

Research Article

A Framework Studies of Sustainable Eco Urbanspace

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Abstract: In this study the researcher introducing eco urban sustainable and explain about its components. It also mentions the relationship between urban and green with the description about the elements of sustainable green criteria in eco urban. Urban is known as a place with higher population density, very large proportion of the population live in urban area. They need great facilities for a comfortable life. Being complete of this feature shows the progress of urban development. The urban is a place for living activities, business opportunities, shopping centers, transportation and housing and lots of acting which is related with living. These activities makes urban polluted, noisy, crowded and populous. A city reaches to the sustainability once the planning managers and officials solved urban issues and problems. This strengthens its capabilities with policy, creativity and knowledge considering the abilities and potential which cities have.

Keywords: Eco town, living space, sustainable, transportation, urban

INTRODUCTION

The subject of sustainable urban development has been raised in recent years as a scientific issue in all societies (Majid and Ali, 2009). Eco urban is area where both of environmental and urban planning are being coordinated with each other. A sustainable urban manage urban wastes recycle material, protect our town environmental, reach to a good economy development in economy and industrial communities, business, facilities (Bettina and Raimund, 2007). Eco urban should have new houses with 5000-10000 home and zero carbon, good facilities, business opportunities and affordable housing. The design for town should have good traveling plan include walking, recycle line, public transportation with lowest air pollution (DCLG, 2008). Urban sustainable planning considers comprehensive attitude to urban policies, programs and projects necessary. Positive and negative effects of each project cannot be the criterion of operation and assessment alone. Urban sustainable development requires codifying economic and ecological goals and it is essential for policy and planning at to take place seamlessly all levels. Manufacturing needs of today's generation without compromising the ability of future generation to supply their needs. There is a better definition of sustainable development that including economic and social stability, environmental sustainability. It means people, profit and planet (Eades, 2009).

A good eco urban have properties which include the following items:

- Strong economy
- Healthy and safety area
- Good transportation, pedestrian area and walking
- Well climate
- Renewable energy
- Multi-purpose use of urban spaces
- Buildings durability for use of a few generations
- Building design for energy efficiency
- propagating clean energy use in City

Inner (1997) discussed some main part of Eco urban health includes mental health, physical and social of residents. Lots of physical illnesses in town area are related with weak feeding, air pollution, poor housing and lose of social infrastructure. The habitability of Eco urban for adults has been the most component of sustainable development. Built places that could be comfortable for older people (Lawton and Klebab, 1971). These are some matters which can show the importance points of eco urban sustainable development and management. Urbanization can include lots of problem without eco urban sustainable such as unemployment, shortage of refuge, leakage of healthy water, power, environmental disaster and reduction quality of life (May, 2009).

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Fig. 1: Rural area in China
<http://www.chinasmack.com/2009/stories/urban-chinese-protest-rural-land-housing-policies-unfair.html>

The eco town concept has been reproduction around the world in country such as Denmark, U.K, Europe, Korea, Japan, Brazil, china (May, 2009). Many investigations have been conducted regarding the cities of developing countries and developed about sustainable city. In Europe, North America, urban governments and planners, suggest a compact city where facilitates living in high density and encourages the population to return to the interurban old neighborhood and thereby reduces the travel time from home to work and cut energy consumption low. One of the cities which have achieved relative stability is Stockholm. This city has showed how can changed an old city to industrial with high levels and management and integrated planning. This area become to ecologically and environmentally sustainable. Stockholm cans reduction 30% in nonrenewable energy use and 41% reduction in water use (Suzuki *et al.*, 2010). Another city which could be show resources are no obstacle to sustainable eco urban planning and development is Curitiba in Brazil (Suzuki *et al.*, 2010). One of the plans to achieve sustainable city conducted in different countries is the plan of waste purchases from this city based on which area residents can receive bus ticket and food coupon in exchange for delivering their garbage bags. this plan both helps improving qualitative life of these slum dwellers and also reduces urban pollution and enhance participation rate of all citizen illness as well. Curitiba in Brazil also bus special plan caused dramatic increasing in using public transport vehicle in the form of public transportation system. Another example of world cities on which these researches have been done and has become sustainable city is Copenhagen, Denmark. The city has also used similar methods to plan and move towards urban sustainable development. The results of these strategies has been high saving in household transportation coast, reducing the effects on atmosphere and air pollution (Yvette, 2007)

