ANALYSIS OF IMPROVING PHYSICAL AND SOCIAL INFRASTRUCTURES IN HYDERABAD

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Abstract

The paper examines the current trends in Indian urbanization, a country known to be the second most populous country in the world. It aims to explore whether India, with its prevailing urban physical infrastructure bottlenecks and targeted policies to overcome the same, is equipped enough to sustain a growing urban population. This study synthesizes social and physical aspects of the problem more thoroughly than previous ones. This might potentially lead to a more in-depth understanding of the issue and thus better strategies for tackling the slum problem on local, national, and international scales.

Keywords: *urbanization, physical infrastructure, slum problems.*

Introduction

The resulting urban agglomeration now has an area of over eight hundred square kilometres and consists of Hyderabad and other municipal entities surrounding it. The city population is expected to exceed one hundred and thirty six lakhs in 2021. As development picked up pace at the end of the nineties, the old city has declined and the newer peripheral regions started to gain prominence. By 2001, the city was the sixth largest urban agglomeration in India; and during the last decade it registered a growth of 32%. Developed land on the outskirts of Hyderabad has been utilised for large scale development just outside the Cybercity. The city itself is on its way to become the leader in e-governance. It has been predicted about Hyderabad that it would become a leading information-based society in the next two decades.

Social infrastructure can be defined as the construction and maintenance of facilities that support all social services which are necessary for human development. It includes schools, hospitals, prisons, community housing, etc. But not include provision of social services like the provision of teachers at a school, etc. The two techniques used to evaluation of social infrastructure are Accessibility and Location-Allocation analysis. There are many definitions of accessibility but it is depends on the nature and goal of the study. In present study accessibility is used to measure nearest existing facility of social infrastructure. It is an amount of effort for a person to reach a final destination. Location-Allocation analysis used to confirm the positions for one or more facilities to be constructed, which can help to supplying facilities in the most effective and economic method.

Suburbanization and the Growth of Slums in Urban Areas

Without individuals moving from rural to urban areas, urbanization would not have occurred. Data shows that many immigrants from developing countries are young adults who lack the necessary skills, education, and financial resources to launch a successful business in a major urban area. While it's true that migrant workers now have more job opportunities

because to their relocation to major cities, many still lack the resources to ensure their basic needs are satisfied, including adequate shelter, food, and clothing.

Factors Affecting Accessibility

There are some factors that may affect accessibility which include transportation demand and supply, extent of mobility, availability of choices, affordability, and land use pattern and mobility substitutes. Transportation demand and supply may depend on several factors such as demographic attributes, purpose of travel, time of the day, distance of travel. The people's accessibility may change with latent demand for transportation and the activity on road. Mobility is measure of physical movement of people and expressed in terms of person-kilometres. Availability of choices can useful to improve people's accessibility because there are various modes which serving the same destination. Affordability associated with the usage or non-usage of transportation which refers to the financial implications. Litman (2012) goes on to demonstrate how lower income people forced to live in an Automobile-dependant locality as they cannot afford the personal cars. Land use pattern can play a vital role in determining accessibility because it depends on where people live and where they seek employment. Due to the unregulated land use pattern, people would be forced to travel more to reach the destination so that people will more depend upon the private modes of transportation leading greater congestion and diminishing accessibility. Mobility substitutes can significantly overturn accessibility by doing away with the need to travel altogether. This can be achieved by provide door-to-door delivery services. The internet and mobile banking services are a classic example of this.

The Growth of Cities and the Economy

Increases in urban areas often coincide with a more robust economy. The process of economic development leads directly to migration, urbanization, and the spread of slums. Instead of being a byproduct of growth in the economy, urbanization and the spread of slums are intrinsic to the development of each large metropolis. Historically, urban areas have been the key sites of economic growth. They may provide access to knowledge and resources such as money. Greater economic and social development may be realized by focusing on metropolitan areas, which have enormous unrealized potential. They do this by taking advantage of economies of scale, which in turn causes the production of wealth. The pace of national economic growth and the rate of reduction in poverty will be determined in large part by the productivity of cities and towns. Many different types of employment and means of subsistence are available there. In order to maximize the potential of India's rapidly expanding urban population, the government must build urban systems that can accommodate large and increasing populations and provide for their needs in terms of housing, healthcare, employment, and social integration.

Growth of the IT Sector

Ever since the 1990s, Andhra Pradesh had been promoting itself as a world class IT location and Hyderabad City, as a result, has managed to attract investment from companies such as IBM, Oracle and Microsoft. The Hyderabad Technology Park has seen hundreds of IT companies registering themselves as soon as spaces are available. The objective of this elaborate promotional program has been to attract the right number of companies which together would form a critical mass for the city to develop as a high tech city

which would rub shoulders with Silicon Valley and Malaysia's Multi Media Super Corridor.

During the nineties, several initiatives were taken up by the state government towards promotion of IT sector. These included setting up of IT training institutes, initiatives in e-governance, development of a Hi-Tech city and promoting the Software Technology Park as a preferred destination for private sector companies. Steps were then taken even further to allow the development of a Hardware Park, creation of a Knowledge Park, and establishment of a financial district. The state government started tapping resources to invest in the biotechnology sector and, as a first step towards making the region specialized, a Biotech Park was introduced.

Ongoing Infrastructure Development

In the aid of industrial development, the city of Hyderabad has also started to develop infrastructure to support it. The infrastructure development is ongoing focused on all important areas including roads, flyovers and cityscape, and improving water supply. Since 2007, eight major projects have been completed in the Hyderabad development plan. These include the completion of flyover at Rajiv Gandhi Circle, Green Lands Junction and Chandrayangagutta. The water supply has further been enhanced by the diversion of Krishna water to Secunderabad, construction of additional storage facilities and completion of Krishna Drinking Water Supply Project Phase II. It must be noted that the main surface sources of water in Hyderabad are Osmansagar on River Musi, Himayatsagar on Esi River, Manjira River and Krishna River. Rainwater harvesting, sewage and water supply are being further developed.

