Introduction

Hyderabad is the state capital of Telangana, a recently formed state of southern India and functions as the central administrative, industrial and commercial hub of the state. From its humble origins as a small town founded in 1591, it has developed to become one of India’s fastest growing metropolitan cities with a population of approximately 7.7 million (Census of India, 2011) which is further expected to increase to about 19 million by the year 2041 (GoAP, 2013). As per the United Nations (2014) document on World Urbanization Prospects (2014), Hyderabad metropolitan region is ranked 38th in the world and by 2030, it will be 28th most populous urban region in the world. Located centrally on the Deccan Peninsula, Hyderabad acts as the link between southern and northern India. From its origins as a small town, today Hyderabad surrounds nearly 650 km² and the larger metropolitan region extends up to 7228 km². During 1994, Chandrababu Naidu, the chief minister of Andhra Pradesh state with effect from June 2, 2014. Hyderabad was the capital of undivided Andhra Pradesh for nearly six decades. While Hyderabad is now the official state capital for Telangana, it is also the shared administrative capital of residual Andhra Pradesh for nearly six decades. While Hyderabad is now the official state capital for Telangana, it is also the shared administrative capital of residual Andhra Pradesh 10 years while deciding on the new state capital (see http://www.bbc.com/news/world-asia-india-27658817). Reference to Andhra Pradesh in this present article connotes to the erstwhile undivided state of Andhra Pradesh (AP). 2 While Hyderabad municipality has a physical boundary of nearly 650 km², the metropolitan region of Hyderabad extends far beyond to the surrounding peri-urban region.

Keywords:
Hyderabad
Andhra Pradesh
Telangana
Cyberabad
High-tech
Smart city

ARTICLE INFO

Article history:
Received 11 August 2014
Received in revised form 13 November 2014
Accepted 13 November 2014
Available online 9 December 2014

Keywords:
Hyderabad
Andhra Pradesh
Telangana
Cyberabad
High-tech
Smart city

ABSTRACT

Hyderabad is the second largest metropolitan region in India. The advent of globalization in India has opened the door for Hyderabad to brand itself as the popular destination for high-tech industries. In 1999, the entrepreneurial state government initiated Andhra Pradesh Vision 2020, a strategic document to develop the state by attracting foreign direct investments and developing specific growth engines in order to leapfrog toward the information society. Hyderabad was chosen to be the spine of the state governments’ visioning strategies and efforts have been made to brand it as the ‘world-class’ high-tech hub of India. Since then, Hyderabad has been under massive urban restructuring. This profile provides an overview of the origins and history of Hyderabad, the changing political economy of the state and resultant urban restructuring and followed by an exploration of emerging urban challenges and socio-spatial complexities of the expanding metro.

© 2014 Elsevier Ltd. All rights reserved.
critical account of evolving urban expansion and development of enclaves in the peripheries. Finally, this profile summarizes the challenges of the city-region pertaining to infrastructures, traffic and issues of social exclusion.

Location and history

Hyderabad is situated in the coordinates of 16°30' and 18°20' North latitudes and 77°30' and 79°30' East longitudes (Fig. 1). At a larger spatial scale, Hyderabad forms the urban core of the Hyderabad Metropolitan Region which by spatial extent is the second largest metropolitan region in India, occupying a land size of about 7228 km² (GoAP., 2013). Above 550 m from sea level, the city is characterized by many hillocks and beautiful rock formations found on the Deccan plateau. Several natural water tanks, some of them pretty large in size, further make the city very attractive. The climate of the city is semi-arid with temperatures reaching nearly 40 °C during May and falling to 15 °C during December. Hyderabad experiences an average annual rainfall of around 80 cm, July to September being the highest rainy season (Hong Kong Observatory, 2012).

The most significant development related to origins of Hyderabad as a city occurred with the advent of the Qutb Shahi Dynasty in the early 16th century (Austin, 1992). The Qutb Shahis laid the foundations of the modern city of Hyderabad. The dynasty controlled the Hyderabad region (then known as Golconda) for about two hundred years, from early 16th century to the end of the 17th century.

In 1591, one of the Qutb Shahis, Muhammad Quli, laid the actual foundation for the beautification and development of Hyderabad as a city with new buildings, civic spaces, shopping areas and roads in a grid pattern throughout the city, which were heavily influenced by Persian design. Muhammad Quli sought to build Hyderabad as a ‘replica of Paradise’ covering an area of only three and a quarter square kilometres (Austin, 1992). The magnificent ‘Charminar’ or the ‘four minarets’, a rectangular building raised on four grand arches, was built in the centre of the city (see Photo 1). It represents the richness of ancient Hyderabad’s landscape architecture and has remained as the most important landmark in Hyderabad (Bagchi, 2008).

