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THE EMERGENCE OF WORLD CITY: BANGALORE

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Bangalore's remarkable transformation
from a small garden city to the home
of India's booming IT sector

BANGALORE HAS BEEN IDENTIFIED AS THE COUNTRY'S 'SILICON VALLEY'

A TINY VILLAGE IN THE 12TH CENTURY, Bangalore has become one of the fastest growing cities in the world by the 21st Century and among the million–plus (in population) cities in India. Greater Bangalore, an area of 741 km^2 agglomerating the city, neighbouring municipal councils and outgrowths, was 'notified' or established, in December 2006 (see FIGURE 1).

The city has grown spatially by more than ten times since 1949. Its tree–lined streets, numerous parks and abundant greenery led to it being called the 'Garden City' of India. More recently, Bangalore has been identified as the country's 'Silicon Valley' and it is one of the technological innovation hubs with a score of 13 out of a maximum of 16. However, even with all the hype about growth in IT and IT related industries, Bangalore also houses numerous other leading commercial and educational institutions, and industries like textiles, aviation, space, biotechnology, etc. As an immediate consequence of this growth in the last decade, apart from creating a ripple effect in the local economy, there has also been great pressure on infrastructure and resources like public transport, water supply, energy, land, etc. The local body and other parastatal agencies responsible for delivery of basic services are facing stiff challenges in catering to this demand.

Recently, there have been serious attempts by sociologists and urban planners to characterise the city. Heitzman (2004) analysed the nature of growth that the city experienced with the emergence of the information society, while bringing out the ingredients that led to the transformation of planning methodologies and spatial planning tools for the city. Nair (2005) has exemplified Bangalore as 'the promise of the metropolis' while illustrating the urban fabric of Bangalore over the last century. In this chapter, an attempt is made to bring out the status of current infrastructure and various facets of planning and governance.

After Independence, Bangalore was made the capital of Mysore (now Karnataka) State. In 1949, the two municipalities were merged to form the Bangalore City Corporation. Subsequently, to keep up with the pace of growth and development, there have been reorganisations with respect to the zones and wards within the corporation, rising from 50 divisions in 1949 to 95 wards in 1980s, 100 wards in 1995 and now about 145 wards. With the 2006–2007 declaration, Bangalore City Corporation was reorganised as the Greater Bangalore City Corporation.
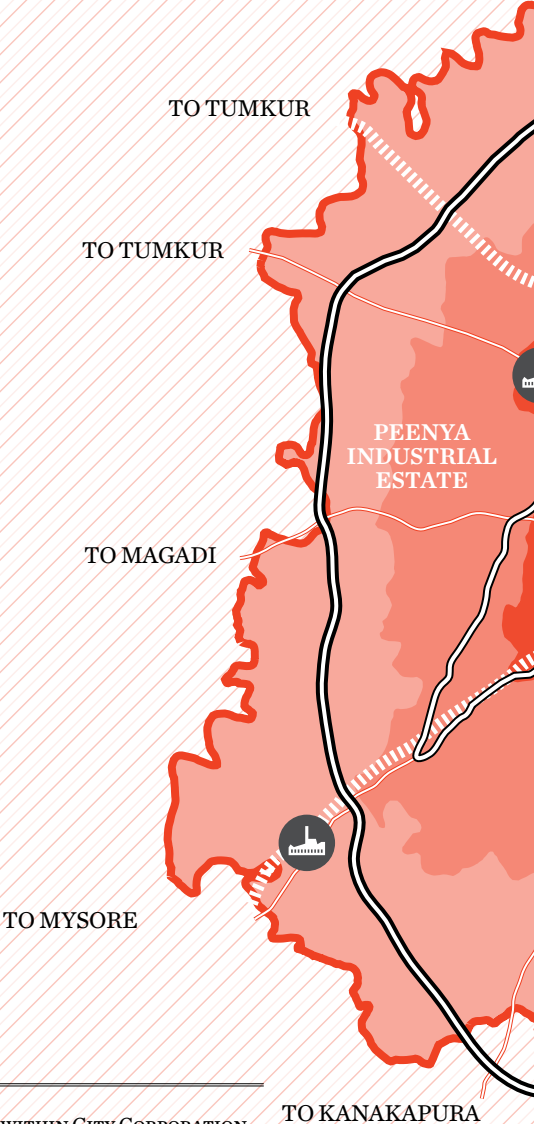
DEVELOPMENT CHARACTERISTICS

