IMPROVING VIABILITY OF OPEN SPACES THROUGH SUSTAINABLE PLANNING IN CITIES

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Abstract - Urban open spaces play many non-obvious roles in constructing a society. The life quality of people in urban area is the result of social interaction with the urban environment. The cities open spaces are vigorous part of urban landscape with its own specific function. Moreover numerous ecological and environmental services, urban landscape offers important psychological and social benefits to human societies, which enrich human life with meaning and emotions. The vital concern of this research is to mention the importance of urban landscape for citizen's livability and for the sustainability of the cities. The method of research was descriptive and the information was gathered through searching scientific books and journal paper. The result provide a framework for understanding the relationship between the quality of an urban environment and sense of livability among the citizens. The physical form criteria are, a walkable community, outdoor amenities, lots of seating, barrier free and open space area in residential areas.

Keywords - Liveability, City, Open Spaces, Sustainable

I. INTRODUCTION

Awareness of the need of public open space began with the industrial revolution, and the rapid urbanization that accompanied it. Urban growth, and the density of population that was typical of the Industrial City at the end of the 19th Century and early 20th Century, created conditions where access to open spaces became more difficult, as the urban environment became denser, more intensive and noisy. The pioneers of modern planning and urban reformers saw this distancing of the population from the countryside as a social and moral evil, as well as a danger to public health. They claimed that a minimum of accessible open space was necessary so that children could play, and so people in general could make contact with nature and have some relief from the stressful urban environment. With the codification of city planning throughout the world, minimum standards were developed to allocate public open spaces of various sizes and scales, and to regulate their distribution in relation to residential areas. (Y. Rofè, G. Feierstein, & I. Zarchin, 2011)

For a few minimum conditions for equality, we truly need a society of equals. Equality is not about the equality of income, but equality of dignity as a member of society and equality for the pursuit of human development and happiness. Higher income people always have access to nature at beach houses, lake cabins, mountain chalets, on vacations – or in urban settings at golf courses or large gardens. Urban open spaces allow the rest of society that contact. Parks and other public pedestrian spaces are some of those few critical elements that make societies a bit equal. (Saffuan, Ariffin, & Amin, 2012) Urban open spaces serve human needs that are difficult to quantify. For example, human beings need to be with others, even with strangers. That is why crowded restaurants are more attractive than empty ones; why people prefer attending a concert to watching a DVD at home. (Penalosa, 2003)

Research in quality of life is important as part of contribution to enhance the quality of life itself (Lever, 2000). Quality of life of people in urban area is the outcome of people interaction with urban environment (Das, 2008). Many studies show that public open space (POS) is one important element of the urban environment (Shirvani, 1985) which gives positive contribution to quality of life (Madanipour, 1999). Public space should be conceived of as an outdoor room within a neighborhood, somewhere to relax, and enjoy the urban experience, a venue for a range of different activities, from outdoor eating to street entertainment; from sport and play areas to a venue for civic or political functions; and most importantly of all a place for walking or sitting-out. (Rogers, 1999) Public spaces work best when they establish a direct relationship between the space and the people who live and work around it. The main concern of this paper is to address the importance of urban open sapces for citizen's livability and for the sustainability of the city they inhabit. The research method was descriptive and the information was gathered through searching articles and related books.

II. URBAN OPEN SPACES

Public open space is outdoor spaces with free access for people (Jacobs, 1961; Madanipour, 1999), such as cafes, retail, bazaar, parks, streets and pedestrian paths. The definition of open spaces evolved in time embracing all types of opportunities to suit the varying outdoor needs of human beings and needs of plant and animal species. (H. Esbah, B. Deniz, & E. A. Cook, 2005) Urban open spaces are vital part of urban landscape with its own specific set of function. Open spaces (natural or man-made) contribute to the quality of life in many ways (Burke and Ewan, 1999).

