Higher you stay, more you pay for water

Pros and cons of a tall city

Several Skyscrapers, Two Of Them 60 Storeys High, Are Going To Change The City's Skyline In The N

Mumbai leads in pushing urban renewal projects VERTICAL MUMB

Once green, now concrete

40-storeye

hotel to ris

at Phoenix

THE HIGH-RISE HANG-UP

Darryl D'Monte

Everyone is aware that one of the most potent and glittering symbols of growth and affluence is that of the high-rise city, and the gleaming skyscrapers of New York in particular. The US TV series, "Sex and the City" (now-banned in India?) encapsulates such aspirations. The symbolism is that much more seductive, now that half of the world's population lives in urban areas and TV transmits images of urban growth round the clock globally.

However, not many may be aware of how India is playing a crucial role in such urban growth, and Mumbai in particular. Indeed, it is probably the only proper mega city in the country, in the sense of registering very high density in the city proper as distinct from the outlying areas, as in Kolkata. A mega city is any metropolis whose population exceeds 16 million. By that token, Greater Mumbai, which had 12 million people at the last census in 2001, has probably just breasted the tape.

It took the Urban Age project, an initiative of Deutsche Bank, to remind Mumbaikars recently that they had been bestowed this somewhat dubious distinction. The Bank's Alfred Herrhausen Foundation named after the former Bank top official who was gunned down in front of his residence in Germany by the Red Brigade 20 years ago is funding the Urban Age project, in collaboration with the London School of Economics (LSE). It is holding a $100,000 award for the best urban project in Mumbai, the very first such annual prize in each of three different mega cities around the world for three years -- which will be announced on November 1, to be followed by a two-day seminar on Mumbai issues.

Needless to say, a city's population is determined by the area that is taken into account for such calculation. Greater Mumbai occupies 466 sq km, but the much bigger 4,355 sq km Mumbai Metropolitan Region is poised to rank among the most populous in the world in the not-too-distant future. According to the Washington-based Population Institute, the region will touch 28.5 million by 2020, surpassing Tokyo by one million people.

At a recent Urban Age road show in Mumbai, Ricky Burdett, an architect who is the Director of Urban Age and Centennial Professor in Architecture and Urbanism at the LSE, alarmed the experts present by pointing out that that Tokyo was likely to have 35 million and the Mumbai region 40 million by 2050. It is thus no exaggeration to say that whatever happens in Mumbai, is likely to have an impact not just on

India's urban growth but is crucial to the shape of mega cities in all developing countries.

At the very least, the Urban Age conference in Mumbai, which follows city conferences held elsewhere in the world may help to focus on the key issues confronting a megalopolis in the 21st century. Even at the introductory meeting in Mumbai, eminent local experts present cited at least three different current estimates of Mumbai's population, which indicates some degree of confusion about basics, including the area being referred to.

Only recently, Mumbai Metropolitan Region Commissioner T. Chandrasekhar, controversially called for halt to migration into the city. However, the International Institute of Population Studies in the city shows from the 2001 census that only 480 people

not families, as is commonly mistaken enter the city every day. Even in the previous 1991 census, it was evident that the proportions of the 1960s have been reversed, with 60% of Mumbai's growth being natural increase and 40% comprising migration. With the precipitate decline in formal employment in Mumbai, the proportions are likely to be 70% and 30% today.

Urban Age has a very revealing chart of the urbanization of the world, which illustrates the highest city population growth rates by skyscrapers on a map. As it happens, South Asia and India in particular has the highest growth of such high-rise structures. In terms of growth rates, Delhi has the highest, with 64 people being added every hour (due to both natural increase and migration), second only to Lagos with 67 and ahead of Dhaka with 61. Mumbai has 49, while London has around eight. This country, where urbanization again contrary to the popular perception, is fairly evenly spread through the country, as the National Commission on Urbanisation, headed by Mumbai architect Charles Correa showed 20 years ago, is by any reckoning a laboratory where future cities anywhere in the world may be envisioned.

While homegrown experts tend to take a sector-by-sector approach to Mumbai's problems, as witnessed in the discourse on the second anniversary of the great deluge of July 26, 2005, the Urban Age specialists have not only a far more

VERTICAL MUMBAI

Source : Sunday Times of India

Project: Imperial Heights
Where: Tardeo
Developer: S D Corporation
Floors: 60 each (2 towers)
Cost: Rs 400 crore

Project: Planet Godrej
Where: Jacob Circle
Developer: Godrej Properties
Floors: 45 (5 towers)
Cost: Rs 130 crore

Project: Bellissimo
Where: Behind Arthur Road Jail
Developer: Lodha
Floors: 50
Cost: Rs 300 crore

Project: Beau Monde
Where: Prabhadevi
Developer: Sheth Developer
Floors: 35
Cost: Rs 250 crore

Project: Ashok Towers
Where: Parel
Developer: Piramals
Floors: 1 50-floor and 3 35-floor towers
Cost: Rs 500 cr (with VRS to mill workers)

Project: Antilia
Where: Peddar Road
Developer: Residents
Floors: 24
Cost: N A

holistic vision but an ecological perspective, which is sadly lacking here. They are concerned, for instance, with the footprint of cities the larger area which citizens reach out to for natural resources, including water, energy and building materials, as well as the waste dumped outside, whether it is on land or in the air or water. (For countries as a whole, the footprint of a resident of the UAE is the worst in the world, with over 10 hectares per capita, slightly ahead of the US; an Indian uses only about 0.4 hectares.)

