Sustainable Urban Development – More Relevant Than Ever
4th June 2016

Vikram Mohan Rao

Faculty of Humanities and Social Sciences, Cultural Studies Department Jain University

Address: JGI, Knowledge Campus, #44/4, District Fund Road Jayanagar 9th Block, Bangalore - 560 069

Phone.:-+91 9845694979

Email : vikram.mohan.rao@gmail.com

	ABSTRACT
Corresponding Author: **Ludovic Baïsserné Palou**	Sustainability in the context of Urban Development is often not understood well. The goal of this article is to throw light on the concept of Sustainability in the Urban Development scenarioby touching upon a few specific areas and practical day to day examples. The article also draws parallels with the Smart City initiatives that are being discussed in modern day India and how it should bean integral part of it.

Key Words :

Urbanization continues to increase steadily across the globe and the numbers and size of urban agglomeration and cities are growing rapidly, especially in developing countries like India.Amidst this rapid urbanization factors like climate change, globalization and demographic change will shape the future of cities.With the need to cope with this change and improve the quality of life and economic competitiveness, cities have to become more resource-efficient and environmentally friendly.Today's modern cities will be expected to play a vital role infinding new and effective ways to protect the environment.Some immediate and pertinent questions that come to our mind in this context include:

How can cities become more livable?

How do we balance quality of life for the inhabitants with the needs of the city?

How do we sustain cities to combat climate change?

How do we ensure economic competiveness?

Is it possible to ensure environment friendly development?

The above questionslead us to the topic of sustainability.The term 'sustainable development' is defined as'development that meets the needs of the presentwithout compromising the ability of future generationsto meet their own needs'.A sustainable city or an eco-cityas it is also referred to, is a city designed with consideration of the environment and the impact that development initiatives have on the city. The city is said to bepredominantlyinhabited by people who are aware and dedicated to minimal usage of energy, water and food, and minimization of waste output of heat, air pollution and water pollution.

The concept of sustainability seems to be getting diluted with the emergence of the smart city. To clear the air, a smart city is typically a city that is a connected and uses modern digital technologies to improve the overall quality of life and performance. Additionally smart cities allow for reduced operation costs and better communication and engagement with citizens. In that context, sustainability remains an area that is

234

different andextremely important that needs be addressed in a city irrespective of whether it is smart or not. The good news is that smart cities can enable urban sustainability if planners take into consideration sustainability best practices during the early planning phase.

Let's now examine how cities become more sustainable and livable. Transportation is an important and necessary componentof any city. Typically a sustainable or eco-city should have multiple means of ecofriendly transportation allowing people to choose their ideal mode of transportand thereby making it convenient for them to commute. It could be walking, biking or mass transit for most transportation needs. The city infrastructure on the other hand should provide for these various means of transportation by having dedicated walking and cycling tracks, metro and railway lines accessing key parts of the city and an integration of other transportation systems with the main and preferred means of transportation.

Most global cities have been growing exponentially and over the next 20 years their population is expected to increase more than two fold. Ongoing growth means challenges for existing waste management infrastructure as most landfills will not be able to manage the colossal waste that a city produces. That makes waste management an important aspect of sustainable cities. What we need is a socially acceptable, financially feasible and environmentally sound waste management planning for a city's long term sustainable growth.A city needs to recycle or reuse most of their waste and they need to have the necessary infrastructure and more importantly the mind set to do it.

Protecting biodiversity - the variety of all living organisms, is crucial for reducing climate pollution and dealing as well as adapting to the effects of climate change. One of the effects of not protecting biodiversity is global warming itself. That makes biodiversity an important measure of sustainable development. So how do we do it? Since consumption of resources is said to be the root cause of biodiversity loss, we can consume less and be more mindful about what we consume. We need to leverage our purchasing power to help protect biodiversity by consuming products that do not harm the environment. The other way of protecting biodiversity is by preserving land and ensuring that the urban sprawl and the needs of a growing city is not allowed to gobble up land meant for biodiversity to flourish.

To meet the growing needs of today's urban cities with large populations, there needs to be additional ways and means of food generation in a sustainable manner. Being wary of this, food is raised in the city in community gardens, garden rooftops and in solar greenhouses with care of not disturbing the ecology.Simple but effective methods being adopted which should serve as an example to many upcoming and growing modern cities setting them in the path of sustainability.

The concept of sustainable or eco-cities has been around for a while now. And there are good examples of eco-cities all over the world: Waitakere City in New Zealand, Leicester in England, Portland in Oregon, and Chattanooga in Tennessee just to name a few.Talking a little about the city of Chattanooga in the state of Tennessee, it is one of United States of America's most sustainable and livable cities.In the 1950s, Chattanooga was an industrial wasteland with highly polluted air and toxic water.With determination and efforts local officials and citizens combined to transform Chattanooga into a beautiful city with zero-emission industry,zero-emission electric buses,satellite parking with bus service,extensive recycling programsand new tourist attractions. A great example of how it's not too late to bring about a change in our cities and make them more sustainable – more 'livable'.

It would be premature to speculate on the successor failure of 'eco-cities', as most projects across the world are stillat the planning stage or 'under construction'.The development of the necessary infrastructure andexpertise, policy support and affordable technologywill also take time.The terms 'eco-cities' and 'sustainable cities' haveentered the researchers and policymakers' dictionary at differentpoints in recent times but now they are both firmlyembedded in the urban environmental sustainabilityagenda, more recently in the context of climatechange. In India to we have many governmental and non-governmental agencies

235

now working on the topic of sustainability from an urban perspective. In practice, however the term 'eco-cities' may be used to describe new cities rather than modification of existing cities considering that making radical changes to a city with a huge living population and existing infrastructure may be a different problem to deal with.In the India, the current NDA led Modi Government has embarked on a smart city mission of converting 100 existing cities into smart cities. It will be interesting to see how sustainable they are made apart from being made smart. The challenges and outcomes of this exercise will surely serve as learning for many urban planners globallyto benefit from in the future.

In conclusion, the greatest challenge when developingeco-cities and sustainable cities will be publicacceptance, as the two concepts require radical changesin their established views, lifestyles and living patterns.Two factors will be integral to ensure their popularityand subsequent implementation. First, the advantages of creating eco-cities and making existing citiessustainable will need to be communicated in aclear and convincing manner. Second, and perhapsmore critically, policy makers will need to work onencouraging public acceptance, participation and ownership ofthese ideas.

References:
1. The Integrated Urban Eco-system and Urban Sustainability by Luxin, Huang & Shu, Du
2. Ecocity Berkeley: Building Cities for a Healthier Future by Richard Register
3. Dimensions of the eco-city by Mark Roseland