**Harmonious Cities: Issues and Suggestions**

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Abstract

Harmonious cities are inclusive cities where everyone and every culture are at home. People in harmonious cities will live in a sustainable eco-friendly environment and will lead comfortable and happy life. In this article an overview has been made on the issues to be addressed in achieving harmonious cities such as urban poverty, urban pollution and congestion and urban transport. To achieve sustainable urbanization for harmonious cities in the context of developing nations including India, the author suggests various measures such as controlled and guided urbanization, green cities, conservation including recycle and reuse options, citizen charters and committees and bus rapid transit system.

1. **INTRODUCTION**

Harmonious cities include a concept which always relates to what is harmonious. Is it in relation to other city or is it in relation to within its residents or in relation to spatio, socio-economic and cultural aspects of the residents living within the city. My answer is yes it relates to all these aspects. It is total harmonious, it is an atmosphere where people living happily in their residents made up of sustainable environments, feeling togetherness, enjoying the true sense of belongingness, equality in all aspects irrespective of their socio-economic, cultural status, and it is a place where the most vulnerable people will get the most importance in all aspects of community life. Harmonious city is a concept with profound internal and external meanings. It is a new residential culture, a new environment cognizance and a new life style. Following the humanist principles and ecological models, it concentrates on the harmony between humans and environment, thereby on the characteristics of sustainable development.

Harmonious cities are inclusive cities where everyone and every culture are at home. In an age where for the first time half of the humanity is living in towns and cities, the quest for adequate shelter for all along with basic services such as water, sanitation, electricity, decent health care, safe stress, etc. is more urgent than ever, especially in developing nations. There should be no illusion that cities have the greatest impact on the environment and climatic change and where they are poorly managed, with weak governance structures, it is their citizens and their surroundings that suffer the most.

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People who live in a harmonious city will have scientific recognition of the environment and a strong sense of the harmonious development of men and nature. People in harmonious cities will live in a sustainable eco-friendly environment and will lead comfortable and happy life. They live a low energy consuming life and hang for a harmonious relationship with each other. They take a developing view on their behavior and take part in all kind of commonwealth activities to create a harmonious atmosphere. Before suggesting how the cities should become harmonious, an overview of global urbanization and anticipated problems has been made in the forthcoming section.

2. URBANIZATION-GLOBAL SCENARIO-AN OVERVIEW

People move into cities to seek economic opportunities. In rural areas, often on small family farms, it is difficult to improve one’s standard of living beyond basic sustenance. In rural areas living is dependent on unpredictable environmental conditions, and in terms of drought, floods or pestilence, survival becomes extremely problematic. Cities in contrast are known to be places where money and wealth are concentrated. Cities are where fortunes are made and where social mobility is possible. Business, which generates jobs and capitals are usually located in urban areas.

Rapid growth of urban areas is the result of two factors: natural increase in population and migration to urban areas. Migration is defined as the long term relocation of an individual, household or group to a new location outside the community of origin. Today the movement of people from rural to urban areas (internal migration) is most significant. Migration is often explained in terms of “push factors” - a condition in the place of origin which is perceived by migrants as detrimental to their well being or economic security and “Pull factors” - the circumstances in new places that attract individuals to move there. Examples of push factors include job opportunities or moving to a better economic climate.

Since 1950 the proportion of the world population living in cities has more than doubled to an estimated 36 percent or 1.3 billion people. About half of the urban dwellers are migrants from rural areas and a majority lives in overcrowded slums or makeshift squatter settlements. The developing world 95 urban population is growing at an annual rate of 3.7 percent a year almost 4 times faster than population growth in rural areas. Slums are generally expanding faster than other urban zones and certainly faster than city infrastructure, essential services and employment.

