Assessment of Social Infrastructure in Malviya Nagar, Jaipur city

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Abstract—The objective of this research paper is to study the present condition for social infrastructure available in Gaurav Tower and its nearby area of Malviya Nagar, Jaipurand to evaluate the lack of infrastructure and the accessibility by the residential. The study looks into how far the present provision can be achieved with minimum requirement. The spatial distribution of the facilities in the area is being evaluated using the distance based accessibility to the facilities provided concerning the walking distance. And the social infrastructure facilities concerning the healthcare and the education facilities by using it to determine the service level of the facilities.

1. INTRODUCTION

An important determinant of physical infrastructure is good domestic production while social infrastructure is important for human development and progress for economic growth through better education, healthier and skilled people. Positive externalities for social infrastructure play an important role in the economic development of a country. For the impact of the growth of an economy, it is provenand recognized that the impact of health and education is required. Education developing in skills provision and training of healthcare facilities increases the workforce productivity and population welfare. The key engines for developing countries like India, the growth of social & physical infrastructure requires continued investments to accelerate growth prospects.

Particular social infrastructure performance depends on the availability of services; population served & location of distribution of services, etc. Lack of availability of services in an area is responsible for low accessibility for the residentials.Analysis of CRISIL research proves that between 2004 and 2011 that spending on the budget for social infrastructure increased at a the compound annual growth rate of 18.7% more than CAGR of GDP at 15.3%.

On social infrastructure side too, return to government spending onthesocial infrastructure side, Return on spending for the government should be carefully checked so that the results-driven are measurable from every penny spent.

In the recent times, the importance of the issues related to the development of the social infrastructure has increased. It is observed that the increase in the per- capita income of the population or the economic development should be matched by developing the social sectors if the development process is to lead to the increase in the social infrastructure or the welfare of the social sector and they are the basic objective of development.

2. LITERATURE REVIEW

Before arriving at any methodology, it was important to understand the approaches that have been earlier made in this field. Hence several research papers were studied to formulate a methodology that would not just establish the importance of social infrastructure through qualitative research process but would treat the subject quantitatively as well.

Location for social infrastructure which is facilities for education and health is the travel destination for people. The planning for social infrastructure provision, Case study: Ahmedabad India was studied. The level of accessibility for the population to be served was assessed. In this case capacity of each facility is 20,000 people per facility. The distance to existing educational facility studied, and spatial distribution was done. It is analysed that the distance between origin location and the educational or health facilities for the existing population was shown. Two main problems regarding the existing social infrastructure were notice first is regarding the distance and secondly regarding the capacity. In case of healthcare facility people living on the outskirts of AUDA, distance is beyond the walking distance. However, schools near villages haveafull overloaded capacity of primary schools.

3. STUDY AREA

Jaipur is the capital of India's Rajasthan state, also known as the Pink City. It is a city located in a semi-desert terrain region. At the center of its stately street grid stands the opulent, colonnaded City Palace complex. With gardens, courtyards and museums, part of it is still a royal residence. Jaipur was a walled city, but presently it has expanded much beyond that. The city is a good example of Hindu architecture. Jaipur is built in the form of 'Pithapada,' an eight-part mandala.



"Figure 1: Location Site (Malviya Nagar, Jaipur city)"

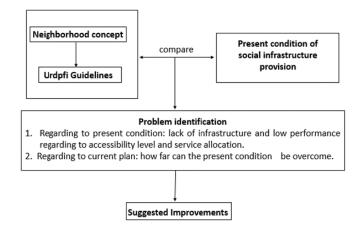
The site for the study is Malviya Nagar, Jaipur City. The population of Malviya Nagar area is 32,292 (census,2011)Itis one the oldest colonies in India. It has come up with a newer residential area which has major commercial thrust with Jawahar Lal Nehru Marg as a major connecting road.In 2025 proposed land use Master Plan the area is proposed for mixed land use with commercial & residential land use. The area is proposed withadifferent hierarchy of schools, colleges, hospitals, shopping centers, and malls.

The conceptual neighborhood unit in any traditional built environment constitutes a strong sense of identity, attachment, admittance & feeling of belongingness for the users. The close proximity of most of the recreational or community services in a residential area enhances social infrastructure & provides facilities.

In case of existing neighborhood studied for Malviya Nagar due to the impact of urbanization, rise of mass society the feeling of then eighborhood in the contemporary urban environment has led to less social interactions & unavailability of minimum social services required by a community. Urbanization is a reality staring in the face.

4. METHODOLOGY

The analysis of framework, data availability and requirement and to study the steps are included in the methodology process. The accessibility choice is measured and model location and allocation is used and also the description of procedure of handling data is also described. The problems are identified and then compared with the Urdpfi guidelines. And the neighborhood concept of proximity of accessibility is measured regarding the present condition.



"Figure 2: Methodology Adopted"

5. DETAILED ANALYSIS OF THE SOCIAL INFRASTRUCTURE:

5.1 Status of Social Infrastructure

The study of residential area would give an idea about the status of the social infrastructure available. And this will help in knowing the level and the number of facilities provided.

5.1.1 Status of Education facilities in Malviya Nagar, Jaipur City

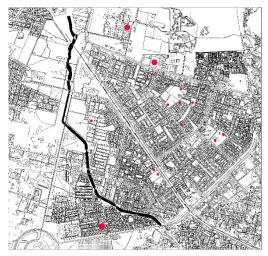
The analysis was done comparing the existing no. of education facilities available in Malviya Nagar and the requirements given according to the Urdpfi guidelines i.e, according to the population and the population of Malviya Nagar is around 32-35 thousand according to the 2011 census reading.

"Table 1: Education facilities compared with Urdpfi guidelines."

SCHOOL	To serve population	Required	Available	Surplus/Deficient
Primary school	5000	1	-	
Sr. secondary school	7500	1	6	Surplus
Colleges/Institutes	10 lakh	1	3	Surplus

(Source: Author)

From the primary survey, we can see that all education facility in Malviya Nagar is surplus as per Urdpfi norms.



"Figure 3: Location of education facilities."

(Source: Primary survey)

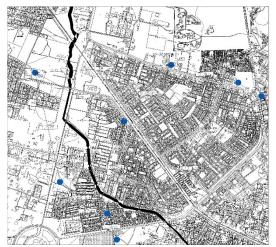
5.1.2 Status of Healthcare facilities in Malviya Nagar, Jaipur City

Similarly, the same no of healthcare facilities available in the existing area was compared according to the Urdpfi guidelines i.e, according to the population and the population of Malviya Nagar is around 32- 35 thousand according to the 2011 census reading.

"Table 2: Healthcare facilities compared with Urdpfi guidelines."

Healthcare facilities	To serve population	Required	Available	Surplus/Deficient
Primary health center	1 lakh	1	× .	-
Nursing hospital	1 lakh	1	6	Surplus
General hospital	2.5 lakh	1	2	Surplus

(Source: Primary survey)



"Figure 4: Location of Healthcare facilities." (Source: Primary survey)

From the primary survey done in Malviya Nagar in the case of the education facility we found it to be surplus as per requirement in Urdpfi guideline. The minimum distance is 0.3km to 2.17km between the healthcare facilities. Therefore the facilities are in surplus with Jaipuriya Hospital & Fortis intheproximity of the neighborhood.

The construction and design of the interior street pattern are such that it provides low volume for traffic movement and easy connectivity between healthcare facilities and schools.

"Table 3: Distance between two healthcare facilities."

\$1. No.	Hospitals	Distance	Distance in between
1	A	A-B	0.6Km
		A-C	0.87Km
		A-G	0.9Km
		A-H	1.2Km
2	В	B-G	1 Km
		B-C	0.3Km
3	с	C-D	2.17Km
4	D	D-E	0.3Km
5	E	E-F	0.7Km
6	F	F-H	1.38Km
7	G	G-H	1Km

(Source: Primary survey)

As per the concept of neighborhood, within 1 quarter mile radius, the healthcare facilities in Malviya Nagar can be accessed.

6. CONCLUSION

The Social infrastructure facilities available in the Malviya Nagar area is enough for the population of the area. The education facilities available in the area is fulfilling the requirements provided as per the guidelines, but the location of this facilities are not evenly distributed. Many small primary education facilities are also coming up in random areas as per the increase in the demand due totherandom location of the existing facilities and the travel distance problem for the primary children. Different hierarchy of schools is also available in the locality, of play schools, primary schools, senior secondary school, colleges & national university which fulfills the demand of the social infrastructure available in the locality.

In the case of Healthcare facilities requirement for Malviya Nagar area, withtheavailability of Jaipuriya Hospital as a government hospital & Fortis Hospital private hospital attheproximity of 1Km Radius and other nursing facilities in the nearby areas as required. The minimum distance is 0.3Km withamaximum as 2.17 Km which clearly indicates the accessibility of the social infrastructure. The government & private facilities are enough to serve the residents in the area. These healthcare activities act as ancillary facilities which haveled tothedevelopment of nearby areas with pharmacies, Medical shops. The transportation modes have also developed due to these facilities.

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