FUTURE OF INDIAN CITIES

 India is transforming from a rural to an urban country. To prepare our cities for the future – we need to re imagine concepts of shelter, utilities, culture, health, and economy. Unless we plan today, we will build cities that codify inequity and un-sustainability.

In the next three decades India will transform from a rural to an urban country

Approximately 1,800 Indians move from rural areas to a city every hour. The pace at which Indian demographics are shifting from rural to urban is unprecedented.

 Major cities such as Mumbai and Delhi are no longer "cities" as traditionally defined but megalopolises – a collection of urban conglomerates whose borders have merged to become the Mumbai Metropolitan Region and Delhi NCR respectively Consider this: by 2050 60% of Indians will live in cities. Delhi, Mumbai, and Kolkata will be amongst the world's largest cities and cumulatively become home to nearly 100 million people.

 How will these cities that are already bursting at the seams ensure basic quality of life for all these new citizens?

The answer is in reimagining the construct of cities.

 We need to shift away from thinking of cities purely in terms of fixed locations and physical infrastructure such as roads and buildings, and towards cities as dynamic living systems.

- We have an opportunity ahead of us to overhaul our existing cities and carefully plan new ones as we prepare for the future.
- Resilience to natural resource scarcity,
 extreme weather conditions and human-made
 disasters, as well as inclusive growth will need
 to be the bedrock of the future of Indian
 cities.

- India is known as a 'reluctant urbaniser' for a reason. Our ruling class romanticised the notion that the "soul of India lives in its villages" for far too long.
- The excessive obsession with villages in our policies led to the decay of many potential towns over time, and eventually resulted in mass migration of population towards metros.
- Today, our mega cities are overcrowded and unmanageable due to the rising migrant workforce.

- Our post-Independence cities are good examples of urbanisation gone wrong.
 Chandigarh, Bhubaneswar, Gandhinagar and Naya Raipur, though meticulously planned, are at best administrative towns or retirement abode for bureaucrats.
- Others, such as Gurgaon, are concrete jungles, devoid of basic civic infrastructure, and driven by private developers.

- Presently, India has 300 million urban dwellers. By 2047, 65
 per cent or 700 million people will be in cities. A McKinsey
 Global Institute report says the country will need 25 new
 townships or urban areas two-and-a-half times that of
 America to contain that population.
- Can our cities provide necessary infrastructure, services and quality of life to the inhabitants of these new cities?
- The government's ambitious 100 Smart Cities can be the answer to this question.
- "India is on the cusp of a transition, a rapid urbanisation.
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 small towns and build new cities that are compact, dense
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- Our cities are over-stressed and we need to redevelop small towns and build new cities that are compact, dense and vertical," says Amitabh Kant, Chairman, NITI Aayog.
- The government is planning many greenfield and industrial cities along the Delhi-Mumbai Industrial Corridor (DMIC), including Shendra-Bidkin in Maharashtra, Global City in Haryana, Ponneri in Tamil Nadu, Khushkera in Rajasthan, and Gift City and Dholera in Gujarat.

- To build a city of the future, we have to think how mega trends in technology and urban planning will converge in future.
- Many Indian cities are adopting technologies such as the Internet of Things, intelligent traffic system, and central command and control system to stay ahead.
- "We have an opportunity ahead of us to overhaul our existing cities and carefully plan new ones as we prepare for the future.
- If executed efficiently and timely, India will see new engines of growth, which are greener in design, smarter in function, efficient in governance, and sustainable and economically viable in the long run," says Jagan Shah of National Institute of Urban Infrastructure.

Challenges

- "The cities of India bring with them a host of environmental and in frastructure challenges, from pollution to lack of civic amenities such as drinking water, sewage, and electricity," says Arvind Subramanian, chief economic advisor to the Government of India.
- In 2047, at least 22 of India's big cities will be in danger of running out of water, and the electricity demand will rise 4.5 times. A joint report by Assocham and PwC has projected that the waste quantity of our cities will reach 436 million tonnes. If untreated, it will require 88 square kilometre of land for disposal.
- Already, 17 per cent of urban population lives in slums, as per 2011 census. Nearly a third of the country's geographical area is drought-prone and 12 per cent of the area is prone to floods. Global warming will make it worse. India is among top five countries in terms of air and water pollution in our cities.

- The task of providing urban way of life to 700 million citizens by 2047 will be far more challenging than anticipated as our megacities are far behind its global peers in terms of civic infrastructure.
- Providing civic amenities, employment opportunities and creating social infrastructure will be an administrative challenge that will require \$950 billion in the next 20 years to effectively build and run the urban cities.
- In this context, are Indian cities, ready to leapfrog to becoming the future cities of 2047, or is the government just counting on its 100 smart cities mission to wield the magic wand?
- The answer will rest entirely on how effectively our policymakers are able to tackle the existing and future challenges of cities.