UN World Urbanization report described the twentieth century as witnessing “The rapid urbanization of the world’s populations, as the global proportion of urban population more dramatically from 13 percent in 1900 (220 million) to 29 percent (732 million) in 1950 to 49 percent (3.2 billion) in 2005. The same report projected that this figure is likely to rise to 60 percent (4.9 billion) by 2030. United States
exemplified this trend of urban migration as urbanization increased at a steady pace over the twentieth century”.

3. PHENOMENAL URBANIZATION IN DEVELOPING COUNTRIES

Urbanization is the major social change sweeping the entire globe, especially the developing countries. An unprecedented and indiscriminate growth of urbanization shows adequate effects on human health due to structural changes taking place especially at places they work, quality of water they drink, the air they breathe and houses in which they live. A majority of urban dwellers in the third world countries show poor status of public health due to inadequate infrastructure facilities such as water supply, poor sanitation, uncollected garbage, overcrowded housing and air pollution. Besides this the other common problems observed are unemployment, urban poverty, urban violence, alcoholism, drug abuse, etc.

According to UN-HABITAT 2008 annual report, some time in the middle of 2007, the majority of the people worldwide will be living in towns and cities, for the first time in history, which is referred to as the arrival of the ‘Urban millennium’. In regard to future trends, it is estimated that 93 percent of urban growth will occur in Asia and Africa and to a lesser extent in Latin America and the Caribbean. By 2050 over 6 billion people, two third of humanity, will be living in towns and cities.

In 1950 only New York and Tokyo had population of more than 10 million. Today there are 20 of these so called mega cities, bulk of them in Asia and Latin America. But most of the growth in the decades ahead will come in small cities. By 2015, demographers project there will be 59 cities with populations between 1 million and 5 million in Africa 65 such cities in Latin America and the Caribbean and 253 cities in Asia. As early as 2030, four out of five of the World’s urban residents will be in what we call the developing world.

Although urbanization has stabilized in America and Europe, with about 75 percent of the population living in urban areas, Africa and Asia are in for major demographic shifts. Only about 35 percent of their population lives in urban areas but it is predicted that this figure will jump to 50 percent by 2030.

Most of the world’s most populous cities are in developing countries. Many of these cities are in Asian countries with low per capita incomes but big populations, such as China, India and Indonesia. These cities have high concentrations of poor residents and suffer from social and environmental problems including severe air pollution.

Take the example of India, a true developing nation. India’s urban population in 2001 was 286.1 million, which was 27.8 percent of the total population. Over the previous five decades, annual rate of growth of urban population ranged between
2.7 to 3.8 percent. The process of urbanization in India is marked by increasing concentration in comparatively larger cities. In 2001, 68.7 percent of the total urban population was living in class - I cities (defined as population over 100,000). Shares of medium and small towns in the total population stood at 21.9 and 9.4 percent respectively. The number and proportion of cities with a population of one million or more has grown significantly from 12 in 1981 with 26.8 percent share of the total urban population, the number of million plus cities has increased to 35 in 2001 with 37 percent share of the total urban population. In this context the following account indicates the issues to be addressed in harmonious cities in the context of developing nations.

4. ISSUES OF HARMONIOUS CITIES

4.1 Urban poverty

Almost everywhere, cities are the destinations for people escaping poverty, conflict and human rights violations or simply those looking for ways to build better lives. A city poverty assessment is a tool for acquiring up-to-date information on a city’s poverty and social development. Constructing a poverty profile at the city level will provide a snapshot showing who is poor, whether they live in the city, their access to services, their living standards, and so forth, thereby contributing to targeting for poverty alleviation.

Rapid growth of cities strain their capacity to provide services such as energy, education, health care, transportation, sanitation and physical security, because governments have less revenues to spend on basic up keep of cities and provision of services, cities have become areas of massive sprawl, serious environmental problems and wide spread poverty.

In cities, poor citizens face the worst environmental consequences. In low income settlements, service such as water, sewage, drainage and garbage collection are often non existent. Lacking resources to purchase or rent housing, between one third to two third of urbanity in developing countries become squatters on dangerously steep hill side flood prone river banks and other undesirable lands.

