

***Mumbai – How to Make it a Global City***

**By**

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### ***Abstract***

The most successful cities for business expansion and investment during the 21st century will be those that give increasing attention to cutting-edge infrastructure that make business operations efficient and allow businesses to operate more effectively in the global economy.

This article outlined the basic ingredients of development strategy for the city of Mumbai. The article endeavours to show that Mumbai as a city will be required to adapt its infrastructure, social amenities, financial markets and institutions in new ways to compete and cooperate at the international level during the 21st century. The efforts of virtually all countries to open their economies to international trade and investment are making the global scenario really competitive.

The most dynamic cities in the new millennium, therefore, will be those that offer high quality labor force, modern and efficient infrastructure, and adequate social amenities. They will also be those that foster creative and flexible public and private institutions to help local economies restructure and adapt to rapidly changing international business conditions. The article presents a strategy for developing Mumbai into an international financial centre.

# ***Mumbai – How to make it a Global City***

***Narendra Jadhav***

## **I**

### **Introduction**

The world outside looks at India through the prism of Mumbai. The image of Mumbai as the mega city of India is firmly etched in the minds of the people outside. In a way, Mumbai provides the crucial link between India and the West. No city in India has evoked as much admiration as the city of Mumbai. It is regarded as a city of challenges, opportunities, guts, hope, peaceful co-existence and above all, a city of dreams. The importance in the economy of India is unparalleled.

Mumbai is the prime economic engine of India. Mumbai and its surrounding regions contribute to one-fifth of GDP. The Bombay port handles 46 per cent of the foreign trade and Bombay pays one-third of the income-tax of the nation. Out of the tax revenue generated by the four metros, Mumbai contributed to about 50 per cent.

Discussing the State of Maharashtra's economy without any mention of Mumbai is like narrating the story of Hamlet without the Prince of Denmark. Mumbai alone accounts for nearly one-fourth of the state income, followed by Thane (10 per cent), Pune (9 per cent), and Nagpur (5 per cent). With various contradictory attributes Mumbai becomes a land of opposites – e.g., a population of 11.9 million, the financial and commercial capital of India with a highly sophisticated financial infrastructure consisting of banks, insurance companies and stock exchanges, the glitterati of Hindi films, a large proportion of population living in the slums, an urban infrastructure seemingly on the verge of a break-down, sky scrapping property prices, organised crime and much more.

**Table 1 - Mumbai, Maharashtra & India - A Comparison**

Item	Unit	Mumbai	Maharashtra	India	% Share of Mumbai in Maharashtra	% Share of Mumbai in India
Area	(Sq. Km.)	437**	3.08 Lakh	32.87 Lakh	0.14	0.013
Population (2001 Census)	(million)	11.9	96.8	1027.0	12.2	1.1
Gross Density	(No. of persons per sq. km.)	20,222	314	324		
Per Capita Income (1998-99) (at current prices)	(Rupees)	45,471	22,763	14,712		
NDP (1998-99)	(Rs. Crores)	44,489	204,120	1,449,424	21.8	3.1
Total Regd. working factories	(Number)	7,212	28,949	255,837	24.9	2.8
Total Workers in factories	(Number)	382,700	1,251,759	10,716,000	30.5	3.6

Source : Bobay first, Fact Book on Mumbai, 2003.

In spite of its stature as an economic giant, Mumbai has shown signs of slowdown in the dawn of the new millennium. Despite this impressive resume, Mumbai, with its swelling population, deteriorating environment, income contrasts and inadequate infrastructure is at a crucial juncture at the beginning of the new millennium. This is not unique to Mumbai, the same problems *albeit* in varying degrees is faced in most cities of India and other six mega cities Delhi, Ahmedabad, Bangalore, Chennai, Kolkata and Hyderabad also require a sound framework for urban renewal. This is due to the fact that while the Indian population expanded three times since independence, the urban population has expanded five times. Consequently, massive efforts towards revitalising the cities are necessary for their own survival. There is no doubt that, in this globalizing age, there are risks as well as opportunities. If the risks are contained and mitigated and steps be taken to take advantage of the emerging opportunities through a forward looking approach, Mumbai can emerge as a world class city, and a hub of world investment and capital flows. It has also potential to become the conduit through which the world will channelise its resources to Asian countries, but to do that, it has to correct the existing deficiencies. Thus, Mumbai presently rests on the razor's edge of promise and failure. The imminent need is to have an integrated plan of action that needs to be implemented through coordinated efforts of the public and the private agencies. Let me in this speech try to give inputs towards the plan.

**Table 2 - Profile of Four Metropolitan Cities**

<b>Item</b>	<b>Year</b>	<b>Unit</b>	<b>Mumbai</b>	<b>Calcutta</b>	<b>Delhi</b>	<b>Chennai</b>
Population	1995	Mns	15.1	11.7	9.9	5.9
Population per sq.km. (density)	1991	000s	16.4	23.7	6.3	21.8
Literate population	1991	000s				
Literacy rate	1991	(%)	82.4	77.1	76.2	81.5
Males			87.8	82.0	82.4	88.1
Females			75.7	71.0	68.6	74.1
Slum dwellers	1990	% of population	42	40	38	39
Regional companies listed on stock exchanges	1999-2000	Nos.	1,810	1,903	1,698	643
Turnover of scrips on the stock market	1999-2000	Rs. crores	685,028	357,166	93,289	250
No. of cheques cleared	2000-01	crores	17	5	10	5
Amount of cheques cleared	2000-01	Rs. crores	6,667,989	365,280	818,999	5,09,292

**II****Developing Mumbai City : Removing the Bottlenecks to Progress****Developing Infrastructure**

The crucial issue that attracts immediate attention is infrastructure. Lack of adequate and efficient infrastructure can cost the city significantly, in terms of relative attractiveness to the investor community. In order to prevent such shift of investible resources, Mumbai should proactively strive for efficient infrastructure to survive the competition for domestic and external investments. Also, empirical evidence with regard to the impact of infrastructure on growth, though inconclusive, tends to suggest: (i) growth is positively affected by the stock of infrastructure assets, and (ii) income inequality declines with higher infrastructure quantity and quality. These two results combined together suggest that infrastructure development can be highly effective not only in promoting growth, but to combat poverty. Latest research from the World Bank demonstrates that in Latin American countries, these impacts are economically quite significant in terms of growth acceleration and inequality reduction<sup>1</sup>.