The future of India's growth process lies in its cities

- Recent studies have projected that India will face an unprecedented scale of urbanisation- 350 million Indians will move to cities by 2030.
- This number is likely to double to 700 million by 2050 which is 2.5 times the size of the USA's present opulation and will be the largest urban movement in the world.
- This implies that every minute during the next 20 years, 30 Indians will leave rural India to settle in urban areas.
- Management guru, the late CK Prahalad, had emphasised the imperative need for India to create 500 new cities to accommodate and provide a better quality of life to its migrating people.
- Otherwise, every existing city will become a slum when India turns
 75 in 2022.

Growth

- Cities are centres of growth, innovation and creativity. In today's world, cities and not countries compete for resources and investment. The GDPs of New York and Tokyo are at par with India's GDP. Not a single Indian city figures in the top 100 cities of the world.
- Mumbai ranks 114th and Delhi a dismal 214th.
- The future of India's growth process lies in the dynamism and vibrancy of its cities.
- In India, farming accounts for more than 58 per cent of its workforce but accounts for only 14.2 per cent of GDP.
- Agriculture can sustain a growth rate of 3 per cent while the Indian economy must grow at 9-10 per cent to lift vast segments of its population above the poverty line.

- No country in the world has grown on a sustained basis for long periods on the back of its agricultural sector.
- It is therefore inevitable that people will migrate from rural India to towns and cities.
- India, like China, has been a reluctant urbaniser. India's freedom movement and Gandhian worldview were rural developmentoriented with the village being a self-sustained economic unit.
- Similar was the case with China's peasantry-led revolution.
- In the early 1870s, China realised that its economic growth and employment creation could not be achieved through the agricultural sector.
- It recognised that urbanisation was an essential feature of economic development and a major component of industrialisation and modernisation.

- For China, economic development was,in essence, about shifting people from sustenance farming to manufacturing, and urbanisation was the spatial manifestation of this shift.
- As a policy, it adopted rapid planned urbanisation with manufacturing as the key locomotive.
- The development of new cities and expansion of existing ones has been a dominant feature of China's growth in the last three decades.

Advantage

- Starting with the development of a planned city in Suzhou in partnership with Singapore, China has gone ahead to develop a large number of new cities through a successful business model of monetisation of land values.
- In fact, mayors have been competing with each other to create new cities and successful mayors have gone on to rise rapidly in the Communist Party hierarchy.
- In sharp contrast, in post-independence India the only cities we have created are the capital cities of Chandigarh and Gandhinagar.
- The only major urban scheme India has launched in its entire planning process is the Jawaharlal Nehru Urban Renewal Mission.

- A recent report has highlighted that by 2020 India will be facing a housing shortage of 30 million dwelling units, 200 million water connections will be required, 350 million people will have to be given access to sewage, 160 GW of power-generating capacity will have to be added and the number of vehicles on roads will increase five-fold.
- There is, therefore, an overriding need to rejuvenate and revitalise India's existing towns and cities and create new greenfield cities.
- The cost of not doing anything will be enormous and seriously retard India's growth process.

- While India is a late starter, it has significant advantages of being able to use technology to leapfrog stages of development and learn from good practices in other parts of the world.
- When cities were made in America, gas and water were cheaply available. Vertical utilities were created and cities were made for cars and not people.
- Today, digital technology enables us to create intelligent and smart cities with a central command room, horizontally managing power, water, transportation and public safety.
- We need to create cities which are compact, dense and vertical, evolve along efficient mass transit systems and encourage cycling and walking.

Sustainable

- Most of the lessons of sustainable urbanisation emerge from Asian countries.
- A great example is Kitakyushu in Japan which, post-World War II, was the most polluted city of the world and is today a unique example of pollution control, recycling, green technology and clean environment.
- Singapore is an example of innovative integrated water management approaches - using reclaimed water, recycling and desalination.
- In 2010, 30 per cent of its supply of water came from reclaimed water, 20 per cent from collected rainfall and 10 per cent from seawater desalination.
- Water is therefore affordable, efficient and of high quality.

- Yokohama has reduced waste generation by almost 38.7 per cent, leading to a saving of \$1.1 billion of capital cost, otherwise required for installing incinerators.
- Its waste reduction between 2001-07 resulted in a reduction of 8,40,000 tonnes of CO2 emissions.
- As India urbanises, it will face severe challenges.
- But there are huge opportunities for smart and sustainable growth which can have a dramatic impact on the quality of life of the expected 700 million urban citizens.