Good quality water and sanitation can also increase real incomes by greatly reducing the amount that was being previously spent on health care and medicines as a result of water related diseases and loss when income earners were ill or had to house other ill family members. Housing schemes that really respond to the needs and priority of low income households can also reduce poverty, reduce health burden from infectious and parasitic diseases and accidents and also provide security, and create a large asset base and space for income earning activities.

UN-HABITAT research shows that by the year 2050, six billion people that is the two - third of humanity will be living in cities and towns. As urban centers grow, the
locus of global poverty is moving to towns and cities especially into the burgeoning informal settlements and slums of the developing world. Urban poverty alleviation is a challenging task before the nations which call for imaginative new approaches. The goal is to adequately feed, construct decent houses and employ large and rapidly growing number of impoverished city dwellers. The need of the hour is to provide poor people with employment and provision of funds for housing and shelter upgradation.

4.2 Urban Pollution and Congestion

A great majority of population growth in the new urban centers of Africa and Asia exists in unplanned and undeserved settlements commonly known as slums. Over one quarter of urban residents in the developing world - more than half a billion people - lack clean water and sanitation and 1.6 million die each year as a result.

In India 26.7 percent of the total poor in the country live in urban areas. In terms of the numbers, 26.7 percent of the total poor implying 80.7 million persons or about one fourth of the country’s total urban population.

Growth of the Indian workforce is also characterized by an increasing level of urbanization. At the onset of 21st century, 32 percent of the total workforce resided in urban areas. The notable point is that 79 percent of the new jobs totaling 19.3 million between 1991-2001 will be generated in urban areas and only 5 million jobs will be generated in rural areas.

Because of the concentration of trade and commerce activities and increase in employment growth in urban areas, migration of not only skilled labourers but those of agriculturists, agricultural labourers and non skilled laborers to urban areas. On the other hand rural economy is suffering from lack of government support, lack of yield of crops because of droughts, lack of market support and now also lack of availability of agriculture labour, and also because of more wages in urban areas. Other unfortunate development is loss of fertile agricultural land which being converted into residential land and people losing not only their property but also their profession and livelihoods without being presented with new options. Thus they are also migrating to urban areas as unskilled workers. Pressure on urban areas in terms of housing, infrastructure, employment creation is very challenging and gigantic task. This is not only common problem in Indian cities; it is common problem across the globe in all third world countries.

Rapid urbanization together with encroachments leading to the loss of catchments of surface water bodies and problem of silt deposits and pollution, which includes domestic, industrial and agriculture water including eutriphication are the major problems of the world to protect and control water resources. Ground water depletion in the city on one hand, water logging and blocking on the other hand
has to be taken care of together by preparing schemes for rain water harvesting both on the surface and recharging existing ground water aquifers. Storm water generated in the area should be utilized for recharging by diverting into suitably designed recharge pits or into nallas by means of drains and to finally surface water collection reservoirs, ponds or lakes.

Considering the availability of basic infrastructure, urban areas in India present a grim picture. About 21 percent of urban population is living in squatter settlements, where access to basic services is extremely poor. Although 89 percent of urban population is reported to have access to safe drinking water, there are severe deficiencies in regard to equitable distribution of water. Nearly 46 percent of urban households have water toilets, but only 36 percent of them are connected to the public sewerage system. Average per capita generation of waste is estimated at 0.4 kg per capita per day in cities ranging from 1 lakh to 50 lakh population, and garbage collection efficiency is estimated to be between 50 to 90 percent of the solid waste generated.

City roads are inadequate for traffic requirements leading to traffic congestion and fast deterioration in quality of roads. Even though there are 35 metro cities in the country except Delhi, Mumbai and Kolkata, none of the other cities have decent public transport systems.