Three areas of infrastructure needs urgent attention. The first is the development of an efficient transport system. Existing rail and road network fail to effectively keep pace with traffic growth leading to heavy congestion. Inadequate road network and inadequate maintenance slows down traffic and thus commuters from suburbs show a distinct preference for trains. The lack of east-west connectivity poses yet another major concern in ensuring smooth traffic flows.

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<sup>1</sup> The Effects of Infrastructure Development on Growth and Income Distribution César Calderón and Luis Servén, World Bank Policy Research Working Paper, 3400, World Bank, 2004.

**Table 3 : Railways - Comparative Operational Statement (1997-98)**

Item	Western Railway	Central Railway
No. of services run daily	922	1077
Passenger Km per year (mln.)	25864	30309
Passenger carried per year (mln.)	1069	1135
Avg. Km. Per passenger traveled	24.2	26.7

**Table 4 : Road Transport**

Year	Passengers carried (Lakh nos.)	Load factor (%)	Diesel mileage (km/ltr. of diesel)
1991-92	16,603	67.98	3.10
1992-93	16,422	59.40	3.14
1993-94	18,364	62.83	2.92
1994-95	17,520	65.02	2.88
1995-96	17,111	65.40	2.99
1996-97	16,556	61.77	3.00
1997-98	15,296	55.20	3.05
1998-99	15,638	53.34	3.06

**Table 5 : Comparative Operational Statement - BEST**

No	Particulars	1990-91	1991-92	1992-93	1995-96	1996-97
1	Fleet owned (as at the end of the year)	2712	3009	3032	3256	3356
2	Effective fleet (as at the end of the year)	2712	3009	3030	3230	3356
3	Average effective fleet	2611	2840	3025	3216	3300
4	Average no. of buses in service	2143	2548	2786	3057	3113
5	Fleet Utilisation (avg. for the year %)	82.08	89.72	92.10	95.06	94.33
6	a) Effective Kms. (Aggregated) (in millions)	163	187	216	230	231
	b) Daily Average (kms)(in 000)	448	510	593	628	633
7	No. of routes operated	282	324	339	368	385
8	a) Passengers carried (Total) (in millions)	1504	1660	1642	1711	1656
	b) Daily Average (in 000)	4120	4536	4499	4675	4536
9*	a) Earnings total (Rs) (in crores)	166	225	282	378	447
	b) Daily Average (Rs) (in 000)	4563	6147	7713	10,348	12,246
	c) Per Vehicle in service (Rs)	2129.40	2412.57	2768.52	3381.99	3933.79
	d) Per bus kms (Paise)	1019.20	1205.56	1301.63	1646.04	1931.66
	e) Per seat kms (Paise)	13.24	15.86	17.13	21.66	25.76
	f) Per Passenger (Paise)	110.77	135.51	171.44	221.34	269.97

These apart, a large number of road development projects in Mumbai are either proposed, announced or under implementation . The road projects are being undertaken by the State Government through the PWD or MSRDC.

Further, Mumbai's connectivity to other region outside Mumbai with industrial belts also assumes significance in this regard. There is strong evidence that **infrastructure clusters** lead to a stronger growth performance through the efficient utilization of inherent externalities. In the context of Mumbai, there is a scope for improving connectivity between Mumbai, Pune

and Nashik and creating a golden triangle. This can enable the cities to develop at a faster pace.

The Airport, providing international and domestic connectivity needs to improve considerably. Presently, it handles 30 per cent of India's total passenger traffic and 38 per cent of the international traffic. An efficient airport gives a very positive image of the economy to the investor community.

**Table 5 :Passenger Traffic at Airports (no. of passengers)**

Year	Mumbai	All Airports in India	Mumbai Share in India%
1995-96	11,117,400	37,013,800	30
1996-97	11,067,400	36,489,900	30
1997-98	11,010,606	36,530,693	30
1998-99	11,018,557	36,989,419	30
1999-2000	11,532,144	39,004,933	30

**Table 6 :International Passenger Traffic Handled**

Year	Passenger handled (Nos.)		Mumbai's Share in India%
	Mumbai	All Airports	
1995-96	4,616,400	11,449,800	40
1996-97	4,760,200	12,209,800	39
1997-98	4,898,052	12,775,781	38
1998-99	4,837,415	12,916,788	38
1999-2000	4,998,171	13,259,493	38

### **Availability of Affordable Housing**

The second major challenge faced by the city is availability of affordable housing. The slum population in Mumbai at 42 per cent is highest among Indian cities. Economic opportunities have led to faster population growth as compared to the growth of affordable housing. This also has resulted in uncontrolled urban growth. Lack of affordable housing has been compounded by lack of various social amenities.

A closer look at urbanization and basic urban infrastructure provision in the Indian context reveals that the urban quality of life has improved for large sections of the population, in the last couple of decades but, perhaps, not enough. The percentage of households with a safe drinking water facility in urban areas increased from 75.1 to 81.4 during 1981-91, according to the Population Census. The corresponding figures for electricity are 62.5 and 75.8

while those for toilets are 58.2 and 63.9 respectively. This implies that safe drinking water has been provided to more than 57.3 million people during 1981-91 which was more than the population of the United Kingdom in 1991. Similarly electricity has been provided to an additional 65 million people in a decade while those with access to toilets in urban areas have been an additional 46.2 million people or more than 9 million households.

However, A lot of improvement needs to be made, as revealed by a Survey of Mumbai slums<sup>2</sup> . For instance, while 51 per cent use toilets, 49 per cent used open defecation. In wastewater discharges in Mumbai, access to sewer is only available to 1.5 per cent of urban poor. 91.8 per cent live in one roomed houses, 60 per cent in houses of temporary nature. Also, a large proportion of population suffer from water-related diseases such as Diarrhoea, Malaria and Typhoid.

