Urban infrastructure and governance

chapter 14

1. The importance of high quality urban infrastructure for an IFC

While the answer may seem obvious, or it may be otiose, the question has to be asked: Why do successful GFCs, like London, New York or Singapore, need to have such high quality urban infrastructure? For two main reasons:

The first concerns ***productivity***: International finance involves highly compensated specialists with unusual knowledge-experience skill sets. They are busy and need to make the most of their time. To them, the costs of delay, non-performance, or failure on their part are inordinately high. IFS provision involves intensive national, regional and inter-continental travel and 24-hour telecommunications connectivity. In that respect it is unlike BPO, which takes place in an isolated campus with staff-persons who mostly sit at their desks all day long. In contrast, IFS production involves intensive intra- and extra-city travel for meeting clients, exchanging information and analysis, negotiating and putting together transactions that often involve a consortium of cooperating financial firms.

Moreover IFS production in an IFC is highly IT systems dependent. That is true not just for financial firms operating in an IFC, but for exchanges and trading platforms, payment and settlement systems, and regulators who need to exert continuous surveillance over transactions in real time. All this requires not just sophisticated IT hardware (and immediately available hardware maintenance) but also software and software support capacity, along with stable and reliable systems of high-quality air-conditioning and ventilation to maintain constant atmospheric conditions of temperature and humidity. All these in turn need to be supported by high quality electric power supply (with minimal voltage and current fluctuations) and with sufficient back-up to minimize (to nearly zero probability) the risks of interruption.

For these reasons, IFS production requires a venue where physical infrastructure (*i.e.*, residential and commercial space, power, water, waste disposal, transportation and communications) has to be of the highest quality in order to be globally competitive. Deficiencies in infrastructure increase direct and indirect IFS production costs. They hurt finance directly by confounding the mission-critical processes of the securities markets and payments, and by placing onerous coping costs upon every firm which has to plan on failures of public infrastructure and incur additional costs privately in order to compensate for these shortcomings. The indirect cost imposed by poor infrastructure is upon the wasted staff time of high-skill and high-wage finance professionals, and the opportunity cost suffered when tasks which could be performed in Mumbai are directed elsewhere as a response to the weaknesses of Mumbai.

As has been argued elsewhere in this report, an abundance of fibre-optic cables and video-conferencing have not removed the fundamental role of face-to-face meetings for the most important negotiations and decisions. A day in the life of a skilled worker in IFS production may involve an early morning breakfast meeting at a club or hotel, a long commute to work, moving around several different meeting venues within the city throughout the day to meet clients, colleagues in other firms, accountants, lawyers, consultants, along with lunch and dinner meetings before returning home after a 12-to-16-hour day. That daily routine is interspersed during the week and month with air travel around the country and across the world.

Mumbai faces a tall hurdle in being hospitable to this kind of individual. More than half of his/her day can be spent stuck in traffic. Mumbai needs to match at least the mundane efficiencies of London, New York and Singapore in order to be a credible venue for IFS production.

There is a paradoxical effect at work in having the city and country make a transition from BPO to IFS. The more skilled a person, and the higher the opportunity cost of time, the less inclined that person will be to spend time in Mumbai's traffic, or in solving mundane problems of power, water or electricity, or law and order. Hence, as long as the urban problems of Mumbai are not resolved more decisively, there will remain a bias in favour of keeping the junior staff-persons of global financial firms in Mumbai to do the low-value work required. High-value IFS work will migrate to proximate centres that are better endowed with infrastructure and with much higher, more efficient standards of city administration and urban governance *i.e.*, Dubai and Singapore. This kind of fracture will frustrate the goal of Mumbai becoming an IFC that can capture high value addition in IFS work.

The second, related issue is that the most skilled staff-persons in global finance have ***choices*** about where they are located and where their time is spent. Initially Mumbai's role as an IFC is likely to be limited to serving mainly the Indian market for IFS – in other words it will be an IFC more like Tokyo and the continental IFCs rather than like the three GFCs. That initial phase will probably stretch from around 2008–15. It will require additional infrastructure.

But those demands are unlikely to be as great as those made when Mumbai enters its second phase (from 2015 onwards) and attempts to compete with the three GFCs. A defining issue for Mumbai's becoming a credible GFC post-2015 will be the challenge of attracting around 50,000 high level people of the kind typically employed by global financial firms in the three GFCs. Only 20–25% of these are likely to be of Indian origin. All these people have a choice of living and working in any city in the world. Their choice will hinges on the attractiveness of a city as a place in which to live, work and play. All the attributes that a city must have – as a hospitable, friendly, welcoming, efficient and pleasant environment – matter very much in influencing the decisions made by this community.