Another aspect of pollution is air pollution. According to the World Health Organization or WHO, air quality standards, concentration of suspended particulate matter should be less than 90 micrograms per cubic meter. In many cities especially of the third world cities this will be on the higher side. In China, Shanghai (246), Beijing (377), however, in India, Mumbai (240), Kolkata (375), Delhi (415), in Indonesia, Jakarta (279), in Mexico, Mexico City (279) and in Brazil, Rio de Janeiro (139). High concentrations of suspended particulates adversely affect human health provoking a wide range of respiratory diseases and exacerbating heart disease and other conditions.

Level of air pollution depends on a country’s technology and pollution control mechanisms, particularly in energy production. Using cleaner fossil fuels such as natural gas and higher grade coal, burning these fuels more efficiently, and increasing reliance on even cleaner, renewable source of energy (hydro, solar, geothermal, wind) are some of the best ways to control and reduce air pollution without limiting economic growth.

Advantage of using hydrogen to power fuel cells is that it is clean, renewable and abundant in supply. Hydrogen can be produced from water using electricity to separate hydrogen and oxygen molecules. While more work is still needs to be done, the plan is to enable cities to produce hydrogen, untaxed, at US$1.8 to US$3 per kg. Untaxed gasoline produces the same amount of power at three times the
cost. Achieving the production of both low cost hydrogen and fuel cells, which are affordable to the urban poor, will undoubtedly make easier increased political and financial collaboration between governments, international institutions and business community.

Urgent need of the hour is to frame up global energy policies. Research and innovations have already started. In US, Virginia University with India based partner research project have started producing energy from rice husks. This will create two valuable products: electricity and ash, which can be sold as ingredients for cement manufacturing. As of now, two pilot rice husk generators are providing power to about 10,000 Indians, which will save 200 tones of emissions annually for each village if compared to generation of power from diesel or coal. Artificial photosynthesis is another technology being developed. The idea is to create artificial systems that exploit the basic chemistry of photosynthesis in order to produce hydrogen or other fuels both for engines and electricity. Hydrogen burns cleanly yielding just water and energy. Additional benefit in this process is the use of excess carbon dioxide, which is present in the cities in this era of more fossil fuel consumption.

4.3 Urban Transport

Transport problems of urban areas, especially those of bigger cities, have not received due attention. As population increases, number of vehicles will also increase, but the area under roads may remain same. This could aggravate the congestion problem in cities. In the absence of reliable transport, people based on their need and affordability will rely on private vehicles causing congestion, traffic jams and air pollution. In transportation sector, as there are many agencies involved such as traffic police, municipal authorities and transport departments, etc., planning for the same is bound to be difficult.

All the developing nations including Indian cities face a crisis of urban transport. Despite investments in road infrastructure and plans for land use and transport development, they face increasing problem of congestion, traffic accidents, air and noise pollution. Investments in road widening schemes and grade separated junctions, which primarily benefit personal vehicle users (car and two wheelers), have dominated government expenditure. Even though in Delhi there are only 15 percent car users and 80 percent of the transport budget is used for widening roads.

Many city governments are making proposals for new public transport systems such as metro, mono-rail, light rail, sky bus or bus rapid transport systems. Any traffic and transport system demand is dependent on the ease of access, low fares, dependability and proximity to potential bus passengers. Metro, a capital intensive system (Rs.200 - 300 crore per km) and for the cost of one kilometer of a metro
system, 30 to 50 kilometer of modern bus network can be developed. Metro system has to work properly; an anticipated public transport system along with good feeder system should work. Further all rail based systems have to depend on buses, three wheelers, and rickshaws as feeder modes to increase their catchment areas.

However, leaving aside metro, the minimum cost of public transport trips is 20-30 percent of the family income for nearly half the city population living in slums. This section of the population is very sensitive to the slightest variation in the cost of public transport. In outer areas of Delhi, the presence of non-motorized vehicles and pedestrians on some of the inter-city highways with comparatively long trip lengths shows that a large number of people use these modes for lack of any other option. In planning harmonious cities, transport policy has to give priority to cycling and pedestrian movements as these are ecologically viable, environment friendly and cost effective modes for the city to sustain.