Soon, Hyderabad increasingly became the primary trade hub of south India and also developed as a cultural centre of arts and religion. In 1687, the Mughal emperor Aurangzeb invaded Hyderabad. Since then, the region was ruled by many Nizams (Governors) appointed by the Mughal emperor. However, in 1724, the Nizam Asaf Jah I, declared himself independent of the Mughal Emperor (Austin, 1992). Although Hyderabad was built by Muhammad Quli in 1591, it received worldwide recognition during the rule of the Nizams due to their pomp and pageant of wealth and jewellery. The Nizams ruled the region for more than 200 years. However, starting from 1766, the Nizams sovereignty had declined considerably and slowly the British gained authority over the Nizams. In 1947, the British India was partitioned into India and Pakistan on the basis of religion and communal arrangements (Cohen, 2007).

At first the Nizam of Hyderabad state, chose not to join either and kept Hyderabad independent. Nizam’s Hyderabad state had an enormous area extending into present day Maharashtra and Karnataka state. However, later in 1948, Hyderabad was ultimately integrated into a union with India. Finally, in 1956, the state of Andhra Pradesh was formed integrating Telugu speaking districts of Nizam’s region. Hyderabad city was made the state capital (Table 1).

The formation of Andhra Pradesh in 1956 also brought a radical change in the social and economic composition of the city. Large empty areas were transformed with new brick and mortar buildings and the increasing population led to emergence of a ‘complex urban settlement’ of Hyderabad (see Luther, 2006: 345; Alam and Khan, 1972). The new émigrés were increasingly settling down in the expanded frontiers of the city, opening new business establishments and trading centers. Rich peasant class families migrated to the city from coastal Andhra region and entered into the business of cinema production and distribution, education and print and electronic media sector – shaping not only the future of the city but also the political landscape of the state (see Srinivasulu, 2002). In contrast, the old long-time residents of the city, concentrated around the older part of the city and Secunderabad cantonment area as they found comfort in cultural and religious similarities with other residents there. While the newly-extended part of the city was burgeoning with wide roads, shopping and trading complexes along with new residential areas, the old city area retained its original characteristics with narrow alleys, open shops and colorful open-bazaars (see Das, 2010: 109, Austin, 1992). When Andhra Pradesh was formed in 1956, it had 3 distinct geographical regions – Telangana in the north-west, coastal Andhra in the east and Rayalaseema in the south and south-west. However, due to increasing ‘economic backwardness of Telangana and cultural domination by people of coastal Andhra’ (Parthasarathy, Table 1).
people of Telangana region demanded separation from Andhra Pradesh. The separation struggle went on for decades and finally in 2014, Telangana achieved independent statehood with Hyderabad as its capital (PTI, 2014a). The residual Andhra Pradesh state now has two regions – coastal Andhra and Rayalaseema. Hyderabad is also the administrative capital of residual Andhra Pradesh for 10 years within which it is expected to develop a new state capital.

Demography

Asia is home to nearly half of world’s population today (Dahiya, 2012) and major cities in India positively contribute to this. Since 1991, Hyderabad has emerged as one of the most populous capital cities in India. According to the Census of India, 2011 report, Hyderabad’s total urban population was 7.7 million, making it the sixth largest metropolitan city in India (Fig. 2). Hyderabad’s population has increased steadily over the last half of the century (see Mulligan & Crampton, 2005). Recent projected population estimates exceed 9.4 million (Siddique, 2014). It has also been observed that in the last decade, the growth of the city has been much faster in the peripheries than in the core (Ramachandraiah & Prasad, 2008). Hyderabad is the primate city of the state, a position it has maintained for a long time.

Hyderabad is also home to a number of heavy industries in the public sector, several scientific research institutions and the headquarters of the South-Central Railway zone. The majority of these heavy and labor-oriented industries and institutions were

Table 1
Civic and planning organizations of Hyderabad.

<table>
<thead>
<tr>
<th>Organizations</th>
<th>Jurisdiction</th>
<th>Functions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Civic body</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Municipal Corporation of Hyderabad (MCH)</td>
<td>172 km² (1960–2006)</td>
<td>Delivery of civic services within the corporation limit</td>
</tr>
<tr>
<td>Greater Hyderabad Municipal Corporation (GHMC)</td>
<td>650 km² (2007 onward)</td>
<td>Delivery of civic services within the expanded corporation limit</td>
</tr>
<tr>
<td>Planning body</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hyderabad Urban Development Authority (HUDA)</td>
<td>1861 km² (1975–2006)</td>
<td>Land-use planning, zoning regulations and infrastructure creation</td>
</tr>
<tr>
<td>Hyderabad Metropolitan Development Authority (HMDA)</td>
<td>7228 km² (2007 onward, re-structured again in 2013)</td>
<td>Land-use planning, coordinating, zoning regulation and infrastructure planning</td>
</tr>
<tr>
<td>Special development area</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cyberabad Development Authority (CDA)</td>
<td>52 km² (2001–2013)</td>
<td>Planning and development of IT enclave</td>
</tr>
<tr>
<td>Buddha Purnima Project Authority (BPBA)</td>
<td>902 ha (2000–2013)</td>
<td>Tourism planning and development</td>
</tr>
</tbody>
</table>