ZONE 1
CITY CORPORATION AREA

ZONE 2
GREATER BANGALORE REGION

ZONE 3
BANGALORE METROPOLITAN AREA

KEY INDUSTRIAL AREAS

INDUSTRIAL ESTATES

IT ESTABLISHMENTS

MAJOR TRANSPORTATION NETWORKS

MAJOR ROADS

OUTER RING ROAD

PERIPHERAL RING ROAD

RAILWAY LINE

0   5   10

KILOMETRES

TO TUMKUR

TO TUMKUR

PEENYA
INDUSTRIAL
ESTATE

TO MAGADI

TO MYSORE

TO KANAKAPURA

FIGURE 1
DEVELOPMENT CHARACTERISTICS OVER BANGALORE WITHIN CITY CORPORATION
LIMITS, GREATER BANGALORE REGION AND BANGALORE METROPOLITAN AREA
AND NOTING SOME OF THE PROMINENT INDUSTRIAL AREAS
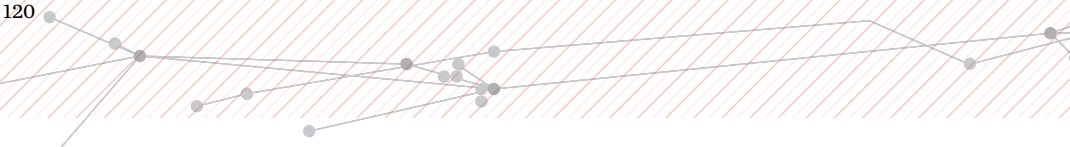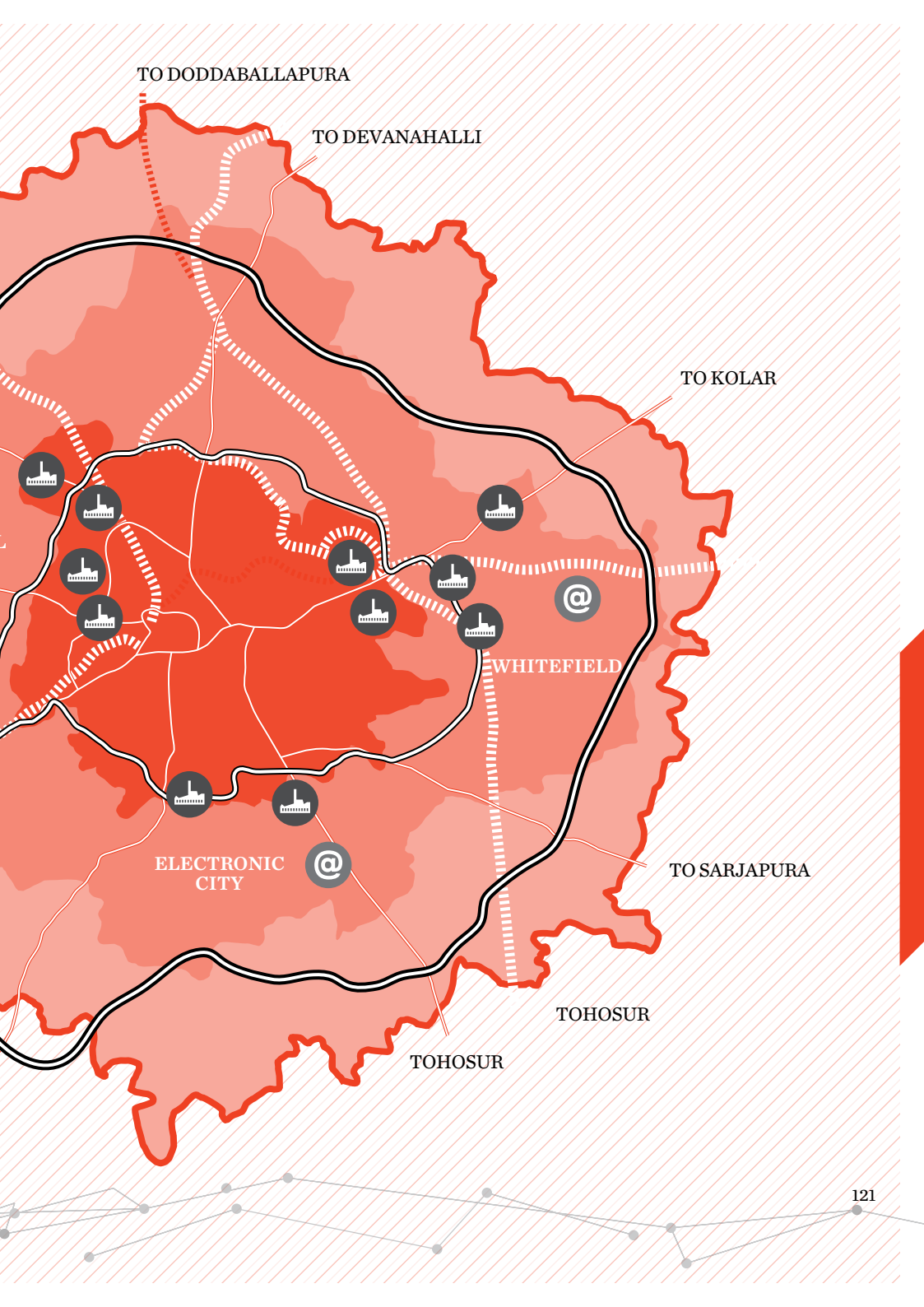
TO DODDABALLAPURA

