STRENGTHENING *the* INFRASTRUCTURE

Experts believe that smart cities initiative will not just go a long way in alleviating the concerns thrown up by the breakneck speed of urbanisation in India, but also create a massive magnet of employment opportunities in the country

By *Tasneem Firdausi*

The buzz word in the developmental arena, of late, has been smart city and now it took another leap forward with the shift in focus on how the cities will become adaptable to the changes and become sustainable. The urban planning is an important aspect of our future smart cities. As a concept, the mission of smart city is a well thought out, well-planned initiative of the Government of India. The cities intend to monetise the assets.

"We need smart cities as there is a lot of urban pressure and a lot of wastage of resources. The inspirational part is already under way as the small townships that are growing at present are trying to fit into the smart city frame," says Pratap Padode, founder & director, Smart Cities Council India.

However, there is no urban planner in the picture, there is much more to uniformity in design. Indraneel Ghosh, assistant vice president, Brillio India, is of the view, "We have to have the vision as to how our cities are going to become in the next five years and later. Smart spaces have to be focused on.

We have to define future-ready cities." Echoing the similar notion Prof. Dr. P.S.N. Rao, head of housing, School of Planning and Architecture &chairman, DUAC, says, "Five years is just a warming period to re-do Indian cities. We surely need much more time.How you manage the garbage, water and other important resources is a very critical part of the whole process."

By 2050, about two-thirds of the world's population is expected to reside in urban areas, with the largest growth taking place in just three countries – India, China and Nigeria – which will account for close to 37 per cent of the projected growth of nearly 2.5 billion people in the urban population. In the next 34 years, India alone is projected to add 404 million urban dwellers, while China 292 million and Nigeria 212 million, according to a United Nations report released some time back.

The world's urban population, in fact, is expected to reach 6.3 billion by 2050 from 3.9 billion currently. "Even as population in cities and towns keeps growing, a key cause for concern is the quality of life that accompanies such urbanisation," says Pradeep Misra, CMD, REPL (Rudrabhishek Enterprise Pvt. Ltd.), giving a simple reason that these urban areas will face numerous challenges in meeting the needs of their growing population, including for housing, infrastructure, transportation, energy and employment, as well as for basic services such as education and healthcare.
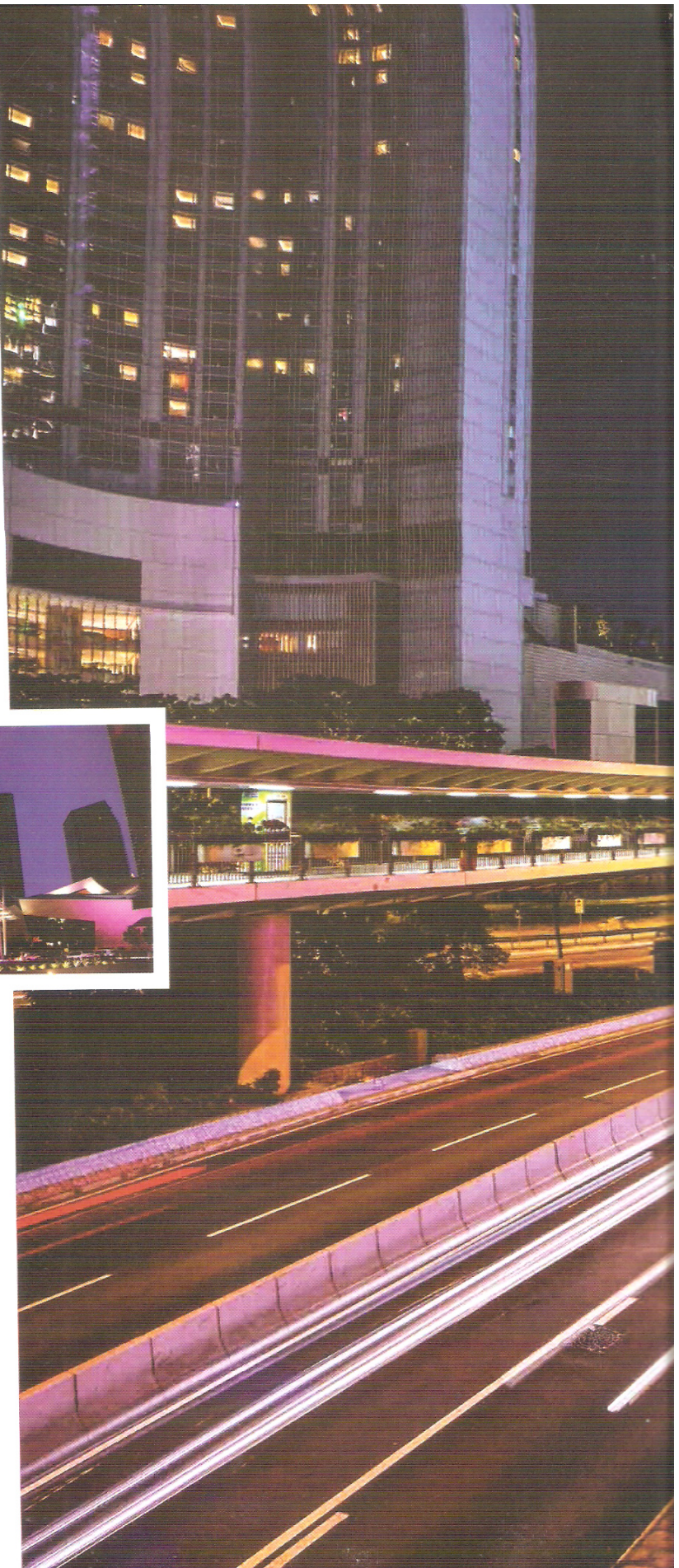
The mission statement and guidelines published by the ministry of urban development in 2015 address the following as core infrastructure elements of smart cities:

- Adequate water supply
- Assured electricity supply
- Sanitation, including solid waste management
- Efficient urban mobility and public transport
- Affordable housing, especially for the poor
- Robust IT connectivity and digitalisation
- Good governance, especially e-Governance and citizen participation
- Sustainable environment
- Safety and security of citizens, particularly women, children and the elderly
- Health and education

In India, trends over the past few decades have indicated that although urbanisation has been increasing over time, the major portion of the urban population (about 70 per cent) is largely concentrated in only about six per cent of cities and towns. As a result, there is tremendous pressure on existing larger cities, and stagnation in smaller ones. "The pressures are being felt by way of stresses on infrastructure assets, public services and housing, with no city being able to provide a quality of life that is comparable to developed nations," states a white paper released recently by RICS.

This explains why along with the development of existing cities, there is need to develop some new cities in sync with population growth to avoid the burgeoning of existing cities. "However, mindless development of new cities without proper infrastructure in place could lead to degradation of urban life, which is not sustainable in future," points out Misra.

THE ROLE OF TECHNOLOGY AND INTERNET WILL BE ESSENTIAL TO SUSTAIN THE FUTURE DEVELOPMENTAL DYNAMICS OF SMART CITIES.

Here comes the role of smart cities, as proposed by the Modi government. Although launched formally in June 2015, the idea to build 100 smart cities was in place in 2014 itself, days after the current political dispensation assumed office.

As the name suggests, a smart city is one that offers a superior way or life to its residents, and one wherein economic development and activity are sustainable and logically incremental by virtue of being based on success-oriented market drivers such as supply and demand. Smart city, in fact, is a broad, integrated approach to improving the efficiency of city operations, the quality of life for its citizens and growing the local economy. A smart city judiciously utilises the resources avail to it, such as water, land, power, roads, public transport, and funds, among others.

As already mentioned, most of the Indian cities are grappling with issues such as poor quality of ambient air, water scarcity or flooding, traffic snarls and challenges related to municipal solid waste disposal, amongst many other problems. "For urbanisation, the key areas of focus from a sustainability and liveability perspective are energy, water, air, waste and urban transportation. Besides, natural disasters such as the Chennai floods and the Nepal earthquake - and their impact on the respective cities - have laid bare the dire need for resilience as a leading objective in urban planning and infrastructure design and development.

Cites need to protect people, buildings and critical operating infrastructure from the effects of major storms and other events," says a JLL India report. At a conceptual and implementation level, smart cities represent a convergence of these focus areas, says the report, adding that the smart cities initiative will go a long way in alleviating the concerns thrown up by the breakneck speed of urbanisation in present-day India. For, smart cities aim at optimum utilisation of infrastructure and resources, combining growth and infrastructure demands enabled by Information and Communication Technologies (ICT).

The smart city concept thus aims to take into account not only the infrastructure development and associated real estate growth, but the assimilation of technology to increase the efficiency of the public service systems as well. "A smart city is a highly urban region that is highly developed in terms of overall infrastructure, communications, sustainable real estate, and overall market viability. And they literally benefit everyone, including residents, businesses, the government and even the environment," adds Misra.

The role of technology and internet will be essential to sustain the future developmental dynamics. According to Stefan Sjöström, vice president Asia, public sector, Microsoft Operations Pte Ltd., technology today touches every aspect of our life. "Technology is the backbone of all the development that smart cities can expect in future," emphasises Sjöström. However, despite being a futuristic concept and having numerous plus points to their side, smart cities are said to have some limitations. Excessive dependency on information technology is one such thing. In case of failure of the system, for instance, the whole city can come to a standstill. Further, there are high chances of vulnerability of city data. Some critics are also of the view that building new high-tech cities could be a case of misplaced priorities, especially in a country like India where many people still live without basic infrastructure.

Whatever be the case, experts feel that smart cities will certainly strengthen the infrastructure of India, including mobility and housing. These satellite towns will create a massive magnet of employment opportunities in big, medium and small-scale industries. Besides, a smart city is expected to improve economic efficiency, provide better quality of life and promote sustainable urban development. More importantly, as the massive rise in urban population is bound to entail environmental and infrastructural changes, and our government and local bodies have to simultaneously rise to the occasion to manage the show, our cities also need to get smarter. And smart cities are surely a way out!