2010: 2), people of Telangana region demanded separation from Andhra Pradesh. The separation struggle went on for decades and finally in 2014, Telangana achieved independent statehood with Hyderabad as its capital (PTI, 2014a). The residual Andhra Pradesh state now has two regions – coastal Andhra and Rayalaseema. Hyderabad is also the administrative capital of residual Andhra Pradesh for 10 years within which it is expected to develop a new state capital.

Demography

Asia is home to nearly half of world’s population today (Dahiya, 2012) and major cities in India positively contribute to this. Since 1991, Hyderabad has emerged as one of the most populous capital cities in India. According to the Census of India, 2011 report, Hyderabad’s total urban population was 7.7 million, making it the sixth largest metropolitan city in India (Fig. 2). Hyderabad’s population has increased steadily over the last half of the century (see Mulligan & Crampton, 2005). Recent projected population estimates exceed 9.4 million (Siddique, 2014). It has also been observed that in the last decade, the growth of the city has been much faster in the peripheries than in the core (Ramachandraiah & Prasad, 2008). Hyderabad is the primate city of the state, a position it has maintained for a long time.

Hyderabad is also home to a number of heavy industries in the public sector, several scientific research institutions and the headquarters of the South-Central Railway zone. The majority of these heavy and labor-oriented industries and institutions were

Fig. 3. Hyderabad Metropolitan with erstwhile civic authorities and special enclaves.
setup during the 1960s and 1970s (Ramachandraiah & Prasad, 2008). The location of these industries created enormous employment opportunities and led to in-migration of skilled workers and their families to Hyderabad. Therefore, since the early 1970s, Hyderabad witnessed a massive influx of people in search of better living conditions and opportunities from the surrounding districts (Ramachandraiah & Bavra, 2000). This has led to considerable pressure placed on existing urban infrastructure, such as housing, water, power and transport. Unplanned land-use and lack of adequate civic facilities led to the formation of slums. It is important to note that nearly 25% of Hyderabad’s population lives in slums (Census of India, 2011).

The city’s urbanization process was impacted by the pressures of increasing population due to influx of migrants. While the increase in population during 1970s and 1980s was fundamentally due to the setting up heavy manufacturing industries around the city, after 1991, it was due to the processes of urbanization overlapped with the liberalization of the economy both at the federal and state levels (Rao, 2007). Since early 2000, with the projection of Hyderabad as the high-tech destination and facilitating it with city-centric informational infrastructures attracted several domestic and foreign software industries such as Microsoft, Oracle, Google, Dell, Infosys, Wipro and Amazon. The new urban-centric economic initiatives led to a fresh wave of migration to the city – largely consisting of highly skilled digeratis (see Redifi, 2004). Their concentration is often visible around the new high-tech enclave in the south-western fringe of the city. In what follows, the next section delves more into the urban restructuring, politico-economic landscape of the region, visioning exercises and the ways it shaped the contemporary urban fabric of Hyderabad.

Urban restructuring of Hyderabad

Manuel Castells have noted that a city is ‘not a place but a process’ (Castells, 1996: 417). Cities today are being increasingly shaped and re-shaped by the processes of globalization in both Global North and South. Economic, political and social changes are happening in a more intense way through cities, shaped by cities and often shaped cities (see Taylor, 2007: 11). That said, it is noteworthy what Jane Jacobs said nearly four decades earlier – ‘a city seems always to have implied a group of cities, in trade with one another’ (Jacobs, 1970: 35). Cities are very much distinguishable due to their ‘complicated and diverse’ economies (Jacobs, 1970: 50). With proliferation of globalization and services sector development, especially due to Information Technology (IT), cities have become the agents of change for their nations – an engine of growth. With IT, cities of both Global North and South are networking more often than ever. Today, global cities such as New York, London and Tokyo are highly connected to Bangalore (see Sudhira, Ramachandra, & Bala Subrahmanya, 2007) and Hyderabad – generating global space of flows. With immense demand for development of IT and ITES sector in India coupled with economic liberalization policy initiative, cities have come to the prominence and are being viewed as engines of growth (Das, 2010). Taking advantage of larger politico-economic changes, Hyderabad began treading the path of city-centric infrastructural development, projecting itself as high-tech and smart so to attract FDIs especially in services sector including ancillary developments of gated residential complexes, ultra-modern shopping malls and multiplexes. In doing so, restructuring of the city became imminent.