### **Management of Solid Waste**

Yet another challenge lies in effective management of solid waste. The city of Mumbai with a population of about 12 million (2001 Census) generates 7,500 tonnes of waste per day. Available land for filling the waste is inadequate. The three main land-fill areas in Deonar, Mulund and Borivli may be inadequate and transporting wastes out of the city may turn out to be expensive. So, there is a strong felt need of processing the waste within Mumbai. Creating public awareness and use of modern technology for recycling are the need of the hour. A comparable example in this context is the city of Beijing, which is gearing up for the Olympics in 2008. It has given priority to solid waste management in the city along with its rapid drive towards uplifting the city towards international benchmarks.

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<sup>2</sup> Karn, Shikura, Harada, EPW, August 20,2003,.

### **Mumbai's Population Explosion & the Slum Problem**

Mumbai's population problem has attracted good deal of attention. The Report of the Study Group on Greater Bombay observed,

*“There has been a phenomenal increase in the population of Bombay .... The enormous increase in population has resulted in congestion of traffic, deficiency in open spaces, play-fields for schools, over-crowding in trains, over-crowding in houses, creation of slums etc. The increased population has also constituted an increasingly intolerable burden on the sanitary services and public utilities (p. 10).”*

The Report of the Study Group on Greater Bombay, constituted in 1959 by the Government of Bombay under the chairmanship of Shri S. G. Barve, Secretary of the Public Works Department, and the increase in population referred to the period during 1941 through 1958.

Mumbai accounts for 12% of Maharashtra's population and for 1.1% of that of the country. The annual rate of growth of population was constant between 1981-91 and 1991-2001. Between 1951 and 1991, the rate of growth of population had slowed down

**Table 7 - Population of Mumbai**

<b>Year</b>	<b>Population (in million)</b>	<b>Rate of Growth (%)</b>	<b>Decadal increase (in million)</b>
1951	3.0	5.1	1.0
1961	4.0	3.3	1.0
1971	6.0	3.6	2.0
1981	8.0	3.2	2.0
1991	9.9	1.9	1.9
2001	11.9	1.9	1.9

With a population density of over 20 thousand people per sq., Km as per the 2001 Census, Mumbai accounted for more than 1 per cent of India's population. Such a population explosion has put enormous burden on urban infrastructure and led to mushroom growth of slums. How many people live in slums in Mumbai?

The first and last census ever conducted of Mumbai's slums by the Maharashtra government was in 1976. It showed that there were 2.88 million slum dwellers in 1,680 pockets. Five years later, in 1981, the government estimated that the population living in the same slums were 3.8 million. Authoritative researchers like Lalit and Sudha Deshpande have assumed that the slum population grew as fast in the decade 1981-1991 as it did between 1976 and 1981. On this basis, they estimate the city's slum dwellers at 6.76 million in 1991. This works out to a staggering 68 per cent of Mumbai's total population in 1991. However, this rate of growth could be exaggerated since the net migration into the city declined substantially in the 1980s.

A related question would be why is that Mumbai has experienced such a population explosion? This brings me to the sensitive issue of migration to Mumbai. It is well known that in any city like Mumbai which offers some avenues for better livelihood would attract people from less developed regions, or regions with less economic opportunities. Economists like Michael Todaro explained this rural urban migration in terms of expected wage differential between the two regions. Sociologists refer to pull and push factors of migration – people who are drawn to bright lights of the city are results of “pull” migration while people who are forced to leave their ‘homes’ are the outcome of “push” migration. *A priori* it may be difficult to segregate the two kinds of migration, and in reality the decisions to migrate could be an outcome of these two factors interwoven. As per the 1991 Census, “net migration” as a percentage of decadal increase in Maharashtra's population during 1981-1991 was of the order of 16.7 per cent – this was a reduction from a whopping 47 per cent between 1971-81, or 48.7 per cent between 1961-1971. Preliminary estimates published in Economic Survey, 2002-03 of the Government of Maharashtra, reveal that migration seemed to have constituted around 23 per cent in population growth during 1991-2001. In other words, one out of every five persons added to the population during the decade of 1990s was due to migration!

**Table 8 : Net Migration**

Year	Net Migration (in mn)	Net Migration as % of decade increase
1951	0.95	79.7
1961	0.60	51.8
1971	0.89	48.7
1981	1.07	47.0
1991	0.28	16.8

While these are the migration numbers for Maharashtra, what is the scenario for Mumbai? A still sensitive issue in this regard is the state-of-origin composition of migrants. It may be noted that as per the 1991 Census data, while the bulk of the migrants to Mumbai are from Maharashtra – around 42 per cent in 1991 – Uttar Pradesh and Gujarat constitute 20 per cent and 12 per cent, respectively of the migrants. Similar estimates are revealed from various survey results. As for example, Professors S. Geetha and Madhura Swaminathan of Mumbai-based Indira Gandhi Institute of Development Research made a survey of 540 households in Goregaon slum. The percentage of people from Maharashtra in their sample was as high as 53 per cent, followed by U.P (22 per cent), Tamil Nadu (10.2 per cent), and Gujarat (3.2 per cent).<sup>3[16]</sup> Without going to the representativeness of the sample, it may be noted that broadly the distribution of state of origin amongst the migrants tells a similar story.

What should be done? First, as far as intra-state migration is concerned, it may not be an exaggeration to say that this is an outcome of the lop-sided agricultural growth within Maharashtra. Thus, the solution will lay either in revival of agricultural growth or in rural industrialization, so that the relative attractiveness of city gets reduced. Coming to inter-state migration, no island-like solution would work effectively in an era where boundaries – national or regional - are fading away. Nevertheless, there are views that Mumbai should not be paying for her success, and in the devolvement of resources between the Centre and the states, suitable adjustment factor could be introduced to take care of the migration.