Besides important environmental benefits, these areas provide social psychological services, which are critical for the livability of the city and wellbeing of urbanites (Chiesura, 2004). Thompson (2002) sees open spaces in cities as places to celebrate cultural diversity, to engage with natural processes and to conserve memories. Public open space is successful while it becomes a conducive place for social interaction (Danisworo, 1989; Whyte, 1985), attracts many visitors to do their activities in there (Danisworo, 1989; Whyte, 1985), with a wide range of activities occur (Rivlin, 1994; CABE and DETR, 2001), individual or group (Rossi, 1982; Gehl, 2002), informal and suitable for recreation (Whyte, 1985; Project for Public Space, 2000), democratic and non-discriminative (Car, 1992), accessible for all class and age of people, including disable people and informal sector (Gehl, 2002; CABE and DETR, 2001). Nowadays, the concept of "open space" in complex urban matrix is not limited only to the urban parks and preserves but also non park-non natural-places. Public spaces such as streets, school yards, outdoor sport complexes, cemeteries, and public squares are important open spaces (Hall, 1998). These areas are open to full spectrum of the society and their sound planning and design make them more attractive. Non-natural places such as railways, highway right of ways, canals have functional values. According to Thompson (2002) these areas are indeterminate areas of open space and these function specific spaces are as much necessary as decorative parks. Ecologically sound planning and design of such spaces aids in establishing ecological networks (Cook, 2000) in the urban matrix. Chiesura (2004) suggests taking into account the variability in the open space types to fulfill the needs and expectation of all the segments of the population.

Successful public open space should promote psychological comfort and safety (Danisworo, 1989). In the physical dimension, the criteria of high quality public open space is the clear and easy access and movement system (Danisworo, 1989; Car, 1992; Rivlin, 1994; Gehl 2002; CABE and DETR, 2001). It could be attained by creating linkage as clear paths which connect each other (Gehl, 2002; CABE and DETR, 2001) and by integration of transportation mode and land use, the present of landmark as orientation (CABE and DETR, 2001), with human scale design (Asihara, 1981; Shirvani, 1985). Pleasant public open space could be reach by high quality architecture, (Danisworo, 1989; Car, 1992), attractive building facade, (Gehl, 2002) and interesting scene and details (Gehl , 2002).

Natural elements are important factor in public open space that improve comfort, relaxation, pleasant experience and anticipate unpleasant climate by placing tress along pedestrian path and sitting area (Kaplan and Kaplan, 1989; Carr, 1992; Gehl, 2002; Avila, 2001). Urban open-green areas form the basic element that helps the constitution of life quality in the city. They come into prominence with their contribution to the urban life quality with their varieties, sizes, implements, functions and service areas, according to their features and qualities. These areas have different functions in cities, at several levels, such as the environmental, ecological, social, economic, cultural and aesthetic, promoting the image and character of an urban area. They are also elements which because of their multi-functionality, act as factors of interaction between human activities and environment, being promoters, by excellence, of quality of life. (Delianur Nasution & Wahyuni, 2012) Lord Rogers' Urban Task Force report (1999) says "to achieve urban integration means thinking of urban open space not as an isolated unit—be it a street, park or square—but as a vital part of urban landscape with its own specific set of functions. (Thompson, 2002)

III. LIVABILITY

The livability of a settlement is determined by the quality of the built and natural environment in addition to the activities that take place within that environment. Quality of life of people in urban area is the outcome of people interaction with the urban environment. Many studies indicate that public open space is one of important urban environment elements which give a positive contribution to quality of life. (Delianur Nasution & Wahyuni, 2012) Notions on the livability of cities are based on the far order of society, modes of production, technological progress, urban life styles and shortfalls of previous urban experiences. Conceptualizations of the livable city by modernism referred to the inhospitable experiences of the pre-modernist city that did not match with the far order of modern urban society, the Fordist mode of production, and urban life-styles. New technologies, in particular the rise of the automobile, were incorporated in the planning visions of the livable modernist city, jettisoning all historic types and forms. A clear separation of urban functions for work, residential purposes and leisure was to remove what had become the inhospitable past of the historic cities (Hebbert et Sonne 2006, pp. 6). This "functionalism" was re-presented in architecture of modernism just as in urban planning schemes. The urban form followed the urban function. Resulting from the shortfalls of the functionally divided city, in the 1960s new concepts of livable cities developed as a backlash to modernist urban planning and urban sprawl. When modernism and industrialization had reduced the livability of city to its mere functions, new dispositifs shaping the far order of livability of a post-modernist city aimed at implementing livability in terms of 'a human scale', 'architectural and social diversity', 'encounters' or 'creative activities' and promoting concepts of mixed used and controlled diversity, walkable and safe urban spaces (Lefebvre, 1996) and eventually re-construction the social fabric of urban precincts.