Changing political economy and the city

Since 1991, India moved from a command and relatively closed economy to liberal market economy (Rudolph & Rudolph, 2001). Along with fundamental changes in the economic policies of India, introduction of economic liberalization also brought changes in (economic) decision-making powers where the centre (federal government) had to increasingly share powers with its states – the sub-national regions (Krueger, 2002). The process of the federal government sharing more power with states in the new market economy has been described by Kennedy (2007) as a re-scaling of provincial states. State capitals and major urban centres in India today, compete for foreign investment and organize roadshows to attract industries. Banking on these processes of reterritorialisation (see Brenner, 1999, 2004), the state government has been trying to transform Hyderabad into an engine of growth for the state (Kennedy, 2007).

Chandrababu Naidu, the chief minister of erstwhile AP in 1995, used the opportunity of liberalization to reform the state economy. Traditionally, the economy of AP was dominated by the agricultural sector. However, the share of agriculture in the state economy declined significantly between 1980 and 1995 and manufacturing sector, remained stagnant (Naidu & Ninan, 2000). By 1995–1996, the state Gross Domestic Product (GDP) of AP was far below the national average. The state government’s expenditures on subsidy and welfare were deemed to be excessive, comprising around 10% of the state GDP (Rao, 2002). As the revenue earning was declining and expenditure increasing, the state economy was heading for a crisis. To recover the state economy, Naidu took loan from the World Bank under the Structural Adjustment Programme (SAP). Along with the loan, the World Bank advised the state government to cut government expenditures and introduce economic reforms (Kirk, 2005).

To control the fiscal deficit, Naidu progressively reduced the government subsidies on welfare programs, especially provided to the poor citizens of the state. At the same time, priorities were given to attract foreign investments in tertiary industries such as information technology, biotechnology, finance and banking. In order to learn from other experiences and experiments, Naidu began traveling around the world, met political leaders, policy makers and attended economic forums.
Vision 2020: From Malaysia to India

In 1997, Naidu travelled to Southeast Asia to meet potential investors and to ‘market the state’ (Naidu & Ninan, 2000: 135). He was very impressed with the larger technology related developments of Singapore and Malaysia – especially Multimedia Super corridor (MSC) near Kuala Lumpur (Bunnell & Das, 2010; Moser, 2010; Sen & Frankel, 2005). Soon after coming back from his Southeast Asia tour, Naidu initiated a $350 million knowledge enclave in Hyderabad, known as ‘HITEC City’ (Hyderabad Information Technology and Engineering Consultancy City) in an area of 65 ha (Sen & Frankel, 2005). Banking on the locally available engineering pool and availability of 1.4 million square feet of IT space helped Hyderabad to attract many international IT giants to setup offices and research centres. The first phase of HITEC City was inaugurated in 1998 with the completion of the ‘Cyber Towers’ (see Photo 2), a ten-storey ‘intelligent’ building with 580,000 square feet area fitted with dedicated optic fiber links, satellite connections, 24-h electronic security system, shopping points, banking facilities and uninterrupted power supply to facilitate hundreds of software engineers and technicians. Later, as the demand increased, several local and global real estate firms began constructing more intelligent buildings. The policy initiatives of creating HITEC City provided a boost to Hyderabad’s urbanization, and spawned massive developments of gated residential apartments, ‘intelligent’ offices and shopping malls around the HITEC City area.

Continuing with economic reform and new policy initiatives, in 1999, the state government formulated the ‘Andhra Pradesh Vision 2020’, a policy document with the help of the well-known consulting firm, McKinsey and Company (Sen & Frankel, 2005). This document was heavily inspired by the Malaysian Vision 2020 through which Malaysian government envisioned creating technologically advanced society and ‘leapfrogging’ toward a developed economy (Bunnell, 2004; Bunnell & Das, 2010; Sen & Frankel, 2005). The AP Vision 2020 identified a set of ‘growth engines’ for the state. It emphasized development of services sector as the key to achieving rapid growth and prosperity and a license to leapfrog. Therefore, emphasis was placed on developing IT-related services, biotechnology, tourism, logistics, healthcare and educational services.