TO DEVANAHALLI

TO KOLAR

WHITEFIELD

TO SARJAPURA

ELECTRONIC
CITY

TOHOSUR

TOHOSUR

DEMOGRAPHY AND ECONOMY

The population census in Bangalore has been recorded in each decade since 1871, the most recent census being undertaken in 2001. Figure 2 shows the growth of population in Bangalore from 1871 to 2001 (5.7 million), along with an estimate for 2007 (7 million). 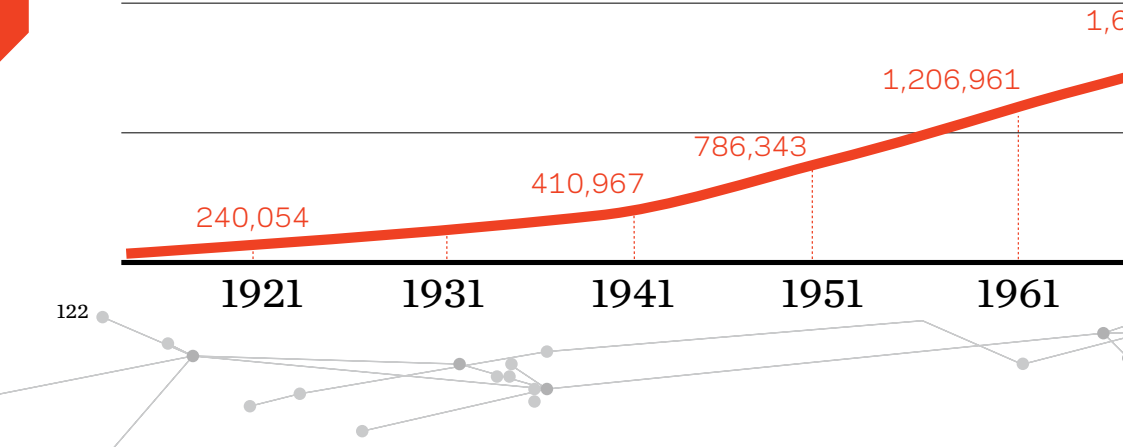This urban primacy has been retained consistently for more than a century now. After Independence, Bangalore, as a state capital, saw an influx of population through migration, although it should be noted that the steep population rise in the decade 1941–1951 was partly due to this migration but also exclusively through the amalgamation of Bangalore Civil and Military Station Municipality with the then Bangalore City Corporation.

Population growth during the 1970s could be ascribed to numerous public sector industries and other defence establishments that came up during the period and fuelled significant immigration. By this time, incidentally, Bangalore had lost its tag of 'Pensioners Paradise', gained before Independence. Although the advent of IT is attributed to the late 1980s, nevertheless, the major growth and expansion of this industry happened only during the late 1990s. Still, population growth in Bangalore in the last census decade, 1991–2001 (38%), was substantially less than between 1971–1981 (76%). Nevertheless, physical growth of the city has been phenomenal over the last few years, and the glaring evidence of this is increased travel–times and escalating real–estate prices.

According to the latest census, the urban agglomeration had an overall population of 5.7 million within an area of 560 km² in 2001,