Advantage of road based mass transport system is that it could be built at one twentieth of a cost of the other mass transport systems. Curitiba (Brazil) and Bogota (Colombia), both considered models of public transport, have decided to expand their BRT system in order to cover the whole area by public transport which does not require subsidy, restricts car usage and has major positive impact on safety, pollution and energy consumption.

Take the classic example of Curitiba, the capitol of the state of Parana in Brazil for effective sustainable public transportation system. To accommodate growing population needs over the past 30 years, the system has grown to utilize varying types of bus services that cater to the needs of passengers within the metropolitan area and surrounding municipalities. Integrated Transport Network, now operating with 1,902 buses, is designed to allow passengers to make travel accommodations to a certain destination without paying more than one passage within the metropolitan area. This integrated system connected by tube stations and terminals also incorporates an express bus system that serves as a surface subway for the city of Curitiba whose foresight in urban planning has demonstrated positive results.

Curitiba planners have decided to address the process of transportation planning as an integrative approach that can assist in the development of the city. In Curitiba’s case its planners recognized that transportation systems can serve as the backbone for the development and growth of the city in the future. Instead of succumbing to the demand of population and addressing transportation service that caters to an ever prevalent and pressing demand, they essentially planned their system with the intention of dictating growth of the city. The city’s urban planners recognized that even with growth in population, it can be controlled; the development of infrastructure in the city can guide the city’s expansion. The city used buses because it had tradition of using buses. While this system is powered by diesel, reduction in
the number of cars used compensates, if not surpasses, the difference in carbon monoxide emissions. Like every city, Curitiba’s transportation system is plagued by overcrowded peak hours and untimely buses. But these are relatively minor inconveniences in comparison to the services provided.

5. URBAN GOVERNANCE

Governance is traditionally defined as actions or manner of governing. But it no longer means just that. In fact it extends beyond conventional law enforcing, service providing domain of the state to imply process of development which is participatory and takes into consideration the interests of all the stakeholder groups in society especially the most excluded and disadvantaged sections. Good governance is seen as a process that promotes and encourages sustainable socio-economic, human and cultural development of societies.

Local government has a crucial role and responsibility in addressing the city administration agenda. As the sphere of government reaches close to the people, local government can best understand and reflect local needs and priorities, broker multi stakeholder partnerships and participate and monitor local trends and issues. They also have critical role to play in raising awareness of the challenges of urbanization for sustainable development and of how local actions can improve quality of life as well contribute to the global environment agenda. Urban local government, while addressing all issues, has to accord high priority to urban poor and people living in squatter settlements, particularly socially and economically vulnerable people.

In India, through 74th Constitution Amendment Act (CAA), Government of India for the first time recognized the importance of local government in cities and towns. It has various provisions such as regular elections after every five years, assignment of 18 mandatory functions which include urban planning including town planning, planning for the weaker section, planning for the socio-economic development, planning for the slum improvement, integration of physical and economic planning at the city and district level through District Planning Committee (DPC) and Metro Planning Committee (MPC), allocation of financial resources through State Finance Commission (SFC). Constitution of Ward Committee (WC) at ward level aims to address local problems and also to build consensus about development programmes and to create awareness about city development issues. These are the historic landmark decision which would really strengthen urban local government to handle multi-task agenda in the globalizing world to build harmonious cities. Only implementation of the same in its true spirit is required particularly in Indian cities and commonly across all the developing nations.

6. SUSTAINABLE URBANIZATION FOR HARMONIOUS CITY

In the following case studies we argue that sustainable urbanization towards harmonious city will be achieved not from anywhere else, it should come from within the city.