The efforts for the development of the services sector called for investments in premium urban infrastructure. Being already shown some advancement on the IT front, Hyderabad received the highest priority. The state government formulated the first AP State IT Policy in 1999 to attract IT enabled services firms to Hyderabad. This policy was followed by a second policy in 2002 and third in 2005. Through these policy initiatives, the government provided lucrative incentives to IT firms to establish their software centres in Hyderabad. In 2002, Hyderabad became number one in the city competitiveness ranking of major cities in India to attract businesses (NASSCOM, 2002). Several national and international survey reports also mentioned Hyderabad as the IT Hotspot of India.

Besides IT, the state government also created a Biotechnology Policy in 2001 to develop Hyderabad as a biotech destination with a proposed 600 square kilometre specialized enclave, known as Genome Valley, about 30 km north of Hyderabad city centre. Hyderabad today projects itself as a smart, high-tech destination within India (see Shaw & Satish, 2007).

Spatial restructuring of the city

Hyderabad has had a long experience of municipal administration. Since 1869, Hyderabad has had a municipal administration, administrated by the then police commissioner of the city. In 1870, the Hyderabad Municipality covered 55 km² with a

---

3 While Chandrababu Naidu was cutting down the subsidies on power and water supply provided to the rural farmers for irrigation purpose as part of the economic restructuring of the state, at the same time he also made sure that the high-tech enclave of Cyberabad received adequate power and water supply and other facilities. Attracting businesses became high on the agenda rather than delivering subsidized services to poor farmers.

population of about 350,000. In 1950, two separate corporations were created, one for Hyderabad city and another for Secunderabad cantonment area. Later in 1960, both were merged into the newly formed Municipal Corporation of Hyderabad (MCH) with an area of 172 km$^2$. In due course, as the physical growth of the city has expanded rapidly increasing economic importance of the city, the demand for civic amenities also increased. In 2007, the state government decided to merge 12 municipalities surrounding the Municipal Corporation of Hyderabad and formed Greater Hyderabad Municipal Corporation (GHMC) with an area of nearly 650 km$^2$ (see Fig. 3).

In 1975, the state government created the Hyderabad Urban Development Authority (HUDA) in order to facilitate better land-use planning for the emerging city. The major aim of HUDA was development of ring towns and growth centres around Hyderabad. Four ring towns were proposed – (1) Ramchandrapuram-Patancheru; (2) Medchal; (3) Ghatkesar; and (4) Shamshabad. Ring towns were primarily proposed to control the congestion and organize the metropolitan growth of Hyderabad (Rao, 1990). However, the development of ring towns did not happen as proposed. Therefore, the organized growth of Hyderabad’s metropolitan area and the reduction of congestion in the central core did not materialize as expected (Ramachandraiah & Prasad, 2008). Initially the total area of HUDA was 1692 km$^2$ and it included both city municipality boundary and the surrounding peripheral region. During mid-1990, the state government, as part of the urban reform process further extended HUDA’s boundary to 1861 km$^2$ (Table 1). The re-shaped HUDA included the existing municipality boundary as well as 125 surrounding villages.

Hyderabad metropolitan development authority

While the spatial restructuring of Hyderabad began vigorously during the chief ministership of Chandrababu Naidu, successive governments carried on similar trajectories. In 2006, the state government proposed to create an expanded and new city planning body by replacing HUDA. In 2008, the new planning body was formed through a government act and renamed as Hyderabad Metropolitan Development Authority (HMDA). The objective of forming the new planning authority was to ensure systematic and planned development of the city and its periphery. From earlier 1861 km$^2$ of erstwhile HUDA, the new HMDA boundary was expanded to more than 7228 km$^2$ amassing 55 mandals (smaller administrative divisions) from the surrounding peripheries making it the second largest urban region in India after Bangalore (see Fig. 4). Development of HMDA paved the way for the state government to create a mega-urban region with a single authority to plan and implement developmental objectives. In 2013, the state government introduced Hyderabad Metropolitan Development Plan 2031 to promote a balanced development of the metropolitan region (GoAP, 2013). As seen from the Fig. 4, the new master plan envisioned creating specific residential zone along the growth corridor and around urban nodes. Along with commercial and manufacturing zones, the new master plan envisioned development of a multiple use zone for industrial/commercial purposes along one kilometre of both sides of the outer ring road, as shown in Fig. 4.

Cyberabad development authority

While the process of restructuring the metropolitan boundaries was underway, re-configuration and delimitation of space for special purposes was also taking place. Following Vision 2020 policy suggestions, the state government prioritized development of high-tech enclaves in Hyderabad as a way to spark IT-driven growth. In 2001, the state government declared creation of Cyberabad Development Authority (CDA) as a special enclave for the location of IT firms; research institutions and allied services around the existing ‘HITEC City’ area in Hyderabad (GoAP & Government of...
Andhra Pradesh, 2001). In conjunction with the name Hyderabad, this new cyber enclave has been named ‘Cyberabad’. The CDA covers an area of 52 km² in the western periphery of the city.