## **Water Supply**

The water supply to Mumbai from various sources is about 563 million gallons per day (MGD). The monsoon precipitation is collected in six lakes and supplied to the city through the year. 460 MGD are treated at the Bhandup Water Treatment Plant, the largest in Asia. Water is brought into the city from the lakes after treatment, and stored in 23 service reservoirs. Since two of the major sources, Tansa and Lower Vaitarna, are at a higher level than the city, not much power is required to pump the water.

The history of water supply Mumbai is quite old and dates back to work on the Vihar Water Works commenced in January 1856, which was completed in 1860. Between 1872 and 1879 Tulsi lake was constructed by damming and redirecting the river Tasso at a cost of Rs. 40 lakhs. The Powai lake was completed in 1889 and the Tansa reservoir in 1892.

The BMC increased the capacity of the Tansa lake from time to time; doubling the volume in 1916, and tripling it five years later. A major breakthrough in the city's water supply came from the World Bank's Bombay Water Supply and Sewage Disposal Projects, implemented between 1975 and 1995, increasing the city's water supply from 260 to 650 million gallons per day, mainly by the development of the Vaitarna site. The Bombay Municipal Corporation (BMC) manages to supply between 70 - 75 per cent of the city's water needs.

Water production costs Rs.24 per 10,000 litres. The BMC charges Rs.6 for 10,000 litres for domestic consumption, and has a system of cross-subsidy by charging Rs.150 for 10,000 litres for industrial and commercial users.

A World Bank report estimated that the demand in the Bombay Metropolitan Region (BMR) is 3,026 million litres per day (MLD) and the supply is 2,474 MLD. Thus, presently only 65 per cent of Mumbai's demand for water was met. Considering the fact that the demand is expected to rise further, new sources can be mobilised and something tangible needs to be done in this respect. There are two principal obstacles in realising these plans. The first is technical. Since the 1994 Latur earthquake, much of the region covered in these projects have been zoned as seismically disturbed. The second is a question of funding. The World Bank has suggested that

different agencies handle the development of the source and distribution of water, in contrast to the present situation where the BMC does both.

These are some of the basic challenges that need to be tackled on a priority basis.

### **Financing Mumbai – The Role of MCGM**

Let us take a brief look at the Municipal Corporation of Greater Mumbai (MCGM) Experience in recent times to understand the financing constraint faced by the city. The Municipal Corporation of Greater Mumbai (MCGM) was formed in 1865 as Mumbai's civic body. The MCGM is veritably the "cradle of local self-governance in India". The MCGM has an annual budgetary outlay of about Rs.7,000 crore. The MCGM entrusts the policy making function to the Municipal Corporation and the policy execution to the Municipal Commissioner. By the end of the financial year 1999-2000, the financial condition of the MCGM became critical. However, with the rigorous implementation of economic measures and revenue enhancing measures in the past four years, the Corporation has achieved financial stability. By continuing the implementation of long-term fiscal policy, the Corporation strives to keep this stability intact in future as well. The major sources of income for the Corporation are Octroi, property tax, grants-in-aid from government and receipts from Development Plan Department. The major heads of expenditure are: wages, contribution to capital account various funds, debt charges, transport charges, repairs & maintenance and new works, lighting charges and grants to schools.

In the Revised Estimates for 2004-05, the Corporation earned Rs. 2,380 crore from Octroi, Rs. 744.16 crore from property taxes and Rs. 274.90 crore from grants-in-aids from government, while it spent Rs. 2,109.75 crore on wages, Rs. 380.28 crore on debt charges and contributed Rs. 500.24 crore to Capital A/C. Thus there was a closing balance of Rs. 0.30 crore in the revenue account at the year-end.

In the Budget Estimates for 2005-06, the Corporation has estimated revenue of Rs. 2,525 crore from Octroi, Rs. 803.69 crore from property taxes, Rs. 245.20 crore from grants-in-aids from government and Rs. 393.64 crore

from Development Plan Department, while it proposes to spend Rs. 2,490.43 crore on wages, Rs. 381.67 crore on debt charges and contribute Rs. 640.15 crore to Capital account. Thus there will be a closing balance of Rs. 0.42 crore in the revenue account at the year-end.

The other main features of the Budget Estimates for 2005-06 are: an expenditure of Rs. 2,123 crore on capital works to strengthen Mumbai's infrastructure and no new taxes imposed or any hike in the rates of the present taxes is proposed. MCGM is taking major initiatives in conformity with its long-term fiscal policy and budget estimates for 2005-06, which includes restructuring of high cost loans, computerization of its accounts and records, continuation of economy measures in expenditure and enhancement of revenue income in order to provide more funds for capital works.

### III

## Transforming Mumbai into a Global City

In recent times, there has been a lot of thinkers on a how to make Mumbai a world-class city and an international financial centre. These two aspects are related but not identical. A city, for instance, can meet the benchmarks of a modern, efficient city but that need not necessarily imply global integration. A global city on the other hand implies that the city is getting increasingly integrated to the global world, with its attendant risks and opportunities.

The economic reforms and subsequent strong performance of the Indian economy has enhanced the image of India among the community of investors in India. This can be seen from the huge capital flows towards Indian in recent past. It is quite evident that the 21st century will be a global century, marked by increasing international trade and investment, growing transnational communications, and expanding cross-border business and industrial activity. Cities seeking to improve or even maintain their economic position must provide the labor force, services, and infrastructure that allow locally based domestic and foreign-owned firms to participate more successfully in the international marketplace. Rapidly expanding global markets will provide our cities and their residents with immense opportunities to prosper, but only to the extent that their businesses and labor forces are prepared to respond to new global challenges.

In recent times, driven in large part by global competitive forces, the primary engine of urban economic development has shifted from one based on mass-production industries and low-skill service jobs to a more sophisticated technology- and knowledge-based system of production and services. This shift has provided higher incomes to those workers and managers who have the skills and knowledge to participate effectively in the new urban economy. Likewise, those cities that become more globally linked and responsive to the competitive needs of businesses will attract investment and jobs while those that do not will decline. **In the emerging global economy, international trade and investment will be key drivers of urban**

**and regional growth and crucial sources of local jobs and wealth.** In the past, urban economists focused on the domestic exports of cities to areas outside their immediate region, **but international trade and investment will play an increasingly important role in the future in urban economic revitalization, job generation, and wealth creation.** Mumbai's economic recovery, for example, rests heavily on its emergence as an important financial centre.