1,6

1,206,961

786,343

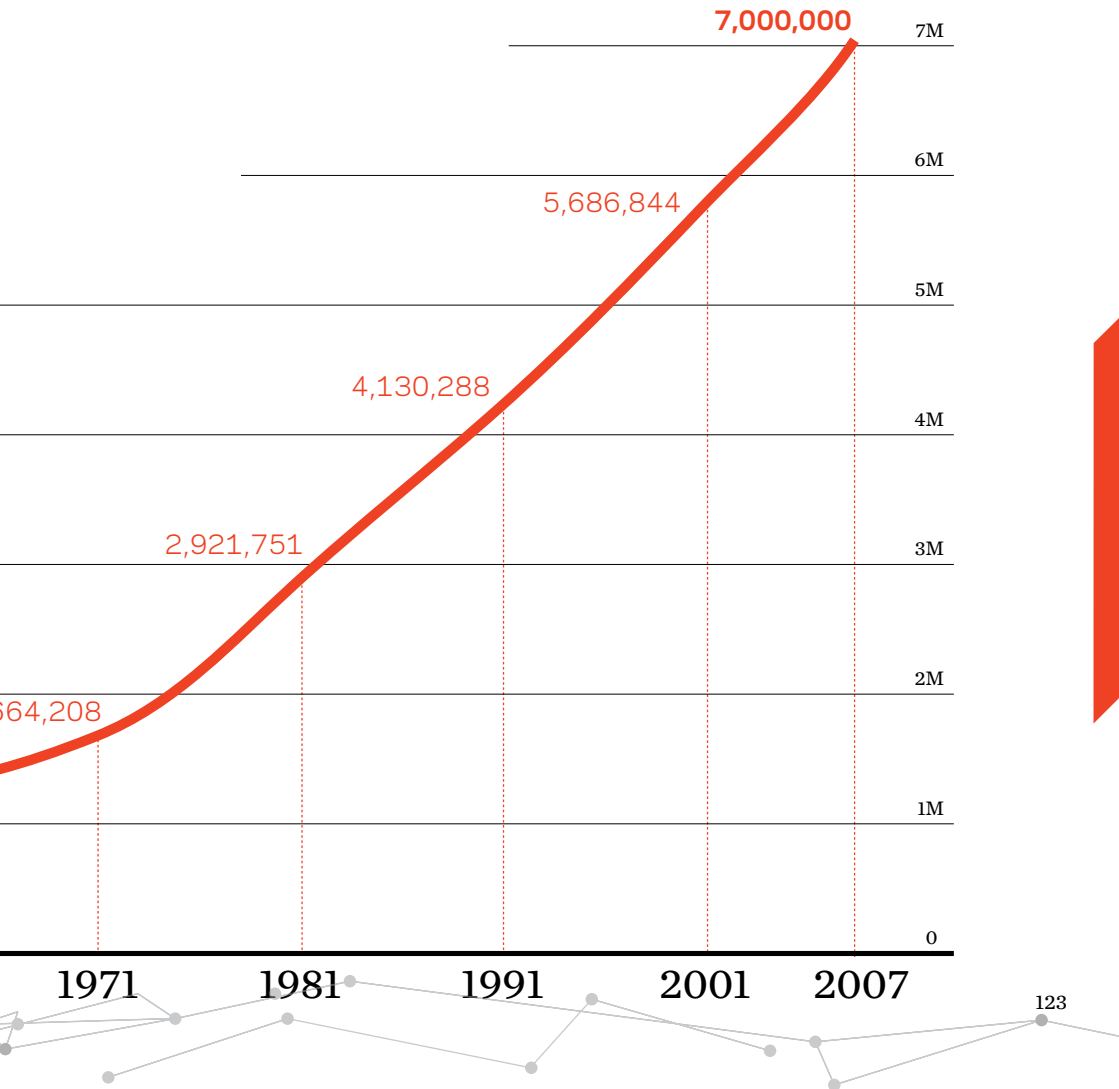410,967

240,054

| 1921 | 1931 | 1941 | 1951 | 1961 |

BANGALORE IS HOME TO ABOUT 30% OF INDIA'S TOTAL IT WORKFORCE

7,000,000

7M

6M

5,686,844

5M

4,130,288

4M

3M

2,921,751

2M

564,208

1M

0

1971   1981   1991   2001   2007

123

which included a workforce of 2.2 million, and a literacy rate of 75.1%. The hype over the IT industry is attributed to the fact that Bangalore is home to about 30% of the total IT workforce in the country and a personal disposable income greater than the Indian city average. This has also resulted in a trickledown effect within the urban economy. Further, investments in industries, infrastructure and other services, have significantly increased purchasing power among the people and have nurtured real estate with consequent land market dynamics, apart from creating numerous secondary employment in services. Interestingly enough, of the 5.7 million population in the urban agglomeration in 2001, about 2 million were migrants (Census of India, 2001b). About 1.2 million of these were from Karnataka state, mainly from the rural parts, while the remaining 0.8 million were from outside the state; the majority of these were from urban areas. It is further noted that people have migrated chiefly for employment or moved with household or for education. The large number of migrant population from other parts of India explains the multitude of languages spoken and understood in Bangalore.

Bangalore is home to numerous institutes of higher learning and research, which is evident from the establishment of premier centres like Indian Institute of Science (IISc), Indian Institute of Management (IIM), Institute for Social and Economic Change (ISEC), Indian Institute of Information Technology (IIIT), and several professional engineering and medical colleges at undergraduate and graduate levels. In tune with recent trends, Bangalore now has numerous malls and multiplexes that are swarmed during weekends. With an active nightlife and Bangaloreans penchant for fast–food, a large number of restaurants, pubs and 'eat–outs' throng the city.

The economic fabric of the city, although at times masked by the IT–based industries is varied, being also characterised by textile, automobile, machine tool, aviation, space, defence, and biotechnology based industries. In addition to these, numerous services, trade and banking activities mark the city's economic landscape. An important feature of the economic activities of Bangalore is the huge concentration of Small & Medium Enterprises (SMEs) in diversified sectors across the city. Bangalore has more than 20 industrial estates/ areas comprising large, medium and small enterprises. Of these, Peenya Industrial Estate, located in the northern part of the city comprises about 4000 SMEs and is considered the largest industrial estate in South East Asia (Peenya Industries Association, 2003). Among others, a majority of the SMEs function as ancillaries/subcontractors to large
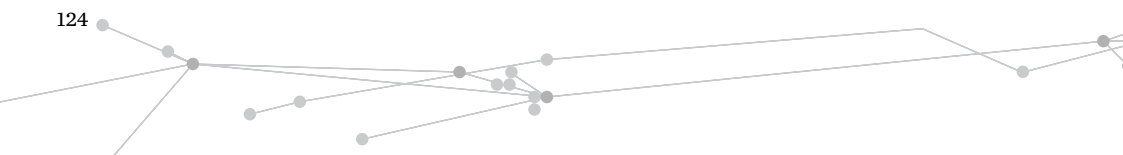
enterprises in the field of engineering and electronics industries. Industrial estates sprung up mostly on the periphery of the city and gradually as the city grew became enveloped by its sprawl. Notable among these are the Peenya Industrial Estate, Electronic City and Whitefield (Figure 1). The proliferation of smes in residential and commercial areas, in addition to the industrial areas, has added to the chaos and congestion in the city. Thus, the thriving economy of the city has resulted in a net district income of rs 379,700 million (approx. us $9.5 billion) and a per capita income of rs 55,484 more than twice the State's average per capita income of rs 23,848 (Government of Karnataka, 2005).

Despite higher per capita income within the urban district relative to the rest of the State, and with significant migrant population, the number of urban poor has been on the rise and the slum settlements in the city have not been restrained. The escalating costs of land prices coupled with the rises in cost of living has pushed the urban poor to reside in squatter settlements with inadequate amenities and services. Some of these settlements have speckled the city's landscape gaining immediate action from civic authorities. According to Bangalore Mahanagara Palike (2006), the number of households in the urban agglomeration defined as poor was 220,000, housing approximately 1.1 million people out of a 5.7 million population (Figure 3). Considering the importance of the matter, the State Government has set up a special agency, Karnataka Slum Clearance Board (kscb) specifically to address the redevelopment of slums in partnership with various stakeholders like the Housing Board, local bodies, Water Supply Boards, etc. The initiatives taken up by the local body addressing redevelopment of slums are noted in the section on Issues in Planning and Development.

