# Future-ready homes

Today, sustainability is not merely a choice; it has become an essential responsibility for everyone. Experts emphasise the importance of conscientious urban development





n exponentially growing urban population has led to a tremendous strain on Lavailable land and amenities in most metropolitan cities. With advanced technology and innovative design, designers have begun to achieve sustainable and smart integration in design at the individual building level. However. integrating these advanced design strategies within the urban development level has been slow. "The expansion of cities that urban population growth entails cannot be contained merely by a horizontal expansion of cities; instead, it must make adequate room to accommodate it in more innovative, more inclusive, and sustainable models. In this context, the redevelopment of under-utilised central urban areas is a step in that direction, which needs to be seen with a fresher perspective as a model for urban development. This momentous task involves extensive sustainable planning for developing housing, open spaces, and supporting infrastructure. The goal is to transform low-density areas into high-density mixed-use developments with adequate infrastructure to cater to the new inhabitants," says, Mitu Mathur, director, GPM Architects and Planners.

According to Mathur, adopting the principle of new urbanism that aligns with the existing infrastructure and development policies is a vital principle that helps check the issue of urban sprawling. Hence, the application of 'smart growth' or 'mixed growth' should be encouraged.

TOGETHER FOR A GREENER PLANET According to a report by the United Nations, 68

per cent of the world's population is projected to live in urban areas by 2050. India will have added 416 million urban dwellers, combined with the overall growth of the world's population, which could add another 2.5 billion people to urban

Vishal Sharma, founder partner and principal architect, Confluence Consultants, shares, "As responsible architects and custodians of the built environment, it is essential to address the need for sustainable infrastructure solutions to combat the global crisis. A fundamental shift is necessary in how we approach urban development to address the growth of urban populations and to preserve our environment. With the rise of solar energy technologies and highly efficient material innovations, the need for renewable energy generation will increase."

Understanding the key innovation technologies and modern trends in urbanisation likely to unfold over the coming years is crucial to the implementation of the 2030 Agenda for Sustainable Development, including efforts to forge a new framework of urban development. One such government-led initiative is net-positive architecture.

As the world continues to urbanise, sustainable development will hugely depend on successful urban growth management, especially in low-income and lower-middle-income countries where the pace of urbanisation is projected to be the fastest. "Embracing a net-positive strategy in housing development with the use of innovative technologies and BIM, future developments can majorly benefit Indian infrastructure growth. Although current regulations around sustainable design is limited, implementing targeted



regulations aimed at net-zero and net-positive infrastructure while strengthening the linkages between the existing economic, social, and environmental ties will foster a trajectory of an environmentally responsible future in India," adds Sharma.

#### INNOVATION AT CORE

The infrastructure sector is one of the key drivers of the Indian economy and overall national development and growth today. This has led to an increased focus on perfecting and revolutionising the architectural landscape in India.

"As infrastructure projects grow in scale and numbers, the technicalities associated with sustainability and green design assume multiple layers. Building construction and operations can have extensive direct and indirect impacts on the environment, society, and the economy. In response to these challenges, the use of innovative technology has helped introduce greener interventions within large infrastructure projects," says Sneha Gurjar, director, CEM Engineers.

On parallel lines, Aman Aggarwal, principal architect, Charged Voids, shares, "The world's most recent developments have made it abundantly clear that the in-between areas — the intermediary spaces and outdoor pockets — are more crucial to architectural design than previously thought. These areas can manifest as interactive zones in public buildings, play areas in schools, and courtyards in all types of buildings.

The buffer zones and liminal spaces are just as important as the built form, ensuring that nature remains an intrinsic part of our lives. Buildings must also incorporate sustainable building techniques and micro-environments that are not controlled by mechanical air conditioning. It must be a thriving environment with plenty of greens and should be thermally comfortable. For this, indoor areas should ideally open up to courtyards or terraces from multiple directions."

Architecture has the potential to tell stories, create and give a new voice to our aspirations, and be a vehicle of change to address our needs and challenges. It often reflects our attitude toward how we live on this planet. Architecture is the art and science of buildings, but these buildings are footprints, footprints that outlive us.

"Predominantly, global architectural practices have gravitated towards homogenising ideologies and construction methods over the past few decades, and this has informed how buildings have been built and even how architecture has been

> taught in our country. We stand at a critical crossroads today where many architects and designers in the country over the last few years have been re-evaluating the practice of architecture and interior design and returning to the roots," says Ankur Choksi, founding principal, Studio Lotus.

#### THE FUTURE IS NET-ZERO

While there is no clear definition in any rulebook for this relatively new concept in Indian infrastructure — 'net-zero building' represents the equilibrium between a building's energy requirements and the renewable energy generated to meet that demand.

The key to achieving net-zero energy lies in utilising renewable energy sources where the building recycles and replenishes resources in equal amounts to its consumption. With minimal impact on the site, a net-zero energy approach emphasises reducing the building's load or demand while also facilitating micro-generation.