In this study we want to investigate the factors that contribute to the framework of sustainable Eco Urban space. We have designed a figure that shows the criteria of green sustainable urban. The Fig. 1 shows a development city in china, that is a sample of eco town.

THE CONCEPT OF SUSTAINABLE ECO URBAN

The purpose of urban sustainable development process is to achieve urban sustainable status in urban communities. A process whose aim is to create or strengthen the sustainability features in economic, social, cultural and urban environmental life. Considering what has took place so far and what is currently common in planning for urban development, it can be concluded that achieving urban sustainable development needs making structural reforms and fundamental developments at all levels of society, especially in the three levels of government and Technology management and life styles.

A Sustainable city meet the needs of citizens environmentally with less consumption and more saving and also Sustainable city form is a form in which fewer resources, including energy, is consumed, urban networks are efficient and competitive and enjoys high functionality for human life. Every Sustainable city, metropolitan and urban region needs to develop its local strategies for sustainable development. It is expected from a good eco urban what has sustainable life style, good network of city, qualified city density, appropriate amount of green and public spaces, recycling of wastes. Green sustainable urban has lots of criteria that is mentioned in the following Fig. 2.

Green infrastructure is the attention to green spaces, strategic management and other values in urban. It collects all of facilities in accordance with eco urban. It tries to improve the quality of life and designs a plan to give the best service which match with eco urban criteria. As reported in Eco town green infrastructure work sheet (2008), 40 percent of total in an eco urban should be considered for green infrastructure.

One of the dimensions of sustainable is to encourage people for walking and cycling. This is important to keep health, reduce air pollution and environmental protection (Joanne, 2010). Zero waste is a program which says in eco urban waste should reuse in another section of household or industrial (Bettina and Raimund, 2007). Eco urban need to be reduction and recycling waste. It is meaning government should be managing for collection, storing and recycling of waste from house and businesses center. Overall an eco urban should send waste material out of town and use some material in construction (Rt Hon Caroline Flint,