FIGURE 3
DISTRIBUTION OF SLUMS ACROSS GREATER BANGALORE (BMP, 2006)

Note: Estimates are based on 2001 Census

AGENCY / AUTHORITY	NO OF SLUMS	NO OF HOUSEHOLDS	REMARKS
KARNATAKA SLUM CLEARANCE BOARD (KSCB)	218	106,266	Declared
GREATER BANGALORE CITY CORPORATION	324	110,991	310 Undeclared 14 Declared
GRAND TOTAL	542	217,257	

BANGALORE'S URBAN AGENDA: GOVERNANCE AND INFRASTRUCTURE

AN IMPORTANT ASPECT OF A CITY IS HOW WELL IT IS PLANNED, managed and administered, that are activities which form the core part of an urban agenda—governance. However, appropriate state mechanisms through organisational structures, procedures and policies are needed to enable these. Also, apart from the formal administrative structures, the presence and involvement of civil society significantly drive the urban agenda.

Organisations and Stakeholders

Greater Bangalore City Corporation (Bruhat Bangalore Mahanagara Palike) is now the key 'urban local body' (ULB), that is, the local governmental structure representing and responsible to the citizens for the city and outlying areas. Notified in December 2006, the new Corporation replaced the local bodies, Bangalore City Corporation (Bangalore Mahanagara Palike), eight neighbouring councils (seven City Municipal Councils and one Town Municipal Council) and 111 outlying villages. Independent of the Corporation, which is governed by locally elected representatives, parastatal bodies controlled by the State government is responsible for many essential services (FIGURE 4).

Planning in the form of land–use zoning and regulation is vested with Bangalore Development Authority (BDA), a parastatal agency, in spite of the *74th Constitutional Amendment Act*, passed by the National Parliament in 1993. This Act requires that the planning function be vested with the (elected) urban local body and not with any parastatal agency. But, in the case of Bangalore, the Corporation has not been granted adequate powers by the State to plan, decide and administer their city! Furthermore, the State has created numerous other organisations of its own to manage various services such as water supply, law and order, energy, etc. The result is the existence of many state–owned organisations, each acting in its own jurisdiction area, leading to complication and confusion in coordinating different activities. Apart from the issue of a common jurisdiction and the lack of coordinated effort, even basic information related to different sectors is extremely difficult to collect, collate and to correlate. For effective planning it is imperative that all the basic information is gathered across a common jurisdiction with the effect of creating a robust city information system.

FIGURE 4
Organisations concerned with Bangalore

ORGANISATIONS	FUNCTIONAL AREAS (SCOPE OF WORK)
GREATER BANGALORE CITY CORPORATION [BRUHAT BANGALORE MAHANAGARA PALIKE (BBMP)]	Urban local body responsible for overall delivery of services—Roads and road maintenance including asphalting, pavements and street lighting; solid waste management, education and health in all wards, storm water drains, construction of few Ring roads, flyovers and grade separators
BANGALORE METROPOLITAN LAND TRANSPORT AUTHORITY (BMLTA)	Coordination of all land–transport matters, prepare plans for transport infrastructure, initiate integrated land–use and transport planning, function as empowered committee on urban transport projects, evolve regulatory mechanisms for all land transport systems in the Bangalore Metropolitan Region
BANGALORE DEVELOPMENT AUTHORITY (BDA)	Land–use zoning, planning and regulation within Bangalore Metropolitan Area; Construction of few Ring roads, flyovers and grade separators
BANGALORE METROPOLITAN REGION DEVELOPMENT AUTHORITY (BMRDA)	Planning, co–ordinating and supervising the proper and orderly development of the areas within the Bangalore Metropolitan Region, which comprises Bangalore urban district and parts of Bangalore rural district. BDAs boundary is a subset of BRMDA's boundary
BANGALORE CITY POLICE	Enforcement of overall law and order; Traffic Police: Manning of traffic islands; Enforcement of traffic laws; Regulation on Right of Ways (One–ways)
BANGALORE METROPOLITAN TRANSPORT CORPORATION (BMTC)	Public transport system: Bus–based
BANGALORE METRO RAIL CORPORATION LTD (BMRC)	Public transport system: Rail–based (Proposed)
REGIONAL TRANSPORT AUTHORITY (RTA)	Motor vehicle tax; Issue of licenses to vehicles
BANGALORE WATER SUPPLY AND SEWERAGE BOARD (BWSSB)	Drinking water—pumping and distribution, sewerage collection, water and waste water treatment and disposal
BANGALORE ELECTRICITY SUPPLY COMPANY (BESCOM)	Responsible for power distribution
LAKE DEVELOPMENT AUTHORITY (LDA)	Regeneration and conservation of lakes in Bangalore urban district

In addition to the official bodies, civil society of Bangalore is known for its vibrant community participation. The spectrum of their activities ranges from literacy and green brigades to urban governance, ensuring continuous interactions with the local administration.