Once again, the more skilled a person is, the more sensitive he/she will be to the wastage of time, and the disutility associated with the very large number of mundane irritations imposed by Mumbai on its residents such as poor roads, air and noise pollution, road and rail traffic congestion, poor health and safety standards and frequent city shut-downs.

These realities make Mumbai an unattractive urban environment for housing an IFC. They need to be tackled and overcome on a war footing after long years of delay and many declarations of intent that remain to be translated into action plans for a new reality. Yet, despite all its shortcomings, Mumbai remains the financial and commercial hub of India. Those who wish to serve the Indian market for IFS will have little choice but to endure its privations and put even further pressure on the city's limited resources and drive up accommodation and land prices. But those privations will not be endured by global clients of an IFC who have other choices.

The highest skill individuals specialised in providing IFS are precisely those who would make a material difference to Mumbai's aspirations to become an IFC. It has oft been remarked by the *cognoscenti* who have lived and worked in the three GFCs that, more often than not, the most innovative ideas in IFS production are exchanged by imaginative, creative financial architects, engineers and artists over cups of coffee. The most fundamental ingredient in a vibrant IFC is the intellectual and commercial interplay between a large number of heterogeneous requirements and viewpoints.

A successful IFC is one that brings a diverse array of knowledge into financial problem solving through lateral thinking, and constructing creative links across diverse groups of players. This requires a large number of conversations and a wide range of IFS participants in these conversations. If Mumbai is a hospitable and attractive city to a globally mobile population of high-level IFS providers, then a person who comes to Mumbai for a meeting on a Friday is more likely to stay over on the weekend for amusement or leisure. The stray conversations of the weekend can ignite further IFS-related business. If Mumbai is inhospitable, and the person concerned cannot wait for his flight to depart the same evening, these conversations and informal relationships, and thus the business they contribute to the IFC, are lost.

The growth and success of the Indian economy does not automatically overcome the problem of an inhospitable Mumbai for IFS. In fact, in the short-term, it appears to be making that problem much worse as the city is unable – in a meaningful sense other than haphazard building – to cope with the consequences of such rapid growth in a deliberate, planned way that allows for carefully designed urban regeneration, redevelopment and expansion. If India is successful, but Mumbai continues to be a hostile urban environment, then global financial firms intent on expanding their India-related IFS business will continue to make key IFS decisions connected with India as they are doing now: *i.e.*, in New York, Singapore, and London.

Perhaps over time some of the executive functions undertaken in those GFCs for India-related IFS business may migrate to Dubai if the DIFC manages to establish itself in the face of Mumbai's (and India's) failure to come to grips with the physical infrastructure challenges that both city and country face. The creation of DIFC is predicated partly on anticipating such failure. In this scenario, relatively junior staff will be placed in Mumbai to maintain regular client contact at managerial (rather than senior executive) levels and to undertake routine process work. Senior executives will travel infrequently to Mumbai to handle the more critical functions and decisions.

Hence, the most critical task in a strategy for making Mumbai an IFC is the challenge of upgrading the city to world standards in terms of the quality of its infrastructure and, even more importantly, the quality of its governance. For Mumbai to become a successful IFC, the best minds in global finance will need to perceive it as a city that is as attractive as the other three established GFCs in terms of locating their families, educating their children, and as a venue for furthering their own careers and for enhancing their lives. If Mumbai is not perceived in that way by this highly mobile community with extremely demanding standards then it will not succeed as a GFC even if it manages to survive as a more limited IFC serving India's IFS needs on a partial rather than total basis.

In offering this observation, the Committee realises the challenge it poses to all levels of government in India, Maharashtra and Mumbai. It may be that the human talent needed to manage and run a world class city may have to be sourced from wherever it exists to upgrade dramatically the quality of local city administration. It is by no means easy to create and govern a first world global city in a third world environment. But it is not impossible. Malaysia has managed to do that with Kuala Lumpur; although that city does not have the advantages of the vast Indian market and is obliterated from competition in the IFC race by having Singapore on its doorstep with vastly superior capabilities. China has managed to do that with Hong Kong, Beijing and Shanghai. South Africa has managed to do that with Johannesburg. Brazil has managed to accomplish the same with Rio de Janeiro and Sao Paulo. Chile has managed to do that with Santiago and so on. The problems faced in Mumbai are not new, having been solved by dozens of cities, including many in the third world.