Dr. Girish Karnad T.G.
In Accra (capital of Ghana), at least one thousand urban farmers grow wood in backyard plots, along road side in abandoned dumps, fertilizing their crops with “grey water” from kitchen and bath rooms. In Barcelona, over half of the new and refurbished buildings now have solar power. In Karachi the urban poor have organized themselves to provide sewer services by having the inhabitants take responsibility for planning, building and managing the local piping system. In Bogotá, many residents move easily around the new bus rapid transit system. On an island in the Yangtze River near Shanghai, a new ecological city is being built from scratch. In Johannesburg, cooperative businesses have been formed to sell eco-friendly construction materials and this has created hundreds of new jobs for its residents.

Harmonious cities will be achieved by sustainable urban - rural complimentary growth approach. In Havana a city of around 2.2 million inhabitants, urban agriculture has taken off since 1989 when food shortages arose. Promotion of urban agriculture has increased the food security of urban dwellers and reduced the need for storage and transportation of fresh produce reducing post harvesting loss. It was estimated that 117,000 people work in urban agriculture and about 26,000 people are employed in related work. Allocation of land for cultivation is now seen as part of urban planning process and urban agriculture has made positive environmental contribution in terms of provision of green spaces using organic waste within the city using urban waste land and improving water retention and air quality.

7. POLICY RECOMMENDATIONS

Urbanization is an inevitable global phenomenon. Urbanization, growth of cities and its impact is much more in developing countries. The following suggestions have been made for controlled and guided urbanization for sustainability to achieve harmonious cities with reference to the third world countries in general and India in particular.

7.1 Controlled and Guided Urbanization

Urbanization is necessary, but guided urbanization is required. Identify the potential resource center based on the available natural resources, economic potential, strategic location of the place and population growth at the local, regional, state and national level. Avoid concentration of activities at one location and decentralize and disperse activities, initiatives, investments based on their potential. Interconnect these places by effective and efficient transportation network. Each growth center or place will act as complimentary place to one another for achieving balanced regional development. While achieving the expected potential growth, sustainability of natural ecosystems, conservation of resources and energy efficient measures are to be followed. While adopting these strategies, residents’ socio-economic and cultural needs are to be fulfilled. Sufficient care should be taken to achieve desired economic growth and benefits should be judiciously distributed.
equally among all sections of the society especially weaker and vulnerable segment of the society.

In India urbanization is taking place with rapid speed. It is expected that 50 percent of India’s population will be living in urban areas in another 30 years. If we see the pace of urbanization most of the mega cities are state capitals or strategic location centers. In this way economic investment and all other employment creation has been concentrated in these places. Cities like Mumbai, Kolkata, Delhi, Chennai and Bangalore are primate cities in their regions. This will attract most of the unemployed and under employed people into these agglomerations. This creates enormous pressure on city infrastructure. It is also evident that India’s labor force witnessed a rural to urban shift and employment growth is more in urban areas than rural areas.

Government should identify growth centers at local, regional and national level. Then based on their hinterland, economic base and its resources, physical and economic plans in the form of regional plans should be formulated and accordingly investment plans should be worked out. Some of them may be developed as tourism centers, trade and commerce centers, education centers, information technology (IT) and biotechnology (BT) corridors. Sustainable habitat policy at the national level has to be worked out by incorporating all these in mind. Proper connectivity in the form of infrastructure corridors has to be made by using both road and rail networks so that migration is checked at the regional level. Planning has to make for balanced regional development of both urban and rural areas.

Urbanization should not take place at the cost of rural migration, rather it should supplement to the rural economy, its growth and sustainability. Rural areas will be growing fields of agricultural and horticultural products for nearby urban areas and for industries and commerce located in urban areas. Nearby rural areas will act as true hinterlands. Rural area will also act as lung space for urban areas by keeping fertile agricultural land as green belt. This development will sustain if effective mass rapid transport system is provided between them. The same issues are also highlighted in ‘Provision of Urban amenities in Rural Areas (PURA) approach. In this way urban and rural economy will sustain, regional balanced development will be achieved and cities will become harmonious.