Notable spheres of activity of these non–governmental organisations (NGOs) include: improving urban governance by Public Affairs Centre (PAC), Citizens Voluntary Initiative for the City (CIVIC) and Janaagraha; improving living conditions in slums by AWAS, APSA, Paraspara, etc.; addressing literacy and education by Prerana, Dream School Foundation, Pratham, India Literacy Project and Akshara Foundation; taking on environmental issues by the Environment Support Group, Hasiru Usiru, etc. Apart from the NGOs, there are numerous resident welfare associations, trade and commercial organisations, and professional organisations that have played a major role in some of the important activities of local bodies and influencing their decision–making. Civil society has contributed considerably in shaping the policies and governance structures and has always intervened whenever there has been any apathy on the part of the administration towards activities of interest to society at large. An experiment to promote public private partnership and to bring together citizens, NGOs, industry representatives and the erstwhile local bodies established the 'Bangalore Agenda Task Force (BATF)'. This experiment was about to be benchmarked as one of the 'best practices' in urban local governance, when it faced strong criticisms from several civil society groups for setting aside priorities favouring the urban poor and was accused of making a back door entry towards policy making (Ghosh, 2005). In the event, the activities of BATF came to a standstill with the change of guard at the State government a few years ago and it is currently dormant. Another instance of strong action by civil society groups, was seen when the local government started tree felling and pruning for road widening. Members of the green brigade, *Hasiru Usiru*, staged protests, held an all night vigil, stormed the Commissioner's office and also moved to the High Court and finally got the actions stayed. The High Court also ruled later that *Hasiru Usiru* members should inspect the trees along with the designated Tree Officer from the Forest Department before any tree felling and pruning of branches begun.

Challenges in Managing Urban Infrastructure

Urban activities require the support of infrastructure. Broadly, urban infrastructure can be divided into social and economic infrastructure. Social infrastructure encompasses facilities like healthcare, education, housing, commercial (shops, markets and hotels), sports, recreation and entertainment. With mixed land–use being practiced in most parts of Bangalore, shops and markets are the most commonly found amenities (approximately one shop per 100 persons) in the urban agglomeration. The provision and maintenance of primary healthcare, elementary education, sports, recreation and entertainment are administered mostly by the Corporation, while BDA also facilitates some of the social infrastructure like shopping complexes, with provisions for private participation. Economic infrastructure encompasses water supply, wastewater treatment, storm water drainage system, solid waste management, telecommunication network, and transportation network.

The Bangalore Water Supply and Sewerage Board (BWSSB) is the parastatal agency responsible for drinking water supply and wastewater collection and treatment in the city. Bangalore is on a

THE VEHICLE TO PERSON RATIO IS FAR HIGHER THAN ANY OTHER CITY IN INDIA

ridge and does not have its own year–round sources of water. Drinking water is pumped from the river Cauvery, located at a distance of about 100 km over an elevation of 500 m with an energy expenditure of 75 MW for approximately 900 million litres per day (MLD). Apart from the supply from River Cauvery, groundwater and water from the River Arkavathy are also tapped. However, while water supply distribution is 100% in the former Bangalore City Corporation limits, only about 20% of the Municipal Council households are serviced. In view of rapid growth of the city, and recent notification of Greater Bangalore, it remains a challenge to service the remaining areas.

Bangalore city is estimated to have vehicle population of about 2.6 million while the current city population is about 7 million. The vehicle to person ratio is far higher than any other city in India. This has led to increased congestion in road networks across the city and frequent traffic jams. Manning signals at traffic islands has also become unmanageable with the amount of traffic plying across junctions. Again, in this sector different components related to

mobility are vested with different parastatal bodies.

In Bangalore where the working population is around 2 million, the Bangalore Metropolitan Transport Corporation (BMTC) operates on any given day with 4,144 schedules, 4,262 buses, 60,475 trips, and carries 3.5 million passengers. It earns Rs 20.5 million per day and pays Rs 0.955 million to the government as taxes (Bangalore Metropolitan Transport Corporation, 2006). Further, according to recent estimates, there are about 1.6 million two–wheelers, 320,000 motor–cars, 80,000 auto–rickshaws, and 170,000 other vehicles totalling around 2.2 million vehicles on road (Regional Transport Authority, 2006).

The onus of maintaining and improving road networks lies with the Corporation. Although a study for the City by consultants' iDECK and RITES (2005) identified 52 high and medium traffic intensity corridors requiring various interventions by different organisations, the former City Corporation proposed only to widen some of these roads. A key aspect ignored while addressing mobility is the role of land–use in generating traffic demand. Failure by the city to acknowledge this, and in particular the implications of changes in land–use from residential to commercial or industrial, has led to stereotypical approaches in addressing mobility such as road widening, creation of new flyovers and underpasses, or conversion into 'one–ways'. Until now, the city has witnessed compartmentalised approaches to widening of roads or construction of flyovers and grade separators, thus posing as stress points for the future.