"Achieving widespread adoption of net-zero buildings demands a well-defined roadmap, particularly focusing on affordability and skill development. With cut-throat competition in the real-estate business and the constant pressure to create value in their offerings, developers across the country are making an effort to join the bandwagon on sustainability. Residences offer ample possibilities for achieving sustainability. Notably, enhancing facade R-Values proves effective in energy savings, particularly in tropical zones and densely populated cities," says on a concluding note Ravi Sarangan, co-founder and director, Edifice Consultants.

## Elite realty showcase

Providing a tailored platform for both homebuyers and investors to discover prime properties in the city, Times Property Expo 2023. organised by The Times of India and HDFC Bank Ltd, in collaboration with Ganesh Hyundai, presented a diverse range of realty options to all



"The property exhibition was a perfect place where people could learn everything about their dream home. I would like to call it as a one-stop solution for every prospective buyer's needs.'

The expo featured properties for every market segment, from affordable apartments targeting young professionals to opulent villas for those seeking a lavish lifestyle. Developers showcased innovative designs and modern amenities, leaving attendees captivated.

The exhibition presented abundant opportunities for investors keen on the commercial real estate sector, from office spaces to retail outlets and industrial



c-Harsh.Kashiv @timesgroup.com ■he vibrant city of Vadodara re-

cently played host to a bustling property exhibition, enticing prospective homebuyers, investors, and real estate enthusiasts to explore a myriad of opportunities within the region. The Sanskari Nagari witnessed a property extravaganza as the 12th edition of Times Property Expo, organised by The Times of India and HDFC Bank Ltd, in partnership with Ganesh Hyundai, unfolded on October 7 and 8. The event featured a diverse range of enticing real estate projects from the city's as many as top 17 developers. The expo saw an impressive turnout, attracting over 1800 eager citizens to explore the multitude of property options.

Emphasising on Vadodara's burgeoning real estate sector, Viswanathan S, vice president at HDFC Bank Ltd, shared, "The real estate market in the city has exhibited strong growth in recent years, propelled by its reputation as one of the fastest-growing industrial centres. Additionally, Vadodara boasts excellent infrastructure and connectivity via rail, road, and air transport, linking it effectively with major metropolitan areas. At the same time, property expos provide homebuyers with a platform to directly engage with numerous developers all in one place, streamlining the process of securing home loans."

With stalls set up by major real es-

tate players, the event proved to be an occasion to look forward to for those aspiring to invest in properties within the city. Attendees were offered a glimpse of various projects, both residential and commercial, engaging in direct interactions with promoters to gather firsthand information.

Over 100 real estate projects were showcased at the event, presenting a variety of options ranging from flats, duplexes, villas to plots. The display catered to all kinds of investors — those eyeing high-end properties, those seeking more economical residences et al, thus providing an extensive spectrum for potential real estate entrants. Rohintan Talati, the deputy general manager of a multinational company in the city, summed up the lively event, stating,

properties. Sharing his experience of attending the event, Ketan Raval, a local businessman, said, "Exploring new commercial properties in the urban areas is a challenge that new businesses often face. Exhibitions like Times Property Expo help the entrepreneur community in finding suitable spaces for investment."

Apart from property exploration, attendees gained valuable insights into real estate investment through interactive sessions. An exclusive lucky draw was also held for registered participants, offering a chance to win enticing prizes.

The exhibition showcased how Vadodara is on the verge of a real estate revolution, primed to welcome investments which can cater to diverse requirements

### Invest in a commercial property today

These businesses strategi-

cally position themselves

in specific areas to increase

their visibility and establish

**Commercial** realty is an ideal investment option during festive season

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ommercial realty has always been 'a preferred investment option. The segment yields better return on investment (ROI) and it ensures a stable and reliable income stream for investors.

Like residential real estate Adrija Agarwal, vice president of business development at Sattva Group, explains, "For individuals seeking to diversify their investment portfolio for long-term income, commercial real estate stands out as an excellent choice. This investment avenue offers a compelling combination of high appreciation potential, substantial rental yields, and valuable tax benefits. From a purely investment-focused perspective, commercial properties often yield impressive annual rental returns, typically ranging from 6 per cent to 10 per cent, depending on the location and quality of the asset. In contrast, residential assets tend to provide income in the vicinity of 2 per cent to 4 per cent. Location and quality play a pivotal role in maximizing the returns on commercial real estate investments."

Furthermore, commercial tenants frequently commit to long-term lease agreements, ensuring a stable and reliable

income stream for investors. a strong foothold, making commercial properties even more attractive. Similarly, Shrinivas Rao.

CEO, Vestian, says, "Com-

mercial real estate is the most organized and sophisticated among all real estate assets. However, the returns on investment depend on the location of the project, developer reputation, amenities, and clientele in the building. There are a couple of reasons why commercial real estate is a lucrative option for investment."