

## Sustainable Development and Urbanization

*Vaishali Saxena*

Development and urbanization are conceptually distinct phenomena. But visually they appear similar. The broad and clean road system, well illuminated areas, sky-high buildings, good infrastructural facilities, good educational facilities, health services construct the portrait of development. The visual of urban area is not distinct and deposits almost similar picture in mind. Hence, there exist a visual relatedness between the two. This relationship is not merely at visual level. Urbanization has been considered as 'engines of growth'. It provides for opportunities for employment, education and ready market for industrial and agricultural products. Several reasons cause this similarity.

Foremost reason for this similarity is the affinity of development with modernization and industrialization. As development is primarily a western conceptualization and became popular after second world war. As a consequence, countries had been labelled as developed and developing or under developed. Most of the developed nations were either European countries or USA. These countries had adopted rapid economic growth model i.e. industrialization. This economic model presumes that industrialization will bring faster economic growth than the agriculture based economies. Consequently, economic and western parameters are used to conceptualize development and development become visually similar to industrialization. This perception is reflected in various approaches, models and analysis of development. For example, F. W. Riggs 'Agraria-Industria' model where 'Agraria' represents underdevelopment and 'Industria' represents development or 'Fused-Prismatic-Diffracted' model to analyse characteristics of developed, developing and underdeveloped nations.

One of the natural consequence of the adoption of industrialization have been spatial and rural areas have vanished fast in such countries, converting them more urban. **So development, industrialization and urbanization tend to be visually similar.**

Another natural consequence of opting industrialization have been rise and promotion of '**consumption- production**' and '**competition**' based thoughts per se in diverse disciplines to facilitate such economies. And capitalism is its valid child while neo liberal is its mere extension and good governance (IMF construction, conditionalities)<sup>1</sup> is its illegitimate prodigy. Liberalization, Privatization and globalization are being enforced and imposed through the politics of good governance.<sup>2</sup> In another terms, it is promoting consumption, production and competition based values globally. All this led to **first**, creation of false needs of consumption and **second** unnecessary production. Economies of the nations are dependent on consumption, production and benefits there in. They stimulate and motivate overconsumption. Affluenza<sup>3</sup> is a term used to describe addiction to overconsumption and materialism exhibited to lifestyles of affluent consumers in USA.

**Third** is immature social & economic system. Most people infected with this disease of overconsumption have telltale symptoms. They feel overworked, have high levels of debt and bankruptcy, suffer from increasing stress and anxiety, have declining health and feel unfulfilled quest to accumulate even more stuff. To add to their misery, they may be laid off or witness salary cuts due to economic or market slump.

**And fourth** is surmountable pressure on our resources. For example, it takes about 27 trucks-trailer loads of resources per year to support one American and 7.9 billion truck-loads to support the entire US population. Stretch end to end, these trucks would more than reach the sun. Proliferation of technology has added another dimension to this complexity. It has enormous environmental impact and unsustainable pattern of development<sup>4</sup>

Here emerges the issue of sustainable development. If we continue to exclude sustainability factor from conceptualization of development itself, sustainable development remains its 'anti-thesis'. For that, development needs to shed off its western clothes i.e. viewing development in terms of consumption and production.

**In post Brundtland (1982)** period, the trend is to assimilate sustainability component in the construction of development.<sup>5</sup> But that also seems to be a failure as sustainable development is also defined in terms of meeting the needs of present generations without compromising the ability of future generations to do so. This need based definition of sustainable development links it again with consumption and production and without any practical applicability.

#### **Sustainable development is not possible without sustainable living**

If societies encourage unreasonable lust for over consumption, greed cannot be satiated. I say development with reason. Because many have argued that affluent provides money for developing technologies to reduce pollution, environmental degradation and resource waste. Or environmental 'Kuznets curve' has indicated that environmental pollution increases during early stages of industrialization but decreases as industry finds more money invested in cleaner technologies.<sup>6</sup> Such arguments are not tenacious. No one wants to get the disease of cancer because one can afford its medical and hospital bills. **Sustainable living is living responsibly and with reason.** Hence, sustainable development is 'developing responsibly.' Responsibility towards ourselves, family calls for nurturing the requirements of them and responsibility towards society, earth, nature etc. demands curbing the greed. As Toynbee summarised the true measure of a civilization's growth is law of progressive simplification: 'True growth occurs as civilizations transfer an increasing proportion of energy and attention from the material side of the life to the nonmaterial side and thereby develop their culture, capacity for compassion, sense of community and strength of democracy'.