With the growing concerns on ensuring mobility and accessibility in urban areas, the Ministry of Urban Development, Government of India, approved the National Urban Transport Policy (NUTP) in June 2006. Specifically, the NUTP acknowledges the linkages of land–use planning with transportation planning. Further to this move, the Government of Karnataka has constituted the Directorate of Urban Land Transport (DULT) and Bangalore Metropolitan Land Transport Authority (BMLTA). The creation of DULT and BMLTA is perhaps the first of its kind in India. The key mandate for BMLTA is to ensure coordination and integration of all initiatives especially those related to land–transport projects apart evolving appropriate policy towards the same. Aptly, the NUTP advocates the mobility of 'people' over 'vehicles' in urban areas. It will be interesting to witness the implications of BMLTA on urban governance as this authority is entrusted as an empowered committee on urban transport projects with other parastatal agencies as members of this authority. It is to be seen whether this authority would aid in critically address the issues of mobility holistically or emerges as yet another enterprise of the State bureaucracy.

Issues in Planning and Development

To understand the development characteristics of the Bangalore metropolitan area, it may help to distinguish three concentric zones—zones, which correspond closely with previous current local authority areas. The first zone would comprise the erstwhile city corporation area of 226 km². The second zone would include the areas of the former eight neighbouring municipal councils and 111 villages, which together form the peri–urban areas and are now incorporated into the Greater Bangalore City Corporation. The third zone would include other villages extending up to the Bangalore Metropolitan Area limits as proposed by Bangalore Development Authority. The development characteristics and agencies across these zones are summarised in FIGURE 5 and depicted in FIGURE 1.

FIGURE 5
DEVELOPMENT CHARACTERISTICS ACROSS BANGALORE

CHARACTERISTICS	DEVELOPMENT ZONES		
	ZONE 1	ZONE 2	ZONE 3
AUTHORITY	Greater Bangalore City Corporation (formerly Bangalore City Corporation).	Greater Bangalore City Corporation (formerly 8 municipal councils and 111 Villages).	Development Authorities and other Town and Village Municipal Councils.
URBAN STATUS	Core city.	Outgrowth.	Potential areas for future outgrowth.
INFRASTRUCTURE SERVICES	Present, but nearly choked, needs augmenting of existing infrastructure.	Not fully present, with new growth, requires planning and augmentation of infrastructure.	Farmlands and scattered settlements with minimal to no infrastructure.
IMPACT OF GROWTH	No scope for new growth but calls for urban renewal to ease congestion, etc.	High potential for growth due to its present status of being a peri–urban area and emergence of new residential layouts and other developments.	Mostly rural, with minimal growth currently, but potential for future growth.
PLANNING, DEVELOPMENT AND REGULATION CONTROLS	Corporation operates building controls. Planning vested with BDA.	Corporation operates minimal building controls. Planning vested with BDA.	Planning vested with parastatal agencies: BDA and BMRDA and not other local bodies. No regulation on building / construction.

Traditionally, planning has been restricted to land–use planning, being vested with BDA for the region under Bangalore urban agglomeration, and with Bangalore Metropolitan Region Development Authority (BMRDA) for the larger peripheral area comprising the rest of Bangalore Urban District. BDA obtains land, develops it as residential layouts, which eventually are handed over to the city corporation, often involving the extension of city limits. Land–use plans are formalised through the Comprehensive Development Plans (CDP) prepared for every 10 years. Accordingly, the last CDP, prepared in 1995 for the period up to 2011, was revised in 2005–06 for the period up to 2015 (Bangalore Development Authority, 2007). A key aspect of these CDPs are that they indicate the amount and location of land–use allocated for various uses (like residential, commercial, industrial, etc.) as well as restricting development in specific areas demarcated as Green Belt and Valley Zones. However, another organisation similar to BDA, the Karnataka Industrial Area Development Board (KIADB), is responsible for development of industrial areas. These industrial estates are situated for the most part in the outskirts of the city and KIADB has powers under the law to take over tracts of agricultural land for the purpose.

Generally, the regulation and enforcement of land–use

BANGALORE IS ONE OF THE BENEFICIARIES UNDER THE GOVERNMENT OF INDIA'S JAWAHARLAL NEHRU NATIONAL URBAN RENEWAL MISSION (JNNURM)

zoning regulations are dismal, leading to a large number of illegal developments and encroachments on public land—problems which have led Karnataka State to establish a legislative committee to investigate irregularities in and around the city. In the particular case of growth occurring around outer industrial areas, urban local bodies are generally unable to provide basic infrastructure and services, thus further aggravating inefficient utilisation of land and other natural resources. With such instances prevailing especially in the areas of the former Municipal Councils, the new Corporation faces a great challenge to deliver basic infrastructure and services.

Bangalore is one of the beneficiaries under the Government of India's Jawaharlal Nehru National Urban Renewal Mission (JNNURM) with an estimated outlay of US $ 11 billion over the next six years. In accordance with the JNNURM guidelines, the erstwhile Bangalore City Corporation prepared the City Development Strategy Plan (CDSP) for

both UIG and BSUP (Bangalore Mahanagara Palike, 2006). The CDSP outlines only an investment plan and financial strategy for taking up various initiatives envisaged in the mission. Under BSUP, 218 declared slums in the former City Corporation limits would be taken up by KSCB for redevelopment. Further, there are 169 slums under the erstwhile City Corporation jurisdiction that remain undeclared, which would be redeveloped by the new Corporation. There are, in addition, 155 slums in the neighbouring former municipal council areas that would be redeveloped by the new Corporation and KSCB. However, a draft community participation law has not been enacted and in Karnataka State, most of the infrastructure projects and redevelopment plans have been administered by ULBs and parastatal agencies and not through community participation as envisioned by the mission. The result is a continuation of top–down rather than bottom–up modes of planning and delivering infrastructure and services. This calls for introspection on the implementation and achievement of the mission objectives. However, with various initiatives under JNNURM being underway, it does offer hope, and perhaps promise in improving the essential urban infrastructure and services in the city.