Burdett cited how cities actually contribute three-quarters of the world's carbon dioxide, the biggest greenhouse gas. Half the energy consumed by the entire world is on buildings for heating, cooling and lighting. If one adds the energy used in producing the building materials, like steel, cement and glass, the proportion of total energy would go up substantially. Furthermore, transport, whether public or private, would add to the load, which means that cities are not very efficient users of energy, even allowing for higher densities, which would mean lower amounts of energy consumed per citizen.

Burdett, an architect who has turned an academic but is also London Mayor Ken Livingstone's advisor on planning for the Olympics next

year, showed a slide of Caracas, which would almost have been mistaken for Mumbai. On the left, occupying about half the slide, was a seething mass of shanty dwellings; cutting a swathe through it was a modern-looking highway; on the far right were some high-rise residential towers. Pointing to the last, he said, censoriously: "This is what we do as architects." He might have added that the highway was what planners did, while the slum dwellings were what the people did for themselves. "Architects have no idea of what happens on the ground between buildings," he asserted. Indeed, many Mumbai architects, including Hafeez Contractor who was present, suffer from an edifice complex.

Perhaps is the interstices of urban life, that visionaries look to the open spaces, the participation of citizens in public life, the alliances and partnerships between classes and communities and, not least, the ownership of a city's physical assets. The scale models assembled by Urban Age show the densities of different cities. New York is, in many ways, one of the most inegalitarian, since there is a phalanx of tall towers looming upwards at the centre. London is evenly spread out: anyone seeing the model without knowing which city it represented, would be hard put to identify it. Shanghai is actually the

most uneven: there is a tumour-like growth protruding from the centre, with flat topography all around it. Johannesburg, thanks to years of enforced segregation during apartheid, has four curious piles amidst a plateau.

Any architect or planner worthy of his profession, should also be concentrating on providing public spaces rather than merely contributing to high-rise growth. London maintains 46% of its entire area green, which makes it such a memorably different experience, even though its population is growing, thanks to migration. Even New York, which is the epitome of urban splendour, has 16% of its area open. Mumbai, which aspires to be a world class city a la Shanghai, has a measly 0.03 acres of open space for every one thousand people, which must be the lowest of any city, certainly any of its size and importance to the national economy. Even Cairo, which the Urban Age experts listed at the bottom of the pile, has 1%. In Mumbai, a venal state government and municipal corporation are in cahoots, with builders to convert the few remaining open spaces -- including salt pans and mangroves -- to private clubs, malls and high-rise buildings. It is not without justification that Mumbaikars say that the only thing real about the city is the estate···

Critics may justifiably condemn Shanghai as an example of urban megalomania, particularly the new business district of Pudong, across

the river, where paddy fields have made way for towers which vie with each other to reach the sky. Indeed, this city of 18 million will soon have some 3,000 high-rise towers. At the same time, there are some features which Mumbai would do well to emulate. There is one bicycle for every two residents, which is extraordinarily high. The eminent British architect, Sir Richard Rogers, once remarked on the high number of cycles to the Mayor of Shanghai on a visit there. The Mayor mistakenly took his observation as a criticism, and hastened to claim that in future every bicycle would be replaced by cars! Some roads are indeed barred to cycles.

However, Shanghai is building 11 satellite cities reminiscent of Navi Mumbai, which has failed in many respects to take the pressure off the metropolis. It is also trying to regulate cars by limiting their entry into the central business district, on the lines of Singapore, by odd and even number plates. When a similar attempt was thought of in Mumbai, critics alleged that it would either prompt the elite to buy another car or to get the person who washed their cars to change its number plate every day! Not being situated in a democratic country, once Shanghai's planners decide to take any action, it generally happens.

The Urban Age experts emphasise the connection between the physical form of cities and their social relationships. The entire issue of governance is central, as Mumbai's experts also correctly reiterate. London saw its worst period at the height of Thatcherism between 1985 and 2000, when the democratically elected London City Council was abolished and planning was almost abolished as well, as witnessed in the redevelopment of the Docklands, now the financial centre of the world. In 1997, London saw the election of its first Mayor, Ken Livingstone, who exercises certain powers over 33 boroughs.

It is under this left-wing Mayor that London has followed Singapore's example in levying a

Pros and cons of a tall city

Nauzer Bharucha | TNN

Mumbai: With restricted supply of land and a burgeoning population, mandarins and developers have frequently pitched for the city to grow vertically. The argument often is: construct more skyscrapers to solve Mumbai's housing problem. Mumbai cannot afford to have a limited FSI, which constricts the height of buildings, if it wants to be at par with the other leading global cities; if Hongkong, New York and Tokyo can have incredibly tall towers, why not Mumbai?