7.2 Green Cities

In order to reduce the use of energy in cities, it should encourage and accommodate more and more Green buildings. This is a new concept. Green buildings concept is fast coming up in developing nations. In India the first such building was the CII Godrej Green Business Center in Hyderabad. A conventional building uses lime bricks that utilize lot of energy. But a green building uses fly ash bricks or some other waste materials for construction. Heat gained by buildings made of fly ash is
less than other buildings, which reduces the use of air conditioning. High performance glass is used in these buildings. This glass has a unique property with which it selectively allows light to come inside the building minus the heat. Roof can be either green or a terrace garden can be grown to have a cooling effect. This concept can be used in all kinds of building: from schools to hospitals, and from residential buildings to airports.

As compared to the conventional building, a green building consumes 30 to 50 percent less energy. It also saves about 30 to 70 percent water. Typical green building uses about 25-50 percent recycled materials. These buildings are certified under Leadership in Energy and Environment Design (LEED) with Platinum, Gold and Silver ratings. The LEED ratings are given according to the amount of energy building can save. This encourages developers to use energy efficient measures like rain water harvesting, waste management, etc. Green building also controls the CO2 level produced in the building. The cost of this type of building is not too expensive and costs are about 8-10 percent higher than the conventional buildings. By considering the eco-friendly structure and energy efficiency achieved, these buildings should be encouraged and government must give various incentives.

7.3 Conservation - Recycle/ Reuse options

To attain the harmonious cities, natural ecosystems in the urban areas should be preserved. Water a precious resource and its conservation should be made through rain water harvesting, recharge of ground water by allowing the water to be retained in natural ponds, lakes and open spaces and undulating unutilized spaces. Conserve all the places of natural importance such as urban open spaces, natural drains valleys, natural drains, urban forest lands, ponds, barren land with rocky hills, lakes and agriculture lands, etc. These will act as lung spaces for the city and will maintain the ecological balance in the city. By using the latest gardening and arboriculture techniques, aesthetics of cities can be improved and these will also act as recreational spots for the residents and the same can be used for commercial purposes to earn revenues for the city administration.

Every new house constructed must adopt rain water harvesting technology before which the planning authority should not give permission for the construction of a new house. The campaign for conserving water is the order of the day and prime importance has to be given. Waste treatment has to be made properly by using the latest technologies and treated water to be used for non-domestic, industrial and agriculture and horticulture purposes. Solid waste generated has to be segregated properly by using various methods such as composting, bio methanisation process energy, etc.

Always encourage ecological building techniques such as green roofs, passive solar energy, water conservative system, solar water heating, wind turbines, and low
energy appliances. Always encourage mixed land uses with mixed income groups of people, with self sustained neighborhoods with proper work home relationships with walkable spaces and cycle lanes to commute at local level. Planning authority should campaign for control of pollution and hazardless developments. Like in India one could use ward committees as forums to popularize the concept of sustainable use of available energy leading to judicious use of resources.

Authority should encourage the public to create an environment of energy efficient and eco friendly atmosphere by giving all possible incentives and support. At the same time polluters pay strategies should be adopted to bring awareness among the city residents for creating sustainable eco-friendly environments. As the people use more water, they have to pay more tariffs at relatively higher slab compared to those who are using less water. Put more tax on personalized vehicles and give incentives for the people who use public transportation routes.

7.4 Citizen Charters and Committees

There is a need to create residents charters or resident committees or ward committees. This should be strengthened and this will act as forum between city administration and local residents both for identifying their needs and fixing their responsibilities. Like in the Constitution of India provision of fundamental duties for the citizen of India, in a similar line, there is a need for framing fundamental duties that each resident has to follow and adopt. This should be inclusive of morality, conserve water, use of recycled water, use of solar water heaters, construction of eco-friendly energy efficient habitats and surrounding neighbourhoods, which consume less energy, avoiding personalized vehicles and use of public transport, live in harmony with nature and join hands with ward committees and in turn city administration in building of sustainable harmonious cities. Role of schools and colleges and electronic media is also very important in building sustainable atmosphere towards the development of harmonious cities.