The CDA was conceived as a self-contained enclave providing premium infrastructures, such as gated residential housing, intelligent buildings, shopping malls and transport facilities among others. The master plan of the CDA was characterized by mixed land-use with more than 25% of the total land area for residential purposes and more than 32% for software industries (see Fig. 5). Along with residential and software industries, the CDA includes Indian School of Business, University of Hyderabad, the Indian Institute of Information Technology, a sports complex and a golf course. The creation of the CDA paved the way for the development of special enclaves meant for special purposes (Ramachandraiah & Prasad, 2008). Further, to provide global connectivity to the elite digeratis, a premium expressway was built to connect Cyberabad with the newly built international airport (see Fig. 4).

**Hyderabad airport development authority**

To achieve the desired growth trajectory and to leapfrog toward an information society, the state required heavy investment in premium infrastructure for global connectivity. Therefore, in 1996, the state government initiated the construction of a new international airport at Shamsabad, 21 km southwest of Hyderabad’s city centre. To promote the planned development of the area around the international airport, the government declared a special development area and called it as Hyderabad Airport Development Authority (HADA). HADA covers around 458 km² in the south-western periphery of the metropolitan (see Fig. 3). The master plan of HADA proposed the promotion of an international airport and ancillary economic activities such as a cargo hub, aviation engineering hub, free trade zone, luxury hotels, residential apartments and other additional services to make the enclave a growth centre (GoAP & Government of Andhra Pradesh, 2003). The region is being connected to the core of the city by radial roads and by an expressway link to Cyberabad. A Metro train link has also been proposed and construction is underway. As part of the first phase of development, the international airport has been completed and inaugurated in March, 2008 along with a luxury hotel. The second phase of development includes cargo complexes and industrial zones.

Along with the development of premium cyber and airport enclaves, the state government also gave attention to developing adequate infrastructure for tourism. Based on the diversity of geographical and historical sites, the AP Vision 2020 mentioned the potential to develop the tourism sector (GoAP, 1999: 32). In 2000, a special development area, covering 900 ha surrounding the HussainSagar Lake was formed for the purposes of tourism, eco-tourism and theme park development. This special purpose authority has been named as Buddha Purnima Project Authority (BPPA). The BPPA identified seven major tourism development pockets for beautification and enhancement around the HussainSagar Lake. These pockets of development included such projects as the creation of NTR memorial and garden, a plaza, several parks and a laser show project (see Fig. 6).

While development of special enclaves were meant for special economic purposes, in yet another restructuring drive, CDA, HADA and BPPA have been merged with HMHD in 2013, paving the way for single authority for the larger metropolitan region (GoAP., 2013). The progressive spatial restructuring of the city through merger and acquisition of surrounding municipalities, mandals and special enclaves served two purposes – first, to achieve administrative efficiency through better land-use management and secondly, to generate economic opportunities by leveraging Hyderabad as growth-engine. However, Ramachandraiah and Prasad (2008) observed that these configurations and reconfigurations of Hyderabad served political purposes rather than increase in administrative efficiency and proper growth of the city. Toward southern part of the Musi River, where a large number of Muslim populations reside, the spatial restructuring processes of the city have nearly bypassed the pocket (see Naidu, 1990). With massive restructuring of Hyderabad, and in-migration of population to this primate metropolitan region, challenges of providing basic urban amenities have increased manifold. The next section details some of the most prominent challenges that Hyderabad is facing today.
Emerging urban challenges

As the city expands to surrounding regions and the population rapidly increases, the challenges of managing Hyderabad have grown manifold in recent years. Basic infrastructural supports such as housing, water supply, power distribution, transport facilities, waste and sewage treatment for the city are still limited within the municipal boundary. Infrastructure related to social development, such as education, health care support, housing facilities for the poor, sports and other recreation facilities are not up to the standard and need larger investment and planning efforts. Overall, water supply, traffic problems and development of slums and poor housing are the most prominent challenges that rapidly growing Hyderabad is facing today (see Rao, 2007).