To accomplish that difficult, but by no means impossible task central and state level policy-makers may have to consider the short-term perpetration of an inequity quite deliberately, as an investment in the future not just of Mumbai but of India. What needs to be done is to recreate Mumbai within the next 3–13 years (*i.e.*, in 2010–20) as a forerunner, at the city level, of what India should become in the next 30–40 years – *i.e.*, a developed country. Meeting the challenge of making Mumbai an IFC capable of graduating to GFC status relatively quickly is not a secondary issue. It ranks as being equally important to the major transformation that is required of the license-permit raj in Indian finance.

In other words whether Mumbai becomes a successful IFC, and graduates quickly to GFC status, depends on whether two strategic challenges can be met simultaneously by the authorities in the knowledge that the Indian private sector has the capacity to meet its operating challenge. The two challenges confronting the authorities at central and state/municipal levels respectively are:

1. **Having the vision, resolve, and political courage/will to make the fundamental wide and deep reforms needed across Indian finance to make it operate on global lines and integrate more rapidly with the global financial system (a GoI challenge); and**
2. **Making the equally wide and deep urban policy reforms needed to upgrade the quality of Mumbai's infrastructure and governance – so that it can become a global city similar to the other GFCs; (a GoM and municipal challenge).**

The most important aspect of becoming an IFC – with enormous beneficial side-effects for the Indian economy – lies in attracting the people needed from around the world to live and work in Mumbai. Whether Indian or foreign, all of them can live anywhere in the world they choose. For Mumbai to become an IFC/GFC this community needs to choose to be in Mumbai. That basic reality needs to be seen for precisely what it is. Going for an IFC in Mumbai is a policy choice that will inevitably invoke social reactions in the city and require astute political management. Those reactions may be difficult to cope with. But it would be remiss to obscure this reality for that reason; or attempt to deal with it through a rhetorical compromise that results in distorting reality and compromises the achievement of the IFC outcome.

Table 14.1: Index of fully loaded costs per head (London = 100)

London	100
New York	96
Paris	97
Frankfurt	84
Hong Kong	99
Mumbai	36

Source: The Competitive Position of London as a Global Financial Centre, the Corporation of London, November 2005. Based on Z/Yen Limited, 2005 Cost per Trade Survey (July 2005).

2. Problems of cost

Even though India is a third world country, and labour costs in India are low, the costs of renting office space in Mumbai are high when all components of establishment cost are taken into account. This will deter the placement of IFS activities in Mumbai.

As Table 14.1 and 14.2 show, Mumbai has a significant cost advantages over most IFCs in OECD countries; but it fares poorly when compared with Shanghai or Singapore, two cities which are likely to compete with Mumbai in the IFC space. The costs seen in Mumbai are out of line with general cost levels associated with India's low per capita GDP. As an example, even New Delhi – which has severe problems of urban policy itself – has costs that are much lower than Mumbai's.

3. Cross-country comparison

In Table 14.3, established and emerging IFCs are ranked for indices K1 through K6, all of which measure the quality of physical and social infrastructure, and the living environment. Mumbai has two strengths: (a) the use of English as the default language for global IFS and financial contracts; and (b) the availability and quality of personal and domestic services. In the area of telecommunications, Mumbai is increasingly closing the gap against other cities. In all other areas, there is a huge gap between Mumbai and the emergent IFCs.

[1]Occupancy costs are defined as the average total cost of leasing 10,000 sq.ft. (929 sq.m.) of net usable

Table 14.2: Occupancy costs[1]

2005	2004		Total occupancy cost per workstation pa (US$)	Space utilisation standard per worker (sf)	Total Occupancy cost (US$ psf pa)
Rank	Rank	Location	2005	2005	2005
3	4	London (City)	15,280	113.0	135.2
5	3	Frankfurt	13,640	236.8	57.6
6	5	Tokyo (Central 5 Wards)	13,400	136.7	98.0
8	6	New York (Midtown)	12,200	225.0	54.2
14	33	Hong Kong	9,320	139.9	66.6
14	19	Seoul	9,320	161.5	57.7
29	17	Sydney	7,790	150.7	51.7
40	40	Mumbai	6,670	129.2	51.6
63	**69**	**New Delhi**	**5,140**	**129.2**	**39.8**
90	92	Shanghai (Puxi)	4,150	113.0	36.7
92	87	Singapore	3,970	118.4	33.5

Source: DTZ Research, Global Office Occupancy Costs Survey, January 2005

4. Difficulties in Mumbai from an IFC perspective

The main infrastructure deficiencies in Mumbai are well known: electricity, water, sewage, flooding, transportation and communications. With the city now developing a fractured geography with its two financial centres being located in the Bandra Kurla Complex and Nariman Point/Fort in South Mumbai – intra-city drive times have become particularly critical. New and innovative strategies need to be undertaken to dramatically transform transportation time, utilising both public transport and high speed intra-city expressways. A host of PPP solutions, based on user charges, can be rapidly rolled out in order to alleviate infrastructure constraints such as transport, power, water, sewage, drainage, railway stations, *etc.* These should be put together by the Indian IFS industry, global PPP players, and multilateral institutions.