Livability became associated with the sphere, the oeuvre of a romanticized historic interpretation of the urban, echoing "past traits that have seemingly been lost" (Allen, 2006). One of the visions of livable cities was the production of "urban spheres" where residents find identity and feel "at home". Drawing on the rationales of an 'Urban Renaissance', 'urban spheres' e.g. as formulated in the Charta of New Urbanism have been implemented in suburban just as in inner city areas. Visual strategies and regulations on the aesthetics gained power, their objectives have moved on to the production of ambience and emotions. However the far order of society was transformed by individualization, diversification of households and lifestyles. Livability of urban precincts has become associated with ambient environments for developing, rendering and performing individual life styles. (Hatz, 2010)

IV. SUSTAINABILITY

Sustainability has been defined through the United Nations as a global process of development that minimizes environments resources and reduces the impact on environmental sinks using processes that simultaneously improve the economy and the quality of life (UN World Commission on Environment and Development, 1987). It is strongly believe that developing more sustainable cities is not just about improving the abiotic and biotic aspects of urban life, it is also about the social aspects of urban life, that is – among others – about people's satisfaction, experiences and perceptions of the quality of their everyday environments.

Today sustainability has become a keyword, according to Wheeler (1998); sustainable development is defined as the development that improves the long-term health of human and ecological systems. It is widely used to describe a world in which both human and natural systems can continue to exist long into the future.

The concept of sustainable development is used to refer to alternatives of traditional patterns of physical, social and economic development that can avoid problems such as exhaustion of natural resources, ecosystem destruction, pollution, overpopulation, growing inequality, and the degradation of human living conditions. Sustainable development can improve a sense of place, lower crime, reduce natural dangers, preserve energy and resources, conserve culture and heritage, improve traffic circulation and decrease waste, thus leading to a livable urban future.

Table 1: Examples of definitions of livability

Dutch dictionary	**Attractiveness and suitability to live in it and with it**
Partners for Livable Communities	Livability is the sum of the factors that add up to a community's quality of life—including the built and natural environments, economic prosperity, social stability and equity, educational opportunity, and cultural, entertainment and recreation possibilities.
American Institute of Architects	Livability is best defined at the local level. Broadly speaking, a livable community recognizes its own unique identity and places a high value on the planning processes that help manage growth and change to maintain and enhance its community character.
Pacione (1990)	livable = humane (used as synonyms); livability is a quality that is not an attribute inherent in the environment but is behavior-related function of the interaction between environmental characteristics and personal characteristics
Veenhoven (1996)	livability = habitability = quality of life in the nation: the degree to which its provisions and requirements fit with the needs and capacities of its citizens
WSDOT (Livable Communities Policy)	A 'livable future' is one that is enduring, vibrant, responsible (civil), and offers a desirable quality of life. This requires a balance of three key societal goals: vibrant communities, vital economy, and sustainable environment.
Hortulanus (1996, 2)	'the degree to which the individual is capable of creating his or her daily living situation
Newman (1999)	livability is about the human requirement for social amenity, health and well-being and includes both individual and community well-being
Marsman and Leidelmeijer (2001)	resident's evaluation of the living environment
RIVM (2001)	perception of the daily living environment

On the other hand, the concept livable is often used at the same level as sustainability, where both promote urban planning that improves lasting community welfare. The former is more oriented to the specific human needs and people's subjective reactions to places, while the latter is more devoted to the physical environment that ensures such needs and relations to be fulfilled and to take place. However, a livable urban fabric is relatively assured through basic aspects which at the same time contribute to sustainability as a healthy environment, safety open spaces, appropriate houses, recreational facilities, etc. the phenomena of unlivable cities is resulted from losing the sense of connection between humans and the natural world.

