
Research Paper**CHALLENGES TO DEVELOPMENT: A STUDY OF INFRASTRUCTURE DEVELOPMENT
IN THE SLUMS OF BANGALORE****SH.Mutharaju**Assistant Professor, Department of Political Sciences,
Government First Grade College, Kanakapura, Karnataka.

ABSTRACT-

Many of the health problems in urban slums stem from the lack of access to or demand for basic amenities. Basic service provisions are either absent or inadequate in slums. Lack of drinking water, clean, sanitary environment and adequate housing and garbage disposal pose series of threats to the health of slum dwellers, women and children in particular, as they spend most of their time in and around the unhygienic environment.

The demands for basic services are lacking, because there