The exorbitant cost of real estate in

office space in a modern, well-specified office building in a prime Central Business District location. They include rent and outgoings, such as maintenance costs and property tax, but exclude rent-free periods, fitting-out costs and other leasing incentives.

Table 14.3: **Rankings:** Quality of physical and social infrastructure and living environment

		London	NY	Tokyo	S'pore	**Mumbai**	HK	Seoul	Sydney	Dubai
K1.	Quality/Availability/Cost of infrastructure: Power	9	9	10	10	**4**	9	10	10	10
	Water	9	9	10	10	**4**	9	10	10	8
	Telecommunications	9	10	10	10	**6**	10	10	10	10
	Transport	5	6	7	8	**2**	6	8	8	5
	Residential Space	7	5	5	7	**3**	7	8	8	7
	Office/Commercial	9	9	10	10	**3**	9	9	9	10
K2.	Leisure, Entertainment, Global Cultural, Recreational and Food Facilities	10	10	3	4	**2**	4	3	7	5
K3.	Use of English as the default international language at work and at leisure	10	10	2	9	**7**	5	3	10	6
K4.	Use of English as the default international language for financial contracts	10	10	5	10	**9**	10	5	10	10
K5.	Availability, Accessibility, Cost of healthcare and education (global standards)	5	5	6	8	**3**	6	7	8	6
K6.	Availability, Accessibility, Cost of personal and domestic services	3	3	1	5	**9**	6	4	2	9

Mumbai could inhibit its emergence as an IFC. Mumbai is said to have lost the BPO industry to Bangalore owing to its astronomical prices of real estate. Mumbai might end up losing the IFS industry to Dubai if this issue is not addressed. This involves repealing the Urban Land Ceiling Act, and new thinking on FSI.

Becoming an IFC also requires strengthening the spirit of tolerance which has always been a part of Mumbai's ethos. A healthy and hospitable city environment that can attract expatriates requires good residential facilities, office space, leisure, and entertainment facilities catering to international tastes, smooth enrolment processes at good schools, hospitals, colleges, universities, and sports clubs accessible to expatriates. Expatriates in an IFC should be able to use English in their interfaces with government, state or city officials.

Fresh thinking is called for revamping the city's administrative structure. In China, the four largest cities have been given provincial status; much like Delhi. But the sensitivity of state and local politics need to be taken into account in considering such an option for Mumbai; even if, theoretically, it might ensure better city governance and greater accountability of the city's policy-makers to the urban electorate. If this solution is out of the question, the most critical priority is to transform the city's administrative structure in a way that creates a fully empowered if not elected 'manager' for the city, who can be held accountable for everything that goes right or wrong in Mumbai (without being able to pass the buck to the state government), and who is not required to be concerned about anything else.

Finally, ways need to be found to reduce the city's vulnerability to city wide bandhs, a peculiarly Indian phenomenon.

5. Improving urban governance in Mumbai

The sheer size and rapid but disorderly uncontrolled growth of Mumbai presents an unprecedented challenge in inducing the evolution of sound institutions for urban governance. Urban infrastructure consists primarily of residential and commercial space, supported by an array of services such as: adequate water supply for drinking and other uses; drainage sanitation and sewage systems; utilities such as electricity and gas distribution; adequate road, rail and water-borne urban transport and parking both public and private; primary as well as sophisticated secondary health care services that caters to all segments of the population; primary, secondary and tertiary educational facilities; and environmental regulation. The sound provision of urban infrastructure is intimately linked to decentralisation of economic and political powers to sub-national tiers of government, which flows from the 74th Amendment to the Constitution. There is a need to create fully empowered city government to manage the urbanisation process, while having political and financial accountability for it.

International experience suggests that without reforms in the institutional framework for urban infrastructure, central or state level government funds directed into the urban sector will not have the expected economic and social returns. Nor will they be appropriately directed for priority use. What Mumbai needs is not simply a few large eye-catching projects that require massive expenditures. What is needed even more is a transformation of the institutional structure that puts the long-run tasks of urban governance on a sound administrative footing.

The key problems are those of independence and accountability. Local/municipal governance functions in Mumbai need to be concentrated under an urban development authority (whether elected or appointed, although legitimacy would be enhanced if that authority was elected) that is directly accountable to the city's electorate. At present, decision-making on financial and governance matters concerning the city is split in a haphazard fashion across the Centre, State and City. This results in diffused responsibility, lack of coordination and disjointed planning; as well as a loss of financial independence for the city.