Hyderabad is surrounded by some of the poorest districts in the state (Ramachandraiah & Bawa, 2000). Due to the semi-arid climate in the region and a lack of proper irrigation facilities, agricultural output in the surrounding districts is relatively low. This has prompted many to migrate from rural areas to Hyderabad for employment opportunities. This has resulted in a rapid increase of slum settlements within the city (Rao, 2007) as affordable housing facilities are not available. There are nearly 1600 slum locations identified within Hyderabad metropolitan region (Census of India, 2001). The majority of slums were built during the mid-1980s and served as initial entry points to Hyderabad for employment opportunities. This has resulted in a rapid increase of slum settlements within the city (Rao, 2007) as affordable housing facilities are not available. There are nearly 1600 slum locations identified within Hyderabad metropolitan region (Census of India, 2001). The majority of slums were built during the mid-1980s and served as initial entry points to Hyderabad (Rao, 2007). The migrants used these slums as their ‘first step toward a better life’ (Afshar & Alikhan, 2002: 1153). These slums lack basic health and civic amenities such as safe drinking water, adequate power supply, paved roads and an adequate number of public toilets – making it challenging to achieve good quality of living (see Goli, Arokiasamy, & Chattopadhayay, 2011). With funding from the UK Department for International Development, the state government initiated the constitution of Andhra Pradesh Urban Services for the Poor programme in 1999 for a period of 9 years. Through this programme, the establishment of proper municipal infrastructure sought to increase the efficiency of the selected municipalities and thereby to reduce urban poverty. Several other state and national government plans were also implemented to reduce urban poverty and to improve the slum environment. With the help of funding through Jawaharlal Nehru National Urban Renewal Mission (JNNURM), the city authority aims to provide water supply to all by 2016 (Nastar, 2014: 5). Further, to develop slum-free cities, another national project known as – Rajiv Awas Yojana (RAY) has also been initiated in Hyderabad to provide better housing opportunities for the clum dwellers (Sharma, 2011). However, the provision of basic amenities to the vulnerable population in the city is still inadequate and needs further government support (see Photo 3).

The traffic density of Hyderabad has increased dramatically in recent years with increase in private vehicles and two-wheelers. The total number of vehicles plying in the roads of Hyderabad is estimated to be more than two million (Ramachandraiah, 2007). However, there is only a small increase public bus service. Further lack of adequate road infrastructure and massive increase in number of vehicles has resulted in massive traffic congestion at major traffic points along with increasing vehicular pollution within the city (see Photo 4). A long history of poor road design, narrow and unplanned network of roads, lack of maintenance and shortages of parking facilities have made the traffic situation further worse. According to Ramachandraiah (2007), ‘Hyderabad has the dubious distinction of being a large metro city without adequate footpaths that forces pedestrians to walk on the roads’.

The reasons for such traffic problems can also be attributed to the overcrowded core area with its old network of narrow radial roads meaning that often vehicles need to cross through the centre in order to travel to different parts of the city. The construction of unplanned buildings and their illegal extensions along the major routes has also made widening of roads very difficult. Further, an inefficient public transport system and the sharp increase in private vehicle ownership in recent years can also be attributed to the current traffic situation of the city (Rao, 2007). Public transport accounts for only 40% of total passenger transport (Ramachandraiah, 2007). Among private vehicles, motorcycles constitute of 78% of total vehicles (GoAP, 2003).

Fig. 6. Planned tourism development in BPPA region.
To tackle the traffic problems, a network of 158 km outer-ring roads (ORR) have been proposed to decongest the traffic problem of the metropolitan region and to provide orbital linkage to arterial roads, access to the international airport and to other important urban nodes. Several radial roads were also proposed to connect the ORR with core of the city. About 125 km (out of the planned 158 km) have been built so far (Suares, 2014). Along with ORR, a US$ 2 billion metro train project is also under way to provide world-class transport facilities befitting Hyderabad’s future global status. Hyderabad’s metro train, once completed will consist of 3 corridors with a total of 72 km. However, the plan to improve transportation system in Hyderabad was criticized for not
providing adequate attention to the local requirement and specific-
ities. Ramachandraiah (2007, 2009, 2010) said that the develop-
ment of metro train system in Hyderabad has been done without
environmental clearance, and alignments are being constructed
through highly dense and congested part of the city which would
lead to increasing noise levels, destruction of heritage buildings
and eviction of thousands of families. Ramachandraiah (2010) 
rather argued for a modified version of bus rapid transit system
(BRTS) so to provide a sustainable and relatively cheaper mode of
transport system for Hyderabad.

Hyderabad metropolitan region has been blessed with
thousands of small and medium sized lakes which used to help
in providing water for drinking and for other household purposes
– especially in the peri-urban region, outside the municipality
jurisdiction. However, the rapid urbanization process has impacted
these water bodies. There has been significant decrease in the
number of lakes due to illegal encroachment to make way for
real-estate developments and continuous discharge of untreated
sewage and toxic wastes. This has led to severe environmental
problems as well as issues of water insecurity for locals. With lack
of adequate water provisions by civic authorities, residents often
need to purchase water provided by private water tankers. While
the affluent residents are able to pay for their water needs, the poor
residents of the city is seriously getting affected by the emergence
of unequal urban landscape.

