

Smart City-Way of Sustainable Development

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ABSTRACT

Urbanization is the indicator of growth, cities are known as ‘engines of development’. But in few decades the nature of development has rapidly changing. They are increasing horizontally & vertically beyond the capacity due to increased population. Today about 31 percent people are in cities & their contribution over 63 percent of GDP it is estimated that in 2030 it may reached up to 50 percent & GDP contribution will be about 75 percent. About 30 villagers moving every miniature from villagers to city tenants not numerous towns will be cleared out at the conclusion of the century Typically not constrained to this, it stimulates so numerous challenges Cities have got to be unsustainable for living, all types of pollution has increased, there is much pressure on infra structure like water, instruction, power, well being & so on. The resource is beneath steady dangers and continuously failing short of needs and requests this have to be overseeing city economically. Keen city show is one of the better ways to preserve the city as engine of growth. The Purpose of shrewd city mission is to promote core foundation & not too bad quality of life to its citizens.

KEYWORDS - Smart City, Sustainable water, infrastructure, Development.

1. INTRODUCTION

Development is a continuous process. Cities are much nearer to development than villages. Cities are the engines of development all indicators of development present in cities comparatively. But in last few decades the nature of development is rapidly changing. Cities are growing horizontally & vertically. They are growing beyond capacity due to increasing population. Today about 31 per cent people are in cities & their contribution over 63 percent of GDP it is estimated that in 2030 it may reached up to 50 percent. About 30 villagers moving every minute from villagers to city dwellers not many villages will be left at the end time of the century. It is not limited to this, it a rouses so many challenges Cities have become unsustainable for living, increasing all type so pollution, there is much pressure on infrastructure like water, education, electricity, health & soon. The situation has become dangerous. It needs to manage cities properly unless the situation will be out of control. Many researchers' policy makers are trying to manage cities. We need development but not unsustainable it should be sustainable. Sustainable development is the development that meets the needs of the present without comprising the ability of future generation to meet their own needs. It is vast concept which includes social economic ecological sustainability which clearly understood from Brandt and commission's report. Present cities are growing unhygienic manner, so smart city is better way to make cities sustainable that is livable. Purpose of smart city mission is to promote core infrastructure.

2. OBJECTIVES & METHODOLOGY

The paper aims,

- 1.To highlight the problems of urbanization & need of smart city
2. To understand the concept of smart city
3. To Focus on Smart city is one of the way of sustainable development

The present study is based on secondary materials like books journals different reports are used & analyzed it with the current situation.

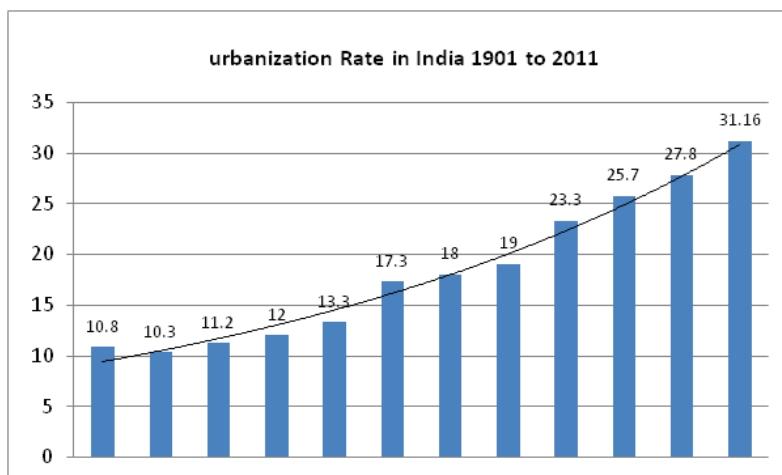
3. WHY SMART CITY

India is the country of 127 core population. Rural face is the identity of India but in last few decades the rate of urbanization is increased rapidly all over the world. In India as per 2011 census about more than 31 per cent people are urban resides in some stat like Maharashtra & Tamilnadu above than 45 per cent are urban. Cities are the 'engines of growth' globally. An Indian city contributes 63 per cent of GDP & it would be 75 per cent by 2030. It indicates the role of city but the cities are growing horizontally & vertically there are no road facilities of water roads drainage electricity in expanded areas of cities. There is a huge problem of solid waste much pressure on health education increasing slums has becoming the real identity of specific city Census report identifies 13.8 million households that is about 64 million people located in city slums nationwide. 1 in six India city residents lives in slums like Mumbai 18

percent people are living in slum areas. Pollution has become a common problem nobody can leave it. Socially cities are becoming unsecure