Road Connectivity

The total length of road in Hyderabad for the year 2013-14 was 17086 Kms (consisting of 338 Kms of cement concrete, 5016 Kms of Blacktop, 10939 Kms of metalled and 793 Kms of unmetalled roads). It (the total length of the roads) has been increased to 198365 Kms by the year 2018-2021, a phenomenal increase of 1100 percent (or 11 times increase) over the base, during the last five decadal periods between 2013-14 and 2018-21. Of the total length of road available in the state 45% is laid with blacktop or asphalt, 15% is metalled, 38% is unmetalled and just 2% is of cement and concrete one.

Table : Road Length (Kms) in Hyderabad by the Type

Year	Cement Concrete	Blacktop or Asphalt	Metalled (W.B.M)	Un-Metalled (Murram	Total Le of Roads
2013-14	338	5016	10939	793	17086
2015-2016	338	54876	46247	63956	165417
2017-2018	1967	73908	39309	71851	187035
2018-2021	3663	89254	29537	75911	198365

Source: Engineer-in-Chief (R&B), Admn. & NH, Roads and Buildings Department

Although state is having only 4646 km distance (just 2% of its total road length) highways passes through the hyderabad , it is important as they connect the state with its neighbouring districts as well as the rest of the hyderabad . The total length of road network available in the state is standardised in terms of its catchment and coverage, it is 6.21 Kms per 100 Sq. Kms of the States' geographical area and 0.55 Kms per 1000 population in 2013-14 and now the length of road comes to about 65.45 Kms per 100 sq kms of geographical area and 2.36 kms per 1000 population in 2018-21. Across districts the road density in terms of length of road (Kms) available per lakh population varies between the

highest 349 Kms to that of the lowest 141 Kms.

Educational Infrastructure

One of the factors that shape the educational development of a state is availability of educational institutions and access to education.

There is a remarkable progress in terms of availability of educational institutions including all levels of school (primary to higher secondary) education in the state. Till 1990s there was an inadequacy but there was unprecedented growth in number of institutions during 1990s owing to implementation of DPEP and later SSA programmes in the state. Subsequently the number of schools/colleges available for primary, middle, lower secondary and higher secondary (intermediate) level classes increased to around 84, 35, 17 and 4 thousands respectively in 2018-21.

Sno	**Parameter/indicator**	**Number**	**Per lakh pop**	**Per 100 Sq Km GA**
1	Number of schools with primary classes	83872	102	30
2	Number of schools with middle classes	35097	43	13
3	Number of high schools	17066	21	3
4	Higher Secondary/Junior colleges	4264	5	2

The coverage of these institutions in terms of population indicates there are 102 schools with primary level classes per lakh population in the Hyderabad. Similarly there are 43, 21 and 5 schools respectively with middle, lower secondary and higher secondary (intermediate) level classes per lakh population in the state. In terms of geographical coverage, there are 30, 13, 6, and 2 schools respectively with primary, middle, lower secondary and higher secondary (intermediate) level classes per lakh population.

Conclusion

The Hyderabad Urban Development Authority is pushing the city to become the next Silicon Valley. The State Government of Telangana, and the Government of Andhra Pradesh before it, have put in remarkable efforts to develop the city's existing infrastructure. The govt. has planned considerable growth of the Greater Hyderabad region and is set to leave Pune and Bangalore far behind in a few years. Nevertheless state has to continue to improve its infrastructure base in order to improve its status with respect to human and economic development. In economic infrastructure, road connectivity and transportation has improved but still there are villages in the state which do not have pucca road and any transportation facility.

References

1. *Anant, T. C. A.; K. L. Krishna and Uma Datta Roy Choudhary (1999): Measuring Inter-State Differential in Infrastructure,*
2. *Antle, John M. (1983): 'Infrastructure and Aggregate Agricultural Productivity: International Evidence', Economic Development and Cultural Change, Vol. 31 (3), April, pp. 609-19.*
3. *APHDR (2008): Andhra Pradesh Human Development Report 2007, Centre for Economic and Social Studies, Hyderabad.*
4. *CMIE (2000): Profiles of Districts, Centre for Monitoring Indian Economy (CMIE) Pvt. Ltd., New Delhi.*
5. *Dev, S. Mahendra; C. Ravi and M. Venkatanarayana (2009) (eds.): Human Development in Andhra Pradesh:*

Experiences, Issues and Challenges, Centre for Economic and Social Studies, Hyderabad.

6. *IJMR (2009) "Public Health is Infrastructure for Human Development", Editorial, Indian Journal of Medical Research, Vol. 130, July, pp. 9-11.*
7. *Majumdar (1983), "Urbanizing Poor: A Sociological Study of Low-Income Migrant Communications in the Metropolitan City of Delhi: Lancer Publisher, New Delhi.*
8. *Koteswara Rao (1996), Rural-Urban Migration and Economic Development, Discovery publishing house.*
9. *Kohen, Barney (2004), "Urban Growth in Developing Countries: A Review of Current Trends and a Caution Regarding Existing Forecasts", World Development, Vol.32, No.1, pp. 23-51.*
10. *Gupta and Mitra (2002), "Rural Migration and labour segmentation: Microlevel Evidence from Delhi Slums" Economic and Political Weekly, Vol.37, No.2.*