With the creation of BBMP, the State government also set up an expert committee to study and suggest alternate planning and governance structures under the Chairmanship of K. Kasturirangan, a member of upper house of National Parliament, Rajya Sabha. The committee has only recently submitted the final report along with the recommendations for the same (in March 2008). One of the key contentions in the report is the breach of constitutional obligation for creating the Metropolitan Planning Committee (MPC) for Bangalore metropolitan region. Therefore, it strongly recommends setting up of MPC with the Chief Minister of the State to head this committee along with about 66% of elected representatives from the region and the remaining (including experts) members appointed by the Government to undertake holistic planning for the entire metropolitan region. The report notes several far reaching and legal changes for facilitating an empowered, responsive and accountable urban local body.

The creation of Bangalore Metropolitan Land Transport Authority (BMLTA) recently by the Government of Karnataka to address the integration of land–use planning with transportation planning is noteworthy. However, much of the success of these organisations rests in addressing key processes that emanate through the interplay
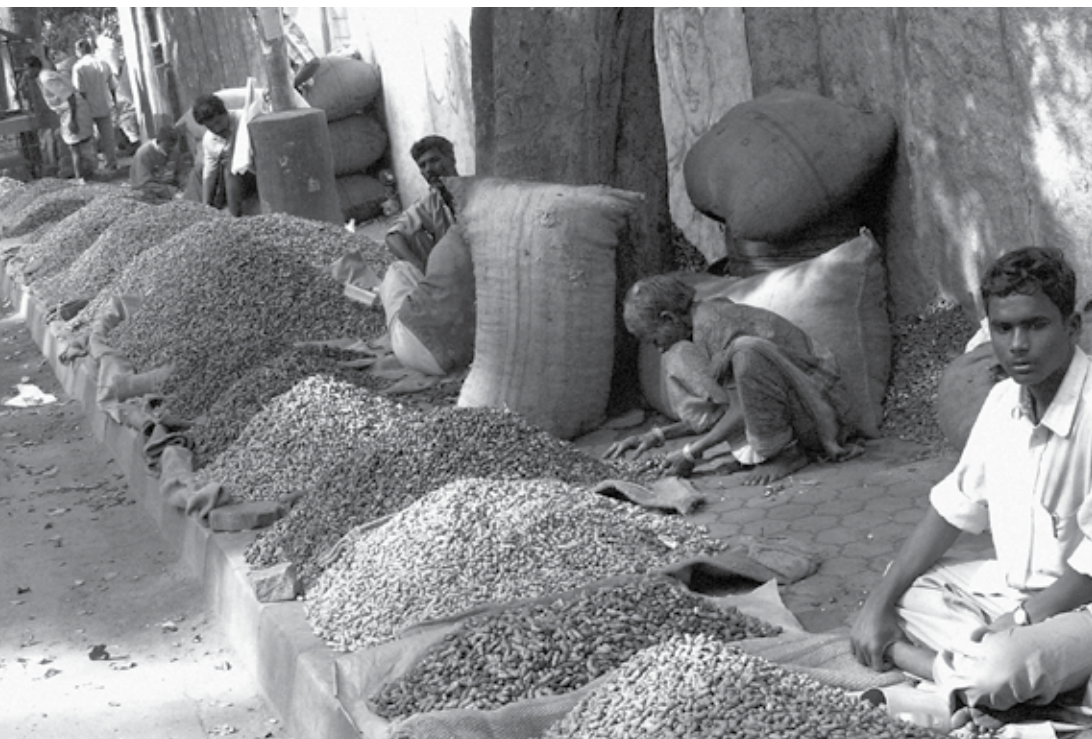
of land–use and mobility and bringing in systemic changes to address the same. However, for effective realisation of the objectives of BMLTA, the organisations should be empowered through adequate statutory support. The successful functioning of BMLTA with added regulation through legislation and functioning under MPC as envisaged could evolve as a 'best practice' in urban governance and planning.

BANGALORE STANDS OUT AS A BEACON OF THE GLOBALISING WORLD AND TO SUSTAIN THIS, IT NEEDS TO SYSTEMATICALLY ADDRESS THE KEY CHALLENGES IT IS FACING IN TERMS OF GOVERNANCE AND INFRASTRUCTURE

BANGALORE, WITH ALL DUE RESPECT to its status as 'Silicon Valley' and 'Garden City', faces real challenges in terms of addressing and delivery of basic infrastructure and services to all its stakeholders. In spite of numerous initiatives and activities envisaged by the urban local bodies, past and present, and by parastatal bodies, the rationalisation of jurisdictions for these activities could mark the beginning of a coordinated effort in addressing the needs of the city. In the wake of recent notification of Greater Bangalore City Corporation and initiatives under JNNURM, Bangalore is currently experiencing a remarkable transformation. Bangalore also stands out as a beacon of the globalising world and to sustain this, it needs to systematically address the key challenges that the city is facing in terms of governance and infrastructure.