7.5 Bus Rapid Transit System (BRTS)

Better bus networks are the best option for cities in the developing world. Bus rapid transit systems are like surface metro systems with large capacity, buses running on dedicated road lanes with well designed bus stations typically spread half kilometer apart that serves as city development hub much like underground metro stations. Big advantage of BRTS over under ground or over head metro rail system is cost because it can be constructed for as little as one fiftieth the cost of rail systems. These systems as developed in cities such as Bogota and Curitiba have an impressive record. BRTS can save large amount of motor fuels and reduce large amount of greenhouse gas emissions at relatively low costs compared to the status quo where no such investments are made and a steady shift to private vehicle occurs. These savings also compare quite favorably to technology substitutions.
such as shifts to more efficient or alternate fuel bases, but without major upgrades to the bus system.

Over all it has been found that there is a clear potential for using Bus Rapid Transit System and related measures such as (pedestrians and cycling enhancements) to provide large reduction in fuel use and CO2 emissions at quite low cost compared to vehicle and fuel technology oriented solutions. All the future residential land uses must adopt mixed land use concept and proper work-home concepts. Each new locality should have self sustained unit in terms employment, public uses, commercial and other socio-cultural needs of the community. In all the future developments and if possible in the present locations, we should also have non-motorized vehicles. There should be separate dedicated cycle lanes provided, which caters to local needs of the residents. Authority should extend all possible incentives to encourage residents to use bicycles. Specific suggestions include:

- Developing an urban environment conducive to efficient operation of enterprises of all sizes with resilience and adoptability in the face of global competition. By concentrating on essential infrastructure, appropriate regulations and encouraging the development of linkages between urban and rural producers.
- Developing capabilities (education, skills, health) of the urban labor workforce so that residents’ especially poor men, women and young people can achieve decent livelihoods and economic enterprises can recruit suitable workforce.
- Improving the provision of basic services to employers and residents particularly the urban poor.
- Reducing the environmental impact of waste generation by increasing recycling and re-use improved solid waste management and sanitation arrangements and measures to tackle pollution from industries and vehicles.
- Reserving and creating special areas such as parks, playground, public uses, natural ponds, valleys, lakes, agricultural lands.
- Strengthening local governments by ensuring that they have appropriate powers, resources and capabilities to take responsibility.

7. CONCLUSIONS
Harmonious cities will be achieved through sustainable urbanization in a dynamic multidimensional process. It embraces relationships between all human settlements from small towns to the metropolis as well as other urban areas. Most crucially it includes not only environmental but also social, economic and political institutional sustainability.

We should make efficient use of resources within the carrying capacity of ecosystems and take into account precautionary principal approach. Provide all people in particular vulnerable and disadvantaged groups with equal opportunities for a
healthy, safe and productive life style in harmony with nature and their cultural heritage, spiritual values and ensure economic and social development and environmental protection, thereby achieving harmonious cities. In harmonious cities rural and urban linkages will be well established. Flow of water, food, raw materials, energy, etc; from non-urban to urban areas has important implications for the ecology of both the originating and receiving areas. Disposal impact of urban wastes (solid waste, air and water pollution) in peri urban and rural areas and beyond is also significant.

There is no magic bullet for creating sustainable, equitable and peaceful cities. But there are some necessary, if not sufficient conditions for such transformations that should be created. These are: transparent governance, decent basic income, innovative infrastructure to conserve the environment, intelligent land use with integrated community development and social cohesion along with cultural diversity. Further, we should bridge the divide between economically well off and others.

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