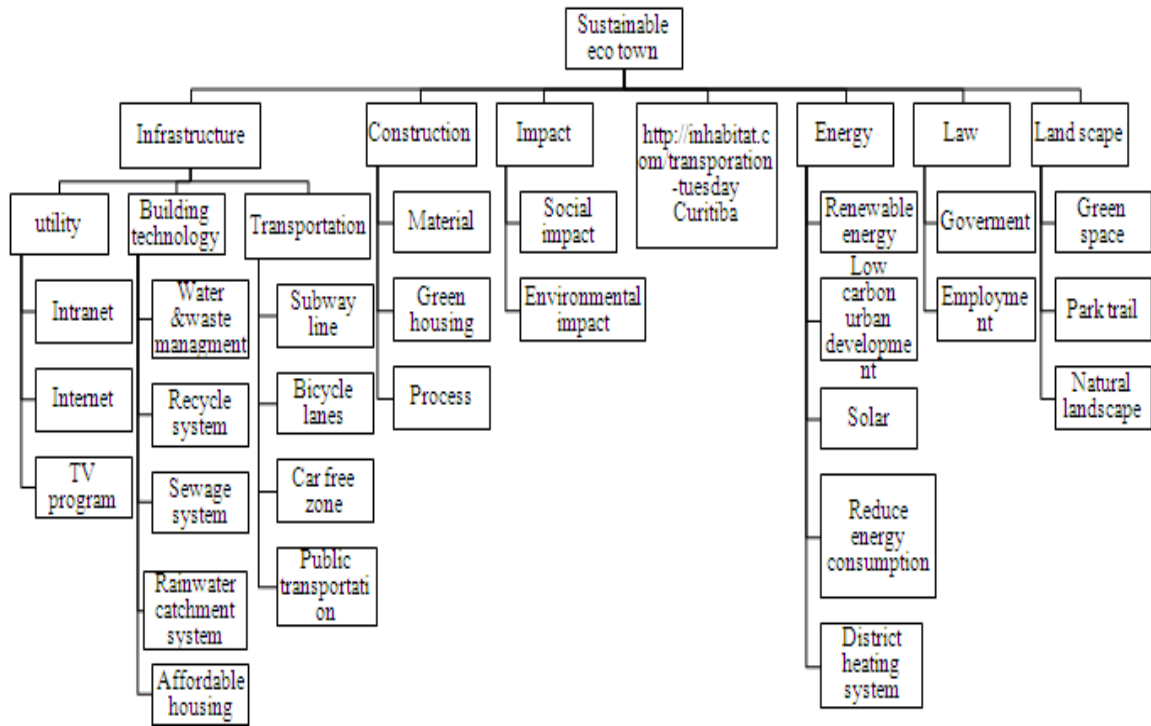


Fig.2: The frame work of sustainable eco town author



Fig. 3: Transportation in Curitiba, Brazil
<http://inhabitat.com/transportation-tuesday-curitiba/>

2008). Figure 3 is a sample of transportation in sustainable town in Brazil.

Managing water, reusing it and water recycle are importance matter about water in eco town planning. Buildings of eco urban should be safe in front of flood and climate change. Drainage system and green roofs are two components of criteria development in eco urban (Rt Hon Caroline Flint, 2008).

The second part is instruction and housing. These are covering the impact of construction housing and keeping material and all of facilities and services which



Fig. 4: Lawn garden, US
<http://home.howstuffworks.com/lawn-garden/professional-landscaping/basics/urban-landscape-design.html>

are needed after building industry (CABE/BioRegional, 2008). Access to affordable housing is a very important criteria to being eco urban developed. Having good spaces for walking, growing developing and having friendly environment and looking after is seemed necessary. Also accessibility to facilities, neighborhood, shopping choice house, living, having house with low coast and carbon has shown a good eco town (TCPA, 2005). Choice of how to live and types of housing and facilities are very important to obtain satisfaction from

eco town. Safty, security; quality and affordability are components about eco housing .Desirable density of the building helps to have good access between work places & homes& parks and shopping centers. This helps people diving the appropriate their time. (Guimarães de, 2012)

Energy: These days governments are searching way to reach to low carbon urban whit different program in transportation, housing or else, but we need to replace ways instead of our habits for example use transferring with bicycle or improve urban streets for walk able abilities.

Landscape: Planning land escape and environment help to serve natural valuable property and creation green corridors and places (CABE/BioRegional, 2008). Eco urban should has employment opportunity and supply of high quality business spaces with good facilities and networking to improve jobs chance (Rt Hon Caroline Flint, 2008). Figure 4 is a sample of land scape design in city according sustainable eco town in Us.

CONCLUSION

Eco urban should be a location where it has all of facilities for stable life. All of features provided in the eco town should be compatible with sustainable environment. One of the fundamental goals of the eco urban sustainable is to reach a safe and efficient city for all the classes of the society. Sustainable eco town is an urban with these specifications such as:

One of important objective in sustainable eco town is Transportation with minimum fuel consumption and improves public transportation and subway lines and bicycle lanes also construction and protecting of the transport networks. Housing includes all of kind energy in city; recycle systems, sewage systems, Rainwater Catchment system, Water and waste management are also members of developments goals. Energy include all cases such as renewable energy, low carbon urban development, solar hot water, reduce energy consumption are important parts of sustainable development. As seen in the study, Fig. 1, 3 and 4 have mentioned as examples of sustainable transportation and urban green spaces design that have been implemented in eco town around the world.

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