The demand for built-up area has grown with the growth of the city, says a veteran city developer. "The restricted availability of land means the need for an additional built-up area has to be met by vertical development."

Hafeez Contractor, arguably the most commercially successful architect in the country, claims the city will be freeing up space for parks by constructing towers. "Imagine the kind of space that will be freed if you put 10 low-rise houses atop each other and convert them into a single tower," he adds. The cost of constructing a skyscraper is between Rs 3,500 and Rs 4,000 a square foot, he says. "What makes it expensive is the cost of FSI," he explains.

But there are those who differ. "It is rubbish to say that the poor can be accommodated in skyscrapers," well-known architect and town planner Charles Correa counters. "Great cities are not determined by the height of their buildings but by the amenities they provide for residents," he feels. The governing factor, he says, should be the provisions for schools, hospitals and playing areas. Town planner Andres Duany once warned in an international publication that Asian cities were adopting an outdated model of urban development, one which had been discredited and discarded in the West. "These cities will be blemishes on their national reputations and a drag on their economies," he said.

Duany gave examples of Dallas and Los Angeles, which

TALLER IS BETTER?

> Imagine the kind of space that will be freed if you put 10 low-rise houses atop each other and convert them into a single tower

Hafeez Contractor |
ARCHITECT

were "stuffed with highrises and surrounded by jammed highways". On the other hand were "compact" cities like Portland and Boston with good public transit systems, walkable streets lined with shops

REST OF ASIA IS GROWING TALLER TOO			
Eight of the world's 10 tallest buildings are in Asia			
BUILDING	CITY	STOREYS	HEIGHT (FT)
Taipei 101	Taipei	101	1667
Petronas Towers	Kualalumpur	88	1483
Sears Towers	Chicago	110	1451
Jin Mao Building	Shanghai	88	1381
International Finance Centre	Hongkong	88	1362
CITIC Plaza	Guangzhou	80	1283
Shun Hing Square	Shenzhen	69	1260
Empire State Building	New York	102	1250
Central Plaza	Hongkong	78	1227
Bank of China	Hongkong	70	1205

and mixed neighbourhoods.

Experts warned five decades ago about the need to decongest Mumbai. Economist Dhananjay Gadgil and the S G Barve Report stated in the 1950s that all development in South Mumbai should stop because of the burden on infrastructure, transport and environment. But the V P Naik government reclaimed hundreds of acres at Backbay to construct a slew of highrises in the late 1960s.

Various policies resulted in a rash of skyscrapers coming up on narrow plots in congested localities, like Girgaum and Grant Road, in the 1990s. Even Bandra, once known for its tranquil charm and low-rise buildings, saw a spurt in high-rise development as a result of the Transfer of Development Rights (TDR), which allowed additional floors to be constructed on existing buildings.

Former municipal commissioner S S Tinaikar says: "Skyscrapers per se are not bad as they are a big achievement in terms of civil engineering and architecture. The question is whether they can be allowed to come in an area with limited civic infrastructure. Singapore and Hongkong, which have lots of skyscrapers, also have a controlled population unlike Mumbai."

A government draft report prepared four years ago suggested that building heights could be restricted in some "vulnerable" parts after a survey. "Hygiene, environment, congestion, vicinity of some monumental structure and preservation of scenic beauty spots could be some of the parameters in identifying such pockets," the report said.

But no follow-up action was taken by the government.

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congestion tax on cars entering the central business district, originally £5, now upped to £8. This now raises around £300 million a year, with operating costs of £7 million. The big difference is that this entire revenue is spent on improving public transport. The fine for not paying the charge has been raised from £80 to £100. London also has dedicated bus lanes and is proposing to install three new tram lines. There will be a fast cross-town rail system, like the RER in Paris, which would get you from Heathrow airport to Canary Wharf in Docklands in 20 minutes.

One of London's most significant initiatives in recent years has been in housing. It has defined its geographical limits and no expansion can take place outside this area. The private sector has been encouraged to invest in new "brownfield" sites typically, derelict industrial areas, but the catch is that half the housing in any new redevelopment project will be reserved for what the British call "key workers": firemen, nurses, cleaners, policemen and the like, at affordable rates. This is precisely what Mumbai ought to have done for the mill land, had it not fallen prey to the greed of property developers.

Andy Altman, who was also present at the Mumbai meet and was for five years Washington DC's Planning Director, summed up what factors made any city vibrant. His own city was divided on the lines of race, with 60% of the population being Afro-Americans and at one stage, was "put into receivership" by the political establishment, with a Control Board appointed by the President. But, with the reassertion of local democracy, and the judicious use of planning, there was diversity of land use, which imparted a new energy to the city. In much the same way, New York, which was once seen as a bad investment illustrated by movies such as the apocalyptic "Escape from New York", had a $5 billion programme to keep the city diverse. As a result, it had now turned the corner and was a symbol of urban success.