### **Divergent Role Models**

In recent years, Asia has seen a large number of serious contenders aspiring to become important financial centres in the region. While Tokyo and Singapore are the undisputed financial centres in the Asian region, other centres like Shanghai, Hong Kong, Bangkok, Jakarta and Taipei are also emerging as powerful alternatives in the region,.

Financial centres can be classified according to their importance and the areas they cater to. National centres usually cater to local requirements of the nation; regional centres spread out to wider geographical areas; and international centres encompass a host of financial services across the world. Different financial centres have followed different models to attain their present status of accomplishment. Most of the financial centres can broadly be categorised into two: International Financial Centres (IFCs) and Offshore Banking Units (OBUs).

Centres such as New York, London and Singapore demonstrate the full potential of an IFC, wherein offshore business is conducted alongside large domestic financial intermediation. In most cases offshore activities are not reinforced from domestic operations and they usually operate in the same regulatory and fiscal environment. Generally, IFCs have highly matured and developed economies. They are also endowed with sophisticated, deep and liquid domestic economies.

On the other hand, an OBU commonly refers to a smaller and less mature jurisdiction that attracts capital through a simple regulatory framework, minimum legal requirements for incorporation and operation, favourable tax treatment and stringent confidentiality requirements. It is, however, pertinent

to mention that there is no set model followed by various IFCs. Indeed, some models of development have been more successful than others.

There are numerous impressive parameters of Mumbai's financial sector:

First Mumbai accounts for a significant share in deposits mobilization (14 per cent of total deposits) and deployment of credit (21 per cent of total credit) of scheduled commercial banks.

Second, in terms of banking sector's transactions in clearance of cheques, Mumbai's share is as much as three-fourths of the total clearances.

Third, Mumbai's presence is overwhelming both in money market and the foreign exchange market transactions. Its share in the forex market is as high as four-fifths of the total turnover. Interestingly, while India is not a hub for foreign exchange (*a la* the Asian Dollar Market in Singapore), treasuries of banks dealing in foreign exchange have their headquarters in Mumbai.

Fourth, Mumbai, being a home to the National Stock Exchange and Bombay Stock Exchange, dominates the turnover and total market capitalization of the India stock markets. While the share of these two exchanges is about 92 per cent with respect to turnover, they collectively represent virtually the total market capitalization of India's corporate sector. Most derivatives and financial futures trading activity takes place in the stock exchanges in Mumbai.

Fifth, the presence of a large number of financial markets players such as foreign institutional investors (FIIs), term lending institutions, merchant bankers, broking houses and so on, makes Mumbai a favourable place for an IFC. Nearly 80 per cent of mutual funds are registered in Mumbai. Practically, all FII investments and over 90 per cent of merchant banking transactions happen in Mumbai.

Sixth, the headquarters of a large number of regulatory bodies are located in the city, including RBI, SEBI, *etc.*

Seventh, Mumbai is truly an agglomeration of the right skills and the right framework for integrated delivery of financial services. The city has a large population of highly skilled English speaking employees and a reputation for attracting the best managerial talent. A significant number of

MBA, chartered accountants, legal advisers and research professionals are based in the city.

Several Committee's over the past few years have suggested revival plans for Mumbai. The key reports prepared in this context included:

1. **Report by Bombay Chamber of Commerce and Industry (June 2002)**, Action Plan for Mumbai as an International Financial Centre.
2. **The McKinsey - Bombay First Report (September, 2003)**, Vision Mumbai-Transforming Mumbai into a world-class City.
3. **Transforming Mumbai into a World Class City, Government of Maharashtra, February 2004** (First Report of the Chief Minister's Task Force).

#### **i) Report by Bombay Chamber of Commerce and Industry (June 2002)**

The Report by Bombay Chambers of Commerce and Industry tries to find answer to the question : What Inhibits the logical progression of Mumbai as an IFC. It suggests a plan of action that included various regulatory and institutional reforms.

1. Improve and expand mass and private transport infrastructure, including linkages to the hinterland.
2. Dramatically increase low-income housing availability (1.1 million low-income houses) and affordability and drive upgradation of housing stock.
3. Upgrade safety, air pollution control, water, sanitation, education and healthcare.
4. Create a dedicated "Mumbai Infrastructure Fund" with an annual funding of Rs.1,500 crore and attract debt and private financing.
5. Make governance more effective, efficient and responsive by corporatising key departments and streamlining important processes such as building approvals.
6. Generate momentum through more than 20 quick wins to show visible on-the-ground impact during the next 1-2 years.

7. Enable implementation through committed public-private resources, led by the Chief Minister and make key government organisations accountable for results.

**ii) Mckinsky Report (September,2003) Vision Mumbai- Transforming Mumbai into a World Class City**, advances a multi-pronged strategy

**I.** Boost economic growth to 8-10 per cent per annum by focusing on services (high- and lowend), developing hinterland-based manufacturing and making Mumbai a consumption centre.

**II.** Improve and expand mass and private transport infrastructure, including linkages to the hinterland.

**III.** Dramatically increase low-income housing availability (1.1 million low-income houses) and affordability and drive upgradation of housing stock.

**IV.** Upgrade safety, air pollution control, water, sanitation, education and healthcare.

**V.** Create a dedicated “Mumbai Infrastructure Fund” with an annual funding of Rs.1,500 crore and attract debt and private financing.

**VI.** Make governance more effective, efficient and responsive by corporatising key departments and streamlining important processes such as building approvals.

**VII.** Generate momentum through more than 20 quick wins to show visible on-the-ground impact during the next 1-2 years.

**VIII.** Enable implementation through committed public-private resources, led by the Chief Minister and make key government organisations accountable for results.