While livability does not always line up with sustainability, it is greatly strengthened when approached within a sustainable framework that includes environment, equity, and economy. This alignment of present goals within a sustainable future allows for a comprehensive and integrated planning framework that can guide development and

investment effectively and efficiently in a manner that meets the vision of both livability and sustainability.

V. PLANNING URBAN OPEN SPACE FOR LIVABLE CITIES

Livable Cities the place is suitable to live and habitable for the people. Third World cities are still growing at astonishing high rates. Most will more than double their built area during the next 50 years. By 2015, there will be 22 mega-cities of more than 10 million inhabitants in the Third World. The world's environmental sustainability and quality of life will depend to a large extent of what is done there during the next few years. Yet Third World cities pressed with everyday urgencies are not being particularly creative. There could be cities with as much public space for children as for cars. The backbone of the alternative city model would have to be pedestrian streets, sidewalks and parks, supported by excellent public transport. (Saffuan, Ariffin, & Amin, 2012)
Improving quality of life is an extremely complex concept which involves the physical environment providing opportunities for humans to meet their needs and desires. Lennard (1987) summarized principles involved in designing urban spaces that promote social life, and a sense of well-being, derived from traditional urban space design theory. A list of 10 basic design principles were comprised: safe and comfortable pedestrian networks; a central neighborhood square; human scale urban spaces; visual enclosure fostering a sense of belonging; natural elements to increase sensual enjoyment; intricacy and variety to stimulate curiosity and encourage exploration; intimate and personal territories beside significant structures to contribute to meaningful experiences; spatial definitions; appropriately designed seating locations and arrangements.

Cities are fundamentally places where people live out their lives, in households, neighborhoods and communities. The most important, overarching desire or concern among metropolitan residents is for the urban environments to be 'humanised' as much as possible. This means living in neighborhoods which embody clear signs of thriving, harmonious communities. At the same time, it is also clear that a range of tastes and lifestyles exist, and that different people are seeking different qualities: there are varied preferences about what types of environments people find harmonious. For example, people who consider themselves 'cosmopolitan' are more likely to be seeking a vibrant setting full of new experiences, while families are more likely to seek quieter, more spacious settings that will accommodate the needs of young children. As such, it is important that a city offers a variety of urban environments and provides for a variety of lifestyles.

CONCLUSION

The way we design, plan and build our cities and their infrastructure is critical for developing competitive and livable cities. Cities are already suffering from severe environmental problems, such as pollution, congestion and excessive waste, while the basic needs of hundreds of millions of urban residents are yet to be met. The unprecedented urbanization imposes an even greater challenge for providing adequate housing, energy, water, sanitation and mobility to all. Cities are at a crossroads. Choices made in urban infrastructure development today will determine the success of cities in delivering services to everyone while growing competitively within a protected environment for decades to come.
Decision makers need to adapt as much as infrastructure – choices made need to be based on eco-efficient and socially inclusive principles and criteria in order to realize necessary win-win situations, and to build competitive and livable cities through environmental improvements. (United Nations publication, 2011)

Livable cities offer a high quality of life, and support the health and wellbeing of the people who live and work in them. Livable cities are socially inclusive, affordable, accessible, healthy and safe. They also feature attractive built and natural environments. Livable cities provide choice and opportunity for people to live their lives, and raise their families, to their fullest potential. Livable places are organized around the themes of walkability, buildings designed on human-scale, public space, lots of seating, and transportation alternatives. Convenience, aesthetics, social mixing, and ecological integrity are the critical features of livable places. Livable cities have an abundance of public spaces, such as piazzas, sidewalks, outdoor cafes, and porches that provide opportunity to interact with people around. Even streets are designed to facilitate public life including social interaction. Another physical manifestation of public realm is the neighborhood center, which is a distinct central public space offering a mix of services and activities, such as community center, school, park, shops, transit stop, post office, mosque and other local amenities. The idea is to mix with people instead of remaining just indoors glued to TV or computer screen, captivated in sights and sounds of the distant world while remaining alienated from one's immediate surroundings. These public spaces are often referred to as social safety valve because social mixing reduces resentment and allows neighbors to develop positive acquaintances. (www.archpresspk.com)

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