#### **Such a living is not possible without cooperation**

Cooperation will enable understanding of fellow human being and facilitate action. Hence, reason, responsibility and cooperation are three defining pillars of sustainable development and development. These three must replace consumption, production and competition. A new definition of sustainable development is being proposed, i.e. '**sustainable development is development with reason, responsibility and cooperation.**'

#### **Urbanization and Urban Growth**

Urban population are growing rapidly throughout the world and many cities in developing countries have become centres of poverty. Almost half of the world's population live in densely populated urban areas. Rural people are pulled out to urban areas in search of jobs, food, housing, a better life, entertainment and freedom from religious, caste and

political conflicts. Some are pushed into urban areas from rural areas by factors such as poverty, lack of land to grow food, declining agricultural jobs, famine and war.

Five major trends are important in understanding the problems and challenges of urban growth.<sup>7</sup>

**First**, the proportion of global population living in the urban areas is increasing. Between 1850 and 2005, the percentage of people living in the urban areas has increased from 2% to 48%. According to UN projections, 60% of the world people will live in urban areas by 2030. Thus by 2005 and 2030 world's urban population is projected to increase from 3.1 billion to 5 billion. Almost all of this growth will occur in already overcrowded cities in developing countries.

**Second**, the number of large cities are mushrooming. In 2005, more than 400 cities had 1 million and more people, and this number is projected to increase by 564 cities in by 2015. To-day 18 megacities or megapolises (up from 8 in 1985) are home to 10 million or more people each- most of them in developing countries. As they grow and sprawl outward, separate urban areas may merge to form a megapolise. For example, Boston, Massachusetts and Washington DC.

**Third**, the urban population is increasing rapidly in developing countries. Between 2005 1nd 2030 the percentage of people living in urban areas in developing countries is expected to increase 41% to 56%.



Source: Extracted from Environmental Science by G. Tyler Miller Jr.

**Fourth**, urban growth is is much slower in developed countries (with 76% urbanization) than in developing countries. Developed countries are projected to reach 845 urbanization by 2030.

**Fifth**, poverty is becoming increasingly urbanized as more poor people migrate from rural to urban areas, mostly in developing countries. Urban population has been growing faster than the economic absorptive capacity and fiscal means of cities. The United Nation estimates that at least 1 million people live in crowded slums of central cities and in squatter settlements and shantytowns that surround the outskirts of most cities in developing countries.<sup>8</sup>

## Urban Sprawl

Where land is ample and affordable, urban areas tend to sprawl outwards, swallowing up the country surroundings. Major problem of most of the countries is lots of room for expansion in urban sprawl. Growth of low density development on the edges of cities and towns gobbles up the surrounding country side- frequently prime farmland or forests-and increases dependence on cars and other vehicles. The result is far-flung, hodgepodge of housing developments, shopping malls, parking-lots and office complexes-loosely connected by multi lane high-ways and free lanes. Urban sprawl is the product of increased prosperity, ample and affordable land, automobiles, gasoline and poor urban planning.



Undesirable consequences of the urban sprawl are increased travel time in automobiles, decreased energy efficiency, increased urban flooding problems, destruction of prime cropland, forests, open spaces and wetlands. It had also led to the economic death of many central cities.

To pay for heavily mortgaged houses and cars, adults in a typically urban family spend most of their nonworking hours driving to and from work and running errands over the vast sub-urban landscape. Many have little energy and time left for their children and for themselves. Many prefers living in sprawling exurbs that are not dependent on a central city for jobs, shopping and entertainment.