**iii) Transforming Mumbai into a World Class City, Government of Maharashtra, February 2004** (First Report of the Chief Minister's Task Force).

The report attempts to chart a sustainable future for Mumbai . It suggests that a sustainable transformation should have three three elements: sound finances, able implementation and public support. To ensure reliable funding, we propose a dedicated developments fund for Mumbai. To ensure that change materializes efficiently, the report recommends that two citizens'

committees drive the programme and track progress by employing implementing agencies.

With regard to creating the implementation apparatus, the Report proposes public-private partnership to drive the programme. It recommends the formation of an Empowered Committee as a permanent successor to this task force. This committee will include civil servants, private citizens and representatives from the implementing agencies and will be chaired by the Chief Secretary. It will sign MoUs with the agencies, administer the MDF and shortlist projects to be financed.

The study emphasises that the Success of developing Mumbai to a global city depends on many different organisations: MCGM, MMRDA, SRA, BEST, MSRDC and others. To ensure that they carry out the citizens' mandate, the Report proposes the formation of a Citizen's Action Group, made up to eminent citizens of Mumbai and chaired by the Chief Minister. The group will ensure that implementation is timely and up to world-class standards.

The Report also talks about affordable housing, slum development, urban renewal, promoting physical infrastructure and economic growth. Thus, it stresses a multi pronged co-operative framework for the development of Mumbai into a global city.

## ***IV***

### ***Mumbai : Vision for a better tomorrow***

Let me now present the action plan, as I see it , for developing Mumbai to a global city. It has been estimated that by 2030, 41.4 percent of India's population will be living in urban areas, which would mean an additional population of 300 million people will be added to India's cities and towns, with the largest cities of Mumbai and Delhi having more than 30 million residents each by 2030. The India Infrastructure Report released in 1996, estimated the annual investment need for urban water supply, sanitation and roads at about Rs. 280 billion (US \$ 6.67 billion), in 1996 prices for the period 1995-2005. Another estimate made for the Ninth Five Year Plan had estimated the investment requirement for housing in urban areas at Rs. 526 billion (US\$ 12.5 billion). This implies a daunting task ahead of urban policy makers and urban infrastructure service providers in India. Mumbai, being the economic engine of the country, is crucially poised to potentially benefit from the ongoing process of India's integration with the global economy.. Thus, apart from meeting the huge challenge that is emerging due to increase in services standards demanded by citizens, Mumbai would also simultaneously respond to emerging opportunities in the globalised world. The major features of such integration in the global economy would be :

- I. The growing importance of international trade and investment.
- II. The increasing global mobility of factors of production.
- III. The driving force of technology.
- IV. The growing importance of knowledge-based industries.
- V. The critical role of market size.
- VI. The need to adopt agile business practices.
- VII. The necessity of forging international strategic alliances.

To be successful as a city in this new milieu, it is essential to plan effectively, encompassing areas such as land use, infrastructure needs, realistic projection of cost, and implementation. (Mohan, 2004). To develop the city of Mumbai, thus, concerted efforts in strategic planning, financing and implementation needs to be undertaken.

### **Decentralization and Self Financing**

Decentralize the instruments of infrastructure provision so that the agencies providing such infrastructure services are able to finance themselves and can respond flexibly to the changing demands of a growing city. While self financing may be seen as rationalization of user charges, it does not necessarily imply commercial financing.

### **Effective Public-Private participation (PPP)**

Private investment in public transport should be allowed to flourish in such a way that high service levels are achieved at low economic and financial cost. This is indeed possible through extensive use of private initiatives within a public regulatory framework. A key problem will be to manage a fast expanding supply of developed urban land for housing and other purposes. Rapid in-migration makes the demand for housing grows much faster than normal population growth. Land development induces investment in infrastructure such as water supply, sewerage, roads and power supply. All this requires substantial front-end investment, which public authorities can ill afford.

### **Bangalore Stands out as an example of PPP**

Bangalore Development Authority (BDA) turned around and became financially self-sufficient by rigorously accounting for all its assets and then selling some while leveraging the others. By doing this, it was able to build 40,000 infrastructural sites in three years ( 2001-2004) as compared to the 3,400 of the previous ten years ( 1991-2000). Bangalore's property taxation system was overhauled and made into a self-assessment scheme.

## **Dismantling Excessive Controls**

The Tenth Five Year Plan underscores a growing recognition of the need to (i) dismantle the extensive controls on urban real estate markets, many of which were established during the years 1975-77, at the national level, and which have deprived cities of the tools to effectively ensure an adequate market-driven supply response to growing urban demand for land and services

## **Rationalisation of Tax structure**

Mumbai in the prime position of being able to attract new manufacturing investments. The Vision Mumbai: Transforming Mumbai into a world-class city Government, therefore, should move towards reducing or eliminating octroi, reducing sales tax, road tax and stamp duty rates while increasing user charges.

## **Property Tax**

Levy property tax on market value along with a self-assessment option. MCGM should push ahead with modifying the current system of property taxes. This will not only rectify imbalances in the current system, but also generate additional revenues. For example, South Mumbai's property tax rate is estimated to be a meagre 0.002 per cent of capital value, compared to international benchmarks of 1-2 per cent.

## **National Level Co-ordination necessary**

At the national level, the ministry of urban development needs to be strengthened and reoriented if it has to play an effective role in overseeing urban planning and development. Since most the work in urban development planning is envisaged at the state level, the role of the central ministry is mainly as a nodal organization for coordinating action, providing technical advice and working out detailed urban investment implications. This technical support arm should be capable of leading urban policy making and would need to be at the cutting edge of urban research. The organization would need to develop systems for improving information on cities and monitoring of

investment programs of these cities by standardisation of data requirements, technologies of locationalising data etc. This would go a long way in systematizing urban development processes

### **Governance : Making the government machinery work**

Need to strengthen city management. city managements will have to manage and cope with large financial requirements for all kinds of investment for infrastructure service provision. Given the overall fiscal constraints at present, resources will have to be raised increasingly at the local level. Thus urban local governments have to be strengthened at all levels, and made creditworthy.