Financial allocations for the city made by central and state governments are disproportionately low in comparison with: (a) the public revenues it generates and (b) its legitimate needs for infrastructure maintenance as well as planned urban growth and development. Unlike Delhi, other metropolitan centres in India are handicapped – in terms of having an independent trajectory for their growth and development – by not having their own revenue base nor any clear autonomous status within the present three-tiered structure of governance. It is a recipe that has brewed the twin paradox of having key Indian cities decaying rapidly in the face of even more rapid population growth. That will eventually change with the rate of urbanisation that is now taking place across India. But such change may occur too late to matter in making a difference when it comes to Mumbai becoming an IFC within the next 3–5 years and creating the administrative structure it needs for that purpose.

The Delhi Metro Rail Transit System (DMRTS) was inaugurated on December 24, 2002. Early indicators suggest that this may become a Metro system that can compete with that of New York, London or Singapore. As yet, a comparable system has yet to be built in Mumbai. It is particularly important to build transportation infrastructure in the form of a Metro to augment the suburban railways, along with intra-city and coastal expressways that link the island to the mainland, so that the mainland becomes a viable alternative for residential and business decision making. This would serve to decongest the city and improve the cost efficiency of IFS production in Mumbai.

When it comes to city financing, the foundation principle of urban finance has to be user charges for the occupation and use of city infrastructure. It is possible for urban institutions to access resources from capital markets to finance a large portion of urban capital expenditure, reflecting their future outlook for user charges and long term cash flows from property taxes. This approach makes it possible to increase capital expenditure rapidly on urban infrastructure in Mumbai without requiring recourse to Central or State finances. However, access to infrastructure and private finance cannot be sustained on a piece-meal, project-by-project basis. Increasingly, the sustainability of infrastructure development and poverty reduction programs will be determined by the overall management and creditworthiness of urban centres.

In terms of institutional structures, municipal functions in Mumbai are fragmented across many different corporations, agencies, and local government bodies with conflicting lines of accountability. Existing agencies for municipal service delivery are structured on functional lines with attendant implications for poor accountability, limited incentive for innovation in delivery of services, and limited use of private sector capacity to manage and finance services. There is no effective interface and almost no accountability connecting the city's administrative systems to its various decentralised communities. In particular, poor communities have almost no voice over city policies except through extreme forms of public resistance when their interests have been compromised beyond their limited abilities to cope.

In terms of fiscal problems, there is persistent under-performance on revenue collection with unsustainable tariff structures and non-transparent subsidy schemes. The general property tax system requires complete restructuring and modernisation. State and municipal governments need to deal urgently and fairly with the problems created by a legacy of rent control and especially the problem of pre-1940 buildings. In doing so, they have to recognize and respect the 'acquired rights' of long-term tenants that may exceed those of landlords who have only recently acquired such properties for speculative purposes under circumstances that would be questionable in law.

Moreover they have to deal more decisively with resolving the outstanding problems concerning the urban land ceiling renewal act. In Mumbai, low income households are often to be found at the regressive end of the fiscal system. At the same time, improvements in tax revenues and user charges are likely to be most acceptable in the context of concurrent improvement in the institutions of service delivery. This is perhaps analogous to the political acceptance of tolling highways *after* high quality highways came about.

At present Mumbai has limited creditworthiness, with opaque financial and accounting systems and primitive treasury management. The relative lack of transparency on a variety of public works contracts has emerged largely as a consequence of such lack of controls; coupled with individual discretion over budgets of a kind that generates perverse incentives inclined toward malfeasance. These need to be rectified before Mumbai can access capital markets, and make the needed institutional and fiscal reforms.

A program of transforming urban infrastructure in Mumbai therefore has dimensions of institutional, fiscal, financial and regulatory reform. Sector-focused reforms in service delivery – *e.g.*, a programme which focuses only on water and sanitation and solid waste – need to incorporate such institutional, fiscal, financial and regulatory dimensions to the reform package.

Solving the problems of Mumbai requires a shift away from an immediate focus on a few high-profile projects such as the second airport project or a metro project, and dwell more on building the institutional foundations for a healthy city. Although such projects are essential they are not the mainstay.

The central policy focus needs to be on the empowerment of the city government to take economic and service delivery decisions, as envisaged originally in the 74th Amendment. This will require a new framework for planning and implementing urban expenditures that is driven exclusively by the city government. It needs to address the current fragmentation of authority between state and local levels, support urban government oversight and accountability for urban functions, and support control of service delivery investments, operations and financing by the urban government.