Conclusion

Asia is going through a substantial urban transformation and is
‘a site of emerging urbanisms’ (Hogan, Bunnell, Pow, Permanasari,
& Morshidi, 2012: 62). Hyderabad rightly provides a glimpse to
these urban-centric transformations. With its emphasis on becom-
ing a world-class city through emulative geographies (Phelps,
Bunnell, Miller, & Taylor, 2014), Hyderabad stands out as a classic
example of worlding (Roy, 2011) from Global South. No doubt, the
state government’s (past and present) efforts to make Hyderabad
as an engine of growth and to position itself into the global frame
have been successful – at least partially. However, the worlding
initiative have also led to a fragmented metropolitan – where
islands of super-premium enclaves have all the world-class facili-
ties but the larger metropolitan region suffers from lack of every-
day basic amenities – leading to liveability and widening
inequality issues (Nastar, 2014). There is an urgent need to address
these important challenges facing the city beyond aspiring to be
world-class – often emulating seductive neoliberal policies. Wid-
ening social inequality and the ways that rapid urbanization of
Hyderabad is affecting everyday liveability appears to be an im-
portant issue for policy makers (see Baud & Dhanalakshmi, 2006) and
an area for future research. Perhaps adaptive and inclusive urban
planning policies will go a long way toward making Hyderabad a
happy and liveable metro (see Pethe, Ramakrishna, Gandhi, &
Tandel, 2014; Ballas, 2013).

Acknowledgements

Funding from the NUS-Global Asia Institute (R-109-000-111-
133) is gratefully acknowledged. I am very grateful to Andrew
Kirby, Sarah Mooer and two reviewers for their very useful, con-
structive comments and suggestions. Also thanks to Lee Li Kheng
for redrawing the Figs. 1 and 3–6.

References

women in Hyderabad. Journal of International Development, 14(8), 1153–1161.
India.
Bagchi, B. (2008). Hyderabad: City of historical and technological panache. The
Economic Times, 2(4), April.
Baud, I., & Dhanalakshmi, R. (2006). Governance in urban environmental
management: Comparing accountability and performance in multi-
Stakeholder arrangements in South India. Cities, 24(2), 133–147.
Brenner, N. (1999). Globalisation as reterritorialisation: The re-scaling of urban
New York: Oxford University Press.
Castells, M. (1996). The information age: Economy, society and culture I, the rise of
New Delhi.
Dahya, B. (2012). Cities in Asia, 2012: Demographics, economics, poverty,
Das, D. (2010). Splintering urbanism in high-tech Hyderabad Department of
Geography, National University of Singapore, Singapore.
Dupont, V. (2007). Conflicting stakes and governance in the peripheries of large
Hyderabad: Government of Andhra Pradesh.
development authority. Hyderabad: Cyberabad Development Authority.
development. Hyderabad: Cyberabad Urban Development Authority.
GoAP (2013). Approval of metropolitan development plan-2031 for Hyderabad
metropolitan region, Department of Municipal Administration and Urban
Development, Hyderabad.
Goli, S., Arokiasamy, P., & Chattopadhyaya, A. (2011). Living and health conditions of
selected cities in India: Setting up priorities for the National Urban Health
urbanisms and privatization of cities. Cities, 29(1), 59–63.
Hong Kong Observatory. (2012). Climatological information for hyderabad, India (20
hk%2Fwinfo%2Fclimat%2Fwenvrld%2Feng%2Fasa%2Fasiana%2Fhyderabad_had_en.html>
University of Chicago Press.
Publications.
Nastar, M. (2014). The quest to become a world city: Implications for access to
Parthasarathy, D. (2010). Fasting, Mining, Politicking? Telangana and the Burdens of
History. In eSocialSciences, Online Multidisciplinary Social Science Portal.
Pethe, A., Ramakrishna, N., Gandhi, S., & Tandel, V. (2014). Re-thinking urban
planning in India: Learning from the wedge between de jure and de facto
PTI (2014a). Telangana is born as 29th state, KCR becomes first chief minister.
In Hindustan times. New Delhi: Hindustan Times.
PTI (2014b). Telangana government working towards making Hyderabad global
Ramachandraiah, C. (2007). Public transport options in Hyderabad. Economic and
Political Weekly, 42(23), 2152–2154.
Economic and Political Weekly, 44(3), 36–40.
Ramachandraiah, C. (2010). Hyderabad's elevated metro rail: Undoing the city and
its public transport. Hyderabad: Citizens for Better Public Transportation in
Hyderabad.