### **Indian Examples of Good Governance**

We need not go to Singapore or Sanghai. Closer home, in 1994, Surat was reeling from an attack of the plague and a deluge of floods. The new municipal commissioner appointed zonal officers and mandated heads of municipal divisions to spend half their day on walkabouts monitoring city cleanliness. He also welcomed private sector participation. Consequently, Surat rebuilt itself without any aid from state or national government and became the second cleanest city in India (after Chandigarh). Similarly, Nagpur and Thane were both improved vastly by the efforts of their new municipal commissioner who improved the efficiency of government machinery by setting targets, making senior government officials accountable for results, monitoring daily progress and penalising non-performers. Consequently, both cities today enjoy wider roads, a cleaner environment, fewer slums and more low-income housing.

### **Appraisal Agencies :**

The existence of information asymmetries give rise to the reluctance of investors and lenders to invest in urban projects. The government can help in funding professional institutions specialized in such appraisal techniques, who can then build professional credibility and provide project appraisals that are respected, and therefore address information asymmetries effectively.

## **Making the most of Financial Markets**

Developing Mumbai as an international financial Centre (IFC) would require simultaneous development of **all segments of financial market** i.e., money market, government securities market, corporate debt market, foreign exchange markets and commodities market because the transactions in all these markets are getting highly interlinked. While some segments of the markets have achieved adequate depth, some still lack liquidity and cling to low volume of transactions. To provide a fillip to the development of a vibrant financial market in Mumbai, the following changes in institutional and legal framework could prove critical.

(1) The Indian debt market ranks third in Asia, after Japan and South Korea in terms of issued amount.

(2) The Indian forex market is predominantly a transaction-based market with the existence of underlying forex exposure generally being an essential requirement for market users. The average monthly total turnover increased sharply to US\$ 174.7 billion in 2003-2004 from US\$ 130 billion in the previous year.

(3) In terms of sequencing, forex markets have to be aligned to external sector reforms and development of financial markets as part of overall reform. Further liberalisation in forex markets have to be harmonised with progress in other areas. Technical Advisory Committee (TAC) on Money and Securities Markets set up by RBI in 1999 has been expanded in 2004 to include forex markets and the Committee has been renamed as TAC on Money, Securities and Forex Markets. A Committee has been set up to undertake a comprehensive review of the liberalisation process set in motion in the last decade, study recent international experience and identify various options for future forex market development in India. The Committee will interact with market participants and experts for this purpose. On the basis of the suggestions, a road map will be drawn up for further liberalisation to reach global standards. The need for collaboration and consultation between regulatory authorities and market players in the process of development of any market.

(4) **Legality of OTC Derivatives and Amendments to SCRA:**

OTC interest rate derivatives were introduced in 1999. The volume in the market has grown noticeably with the outstanding notional amount at around Rs. 6,40,000 crore. However, there has been some apprehension regarding legality of OTC derivatives with section 18A of the Securities Contracts (Regulation) Act, 1956 (SCRA), making only derivatives contracts that are executed on exchanges legal and valid. Accordingly, certain modifications by way of supplementary provisions to the proposed amendments are under discussion to ensure that the proposed amendments do not jeopardize the legal status of OTC derivatives. Specifically, it has been suggested that section 18A be amended so as to make contracts of the class and nature as notified by RBI legally valid, even if they are not traded on any recognised stock exchange. Exchange traded derivatives have their own role to play in the debt market - but by their very nature they have to be standardised products. OTC derivatives, on the other hand can be customised to the requirements of the trading entities. Thus both OTC and exchange traded derivatives are essential for market development.

(5) The private corporate debt market, in the absence of a well functioning secondary market, remains illiquid and unpopular among the investing population. To help in the further development of the corporate debt market, a Group has recently been set-up with the participation of RBI, SEBI and other market participants. Among others, the group intends to look into the following issues:

- Examination of the issues relating to primary issuances as well as growth of secondary market of corporate debt securities in the light of international experience.
- Examination of the regulatory aspects for the development of the market for Asset Backed Securities (ABS) and Mortgage Backed Securities (MBS).
- Analysing the issues relating to trading, settlement and accounting of corporate debt securities including the issue of DvP settlement for corporate debt market.

- Suggesting measures to enhance transparency in pricing and valuation of corporate debt securities.

(6) The securitisation market has been growing at a rapid pace, particularly after the SEBI/RBI introduced regulations on the private placement in debt market. To encourage the growth of this market, the Reserve Bank excluded investments in Asset Backed Securities (ABS)/ Mortgage Backed Securities (MBS) from the 10 percent ceiling on the investment of banks in unlisted non-SLR securities. However, several issues relating to regulation, listing and improvement of liquidity need to be addressed. Most MBS/ABS are issued by Special Purpose Vehicles (SPVs) in the form of trusts which are not regulated. ABS/MBS issued by trusts cannot be listed, although these are rated. Only the securities issued by the companies can be listed. On the other hand, there is legal ambiguity on the status of the listing of ABS/MBS. Exchanges reportedly sought SEBI's clarification on the issue and it is learnt that SEBI preferred an unambiguous enabling provision in the SCRA that these mortgage-backed securities can be listed. Even in the case of U.S.A., where the ABS/MBS market is very large, the regulatory process is still evolving. In fact, the SEC is proposing comprehensive new and amended rules and forms covering registration, disclosure and reporting requirements for ABS and MBS under the Securities Act of 1933 and the Securities Exchange Act of 1934.

(7) As in the world's largest bond market, the United States, there is a large number of municipal authorities, urban development authorities, state government SPVs and the like who could potentially issue bonds for infrastructure financing, if they can become credit worthy. With the increasing role of the private sector in infrastructure, there can also be a large number of private sector issuers. On the investors side, as more private insurance companies enter the market and expand, and pension funds come into existence along with provident funds, there will be increasing demand for medium and long-term safe debt instruments.