3.1. Rapid growth of Urbanization

The growth of urbanization in India is basically through two ways, one is natural growth of urban population & second is through migration from rural to urban areas. After new economic reform, due to rapid economic growth, in cities led migration, from rural to urban. The number of Indian Mega cities will increase from the current five (Mumbai, Delhi, Kolkata, Chennai, Bangalore) to seven by the year 2030 new additional will be Ahmedabad & Hyderabad (UNDP



2016). Trend of urbanization is shown in the following chart.

Chart no 1. Trends of urbanization in India.

Chart no 1 shows trends of urbanization in India since 1901 to 2011. After independence from 1951 the rate of urbanization has increased rapidly.

The 21st century is facing major challenges for humanity. Due to population growth the resources are under constant threats and always falling short of needs and demands. In India as per 2011 census 5.41 percent population are living in slum areas. In Maharashtra it is 10.5 percent, Andhra Pradesh it is 12.0 & Tamil Nadu about 8 percent. As per Government data Maharashtra, Uttar Pradesh, and Andhra Pradesh & Madhya Pradesh will host the largest chunks of India's slum population.

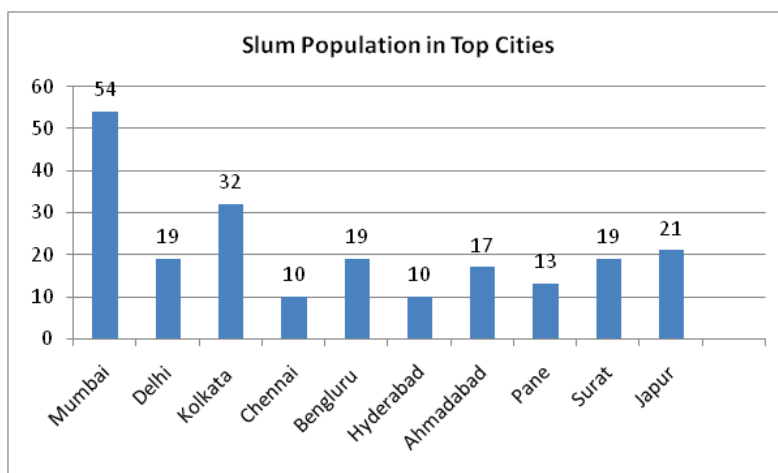


Chart no 2 Slum population in major cities*Census 2001, 2011, Major cities top cities*

Urbanization means development, but when we see another side urbanization represents unsustainable development which is commonly reflecting all over the world. There are lack of facilities in drinking water, good roads, sewage system, unhygienic housing, pollution etc, Today's cities are trapped such problems. Slum is one of the significant features that shown in the chart 1. Major cities majority of people are living in slum areas, in Mumbai about 54 percent are slum people that follows, Kolkatta, Jayapur, Bengluru, Surat, Ahamadabad that is dark side of development which decreases dignity of human life. Apart from this climate change, solid waste, water, air, noise pollution, lack of infrastructure facilities & health problems are increasingly rapidly in urban areas. To cope with the problems or challenges it requires urban planning with sustainable manner that we can see through smart city model.

4. UNDERSTANDING THE CONCEPT OF SMART CITY IN INDIA

Smart city Awes mission was introduced by our Prime Minister Arendt Moden June 2015 a total of rest 980 billon has been approved by the Indian cabinet for development of 100 smart cities Smart city mission is an urban development programmed by government to manage the cities sustainably them is scion aims to create an efficient rub an management system by providing ICT technology. (1) (Randhawa &Kumar 2017).