### Disadvantages of urbanization

Although urban population occupies only about 2% of the earth's land area, they consume three-fourth of the resources. Because of this high rate of consumption and their high rate of output, most of the world's cities are not self-sustaining systems. They threaten biodiversity, lack trees, grow little of their food, and concentrate pollutants and noise, centres of poverty, crime and terrorism. Due to urbanization, large land areas must be disturbed and degraded to provide urban dwellers with food, water and energy, minerals and other resources. This activity decreases and degrades the earth's bio-diversity. As city sprawl outward, they destroy rural cropland, fertile soil forests, and wetland and wildlife habitats. At the same time, most provide little of the food they use. Cities behave like gigantic vacuum cleaners, sucking up much of the world's energy, matter, and living resources and spewing out pollution, waste and heat. As a result, cities create a brown environment and destroy the green environment of the surrounding area. As one observer remarked – "most cities are places where they cut down most of the trees and name the streets after them".

Source: Extracted from Environmental Science by G. Tyler Miller Jr.



As cities grow and their water demands increase, expensive reservoirs and canals must be built and deeper wells drilled. This activity deprives rural and wild areas of surface water and depletes ground water faster than it is replenished.

Flooding also tends to be greater in central cities and their suburbs, sometimes because they are often built on flood plain areas and /or along low line coastal areas subject to natural flooding. Many of the world's largest cities face another threat. They are located in coastal areas that could be flooded sometime in the century if sea levels rise as projected due to global warming.

Cities are like little heat islands. The enormous amount of heat generated by cars, factories, refrigerators, air conditioners and heat absorbing dark roofs and roads in cities are surrounded with cooler rural and suburban areas. As cities grow and merge, their heat island may merge and keep polluted air from being diluted and cleansed.

Urban areas can intensify poverty and social problems. Crime rate is also tends to be higher in these areas than rural areas. And urban areas are more likely and desirable targets of the terrorist acts.

## Making Urban Areas more Livable and Sustainable



Source: Extracted from Environmental Science by G. Tyler Miller Jr.

Smart growth is emerging as a means to encourage more environmentally sustainable development that requires less dependence on cars, controls sprawls and reduces wasteful resources use. It recognizes that urban growth will occur. At the same time, it uses zoning laws and other tools to channel growth into areas where it can cause less harm, discourage sprawl, protect ecologically sensitive and important lands, and waterways, and develop environmentally sustainable urban areas and neighbourhoods that are more enjoyable places to live.

Some communities are using the principle of new urbanism to develop the entire village and re-create mixed neighbourhoods within existing city. These principles include workability with most things being located within a 10 minute walk of home and work; mixed use and diversity- which seeks a mix of pedestrian-friendly shops, offices, apartments, homes and people of different ages , classes, cultures, and races; quality urban design-emphasizing beauty, aesthetics and architectural diversity; environmental sustainability based on development with minimal environmental impact and smart transportation in which high quality trains connect neighbourhoods, towns, and cities. The goal is to create places that uplift, enrich and inspire the human spirit.

A more environmentally sustainable city , i.e. eco-city or green city emphasizes the following goals:

1. Preventing pollution and reducing waste.
2. Using energy and matter resources efficiently.
3. Recycling, reusing and composting at least 60% of the municipal waste.
4. Using solar and other locally available energy resources.
5. Protecting and encouraging bio-diversity by preserving surrounding land.

According to most of the environmentalist and urban planners, our primary problem is not urbanization but rather our failure to make cities more sustainable and liveable. They call for us to make urban areas more self reliant, sustainable and enjoyable places to live through good ecological design.

### References

1. Vandana Desai & Potter; 'Companion To Development Studies'; Arnold Publishing;2002; pg 87-89.
2. Ibid.....
3. G. Tyler Miller, ' Environmental Science', Thompson Brooks/Cole , 2006,pg.14.
4. World Resources Institute, united nations Environment Program UNDP and World Bank (1996) , World Resources 1996-97, A Guide to the global environment, Washington DC, World resources institute.
5. Michael Redclift, 'Sustainable Development' in 'The Companion to Development Studies' edited by Vandana Desai and Potter, Arnold, London, 2002, p.275.
6. Auty R., 'Patterns of Pollution During Industrial transition', The Geographical Journal (163,2),1997, pg206-15.
7. G. Tyler Miller, 'Environmental Science', Thompson Brooks/Cole, 2006, pg. 144.
8. United Nations, World Urbanization Prospects, the 1996 Revision, Estimates and Projection of Urban and Rural population and of Urban Agglomerations, Deptt. Of Economic and Social Affairs ,Population Division, NewYork.