SRA-724.

World Bank (2009) Eco2 *Cities: Ecological Cities as Economic Cities Program*, http://preview.tinyurl.com/ecocitiesfullreport. [accessed on 24/09/2012]

World Bank, http://databank.worldbank.org/ddp/home.do?Step=3&id=4 [accessed on 28/10/2012]

Yue Li (2012), Challenges in Alleviating Poverty through Urbanization, The World Bank