(8) There are some of the other pre-conditions that still need greater attention. First although there has been some progress in the enforcement of creditors' rights, the legal and regulatory system still has a long way to go in this area. The implementation of bankruptcy laws is very

tardy so bond investors would have to wait a long time to get any compensation from defaulting companies. Second, the interest rate derivatives market is in its infancy and needs greater development for the easy access of hedging instruments to bond investors. Third, brokerage systems for retailing of either government securities or corporate debt instruments have yet to develop. What the retail investor wants is transparency in pricing, confidence regarding repayment, simplicity and convenience of dealing in the market and low cost. There must be adequate liquidity to enable ease of entry and exit. This is difficult to achieve without the presence of market makers who can provide buy/sell quotes on a regular basis, and also have the ability to operate in the market with adequate volumes - a role similar to that of primary dealers in the government securities market.

(9) The Government Securities Bill that will facilitate lien-marking pledge of securities for raising loans against government securities *etc.*, though approved by the Cabinet has not yet been passed. The Government Securities Act would pave the way for the introduction of STRIPS. Coupon rates are already being aligned for introduction of STRIPS and the necessary software has also been put in place.

(10) Regarding banking industry, **technological intensity** is one area where perhaps we need to do significant 'catching up', notwithstanding the rapid strides made over the last few years, though data on this score are difficult to come by. Some available figures indicate that in late 1999, the percentage of customers using online banking was less than 1 per cent in India, compared with anywhere between 6-30 per cent in developed economies like US, UK, Germany, Finland and Sweden. Even in Latin America, these figures are much higher than for India. While admittedly the numbers for India are likely to be much higher at present than these figures suggest, so would be the case for these other economies as well. The issue, therefore, remains what has been the extent of 'catching up' by India on this score? In fact, this seems somewhat intriguing: India happens to be a world leader in information technology, but its usage by our banking system is somewhat muted. It is wise for Indian banks to exploit this globally state-of-art expertise, domestically available, to their fullest advantage.

### ***Developing Educational Infrastructure***

The labor-force characteristics of urban areas will fundamentally and pervasively affect the ability of their businesses and industries to produce goods and services for export and to participate effectively in other international economic transactions. One of the most important features of internationally competitive cities in the future will be their capacity to mobilize skilled labor and managerial resources quickly and efficiently for new tasks as global business opportunities change. The most competitive cities recognize that global enterprises must be located near or have access to knowledge centers that can generate or stimulate innovation and provide a reliable source of skilled workers, technically

trained supervisors, scientists, engineers, and managers. At both the secondary and higher education levels they must focus on teaching *how to learn and re-invent*, because knowledge of the learning process will become far more important to students in a globally competitive world. A strong foundation in fundamentals must be built on a process of teaching that creates the capacity for lifelong learning.

There is a need to foster PPPs in the education sector.

### ***Enhance Civic Leadership and Community Action***

To attract and sustain technology-based manufacturing and services activities that are internationally competitive, urban leaders must promote a common civic perspective in the public and private sectors and a positive attitude about a city's or metropolitan area's comparative advantages. An urban culture that encourages and supports cooperation among the public, private, and civic sectors to anticipate and adapt to change is crucial for competitiveness in a global economy. In every city that has successfully restructured its economy, changes came through concerted action and civic commitment.

### **Developing High-technology enterprise zones**

To provide the physical and support infrastructure for agile manufacturing enterprises, U.S. cities can establish high-technology enterprise zones. Cities in China, Japan, the United States, and Europe have developed high-technology zones or parks. These zones provide a business climate suited to the needs of firms engaged in international trade that use agile business practices. The zones are organized around high-performance core industrial networks: hub companies and their major suppliers. Those companies locating in the zones enjoy more flexible regulatory treatment and tax incentives as well as expedited customs clearance of imported and exported materials and goods. The zones provide multimodal transport and communications infrastructure systems to facilitate global logistics and production and just-in-time inventory and production processes.

### **Indian IT Sector shows promise**

Out of India's total exports, the share of IT products (mainly software) has increased from 1 per cent in the early 1990s, to 18 per cent in 2001. The recent encouragement of foreign direct investment in the sector has further spurred growth. The southern cities of Bangalore, Hyderabad, Chennai, Mumbai and Pune have emerged as competitive IT hubs. Key factors in this take-off have been the existence of a skilled, English speaking workforce, and the fact that the software industry was not part of the license raj regime.

Mumbai, the financial and commercial capital of the country, provided the initial lead in **the Infotech Industry**. Despite competition from Bangalore, Mumbai has created a niche in the IT industry scenario of India, with a large number of multinationals as well as small software units located here. The Santacruz Electronic Export Processing Zone (SEEPZ) has a concentration of IT companies and has served as the focus of IT development of the city. A software technology park offering plots to IT companies is also being planned adjacent to SEEPZ. The International Infotech Park in Vashi, Navi Mumbai offers over 6 lakh square feet of built-up area for IT offices. The International Infotech Park (IIP) is designed to meet the requirements of all IT companies in one single location so as to have very little gestation period for a company to start its operations. This Park is expected to generate more than 16,000 direct

jobs and around 24,000 to 30,000 ancillary jobs. The presence of 16,000 professionals is expected to generate significant demand for various urban services and retail sales.

V

### **Concluding Remarks**

The most attractive regions for business expansion and investment during the 21st century will be those that give increasing attention to cutting-edge infrastructures that make business operations within the metropolitan area more efficient and responsive to international economic trends and allow businesses to operate more effectively in the global economy.

This article outlined the basic ingredients of development strategy for the city of Mumbai. The article endeavours to show that Mumbai as a city will be required to adapt its services and infrastructures in new ways to compete and cooperate at the international level during the 21st century. The efforts of virtually all countries to open their economies to international trade and investment is making the global scenario really competitive.

The most dynamic cities in the 21st century, therefore, are likely to be those that offer a well-trained labor force, a modern and efficient infrastructure, and adequate social amenities. They will also be those that foster creative and flexible public and private institutions to help local economies restructure and adapt to rapidly changing international business conditions.