The word "smart" has become the buzzword. Smart phone smart living smart knowledge is some of the routine examples. The concept of smart city was introduced in late 1990s. In India, it was used in 2014 by the government. There are different views of smart city as per 'Single fits not to all'. There is no specific definition of smart city It is differ from, city to city & nation to nation depending on the level of development, willingness to change, reform resources & aspiration of the city residents. The main purpose of smart city mission is to develop cities that provide core infrastructure facilities & give sufficiently good life quality to its citizens a clean & sustainable environment & application of smart solution. A smart sustainable city is an innovative city that uses information technology. The concept of smart city is relatively new and can be seen as a success or of information city, digital city and sustainable city (Yigitcanlar - 2006) Barcelona defines smart city as a high-techs its using new technologies in order to create sustainable greener city, comprehensive and advanced city that connects people. Shrewd city is an urban advancement vision to coordinated different data & communication innovation through internet solution in a secure fashion to manage a city's asset. It includes school, library transport, clinics lodging streets water sanitation managing an account spouse squander administration & vitality etc the objective of keen city is to make strides quality of life of citizens by utilizing urban framework & innovation to make strides the effectiveness of administrations to meet wants of dwells. It include small things smart that is smart housing, smart communication smart technology smart waste management smart water supply smart roads smart health of urban poor. All smart facilities would led towards smart work & smart efficiency that enhance the productivity.

5.SMART CITY- WAY OF SUSTAINABLE DEVELOPMENT

Actually the growth of cities is an indicator of development. Cities are recognized as growth centers of economy, hence in current few decades they have becoming dirty places due

to over population so it has become necessary to manage the cities sustainably. Smart city is one of the better way towards sustainable development of cities. It provides efficiency to all aspects of human life. Smart city have four pillars that includes

1. Physical Infrastructure

The factor aim at cost effective & intelligent infrastructure based on the urban mobility system. Physical infrastructure is very significant to enhance the quality of human life which is inferior in cities Power, water, solid waste sewage roads cyber connectivity, housing tom poorer that is low income groups,

2. Social infrastructure

The component towards the development of human and social aspects. It consists education, health, entertainment parks ,building parking Traffic management etc

3. Institutional Infrastructure

The component aim, to good governance planning & management of a city by using new technology. It consists speedy service delivery, enforcement, transference & accountability, skill development activities, environmental sustainability, public participation etc. all factors can improve good institutional network high broadband connectivity It increases the connectivity at all levels

4. Economic Infrastructure

The component aims to attracting investments & employment opportunities in the city by identifying the core advantages & potentials to generate economic activities which useful the people. It provides more job opportunities, market growth, livable activities, GDP, contribution. Smart city can increase the employment opportunities that improve the economic stability for low income groups.

The word smart has gotten to be the buzz word. Savvy phone keen living keen information is a few of the schedule cases. The concept of keen city was presented in late 1990s. In India, it was utilized in 2014 by the government. There are diverse sees of keen city as per Single fits not to all. There's no particular definition of savvy city It is contrast from, city to city& country to country depending on the level of advancement, eagerness to alter, change assets & desire of the city inhabitants. The most reason of keen city mission is to advance cities that give center framework & grant not too bad quality of life to its citizens a clean & maintainable environment & application of savvy arrangement. A savvy maintainable city is an imaginative city that employments data innovation. The concept of savvy city is generally unused and can be seen as a successor of data city, advanced city and economical city (Yigitcanlar-2006) Barcelona characterizes shrewd city as a high-teche its utilizing modern innovations in arrange to form maintainable greener city, comprehensive and progressed city that interfaces individuals. Savvy city is an urban improvement vision to coordinated different data & communication innovation through web arrangement in a secure design to oversee a city's resource. It incorporates school, library transport, clinics lodging streets water sanitation keeping money spouse squander administration & vitality etc the objective of savvy city is to move forward quality of life of citizens by utilizing urban infrastructure & innovation to make strides the proficiency of services to meet desires of dwells. It incorporates all things savvy that's savvy lodging, shrewd communication shrewd innovation shrewd squander administration shrewd water supply shrewd

streets shrewd wellbeing of urban destitute. All savvy offices would drive towards savvy work & shrewd proficiency that upgrade the efficiency.

Taking into consideration the concept of smart city its mission & present situation of Indian cities it would be a smart solution towards sustainable development. In smart city smart people smart knowledge & smart management would used for sustainable development of city people & improve the quality of life but it depends upon the vision of planners & availability of resources that are provided by government & how much peoples involvement in the scheme, but we hope smart city is better way for sustainable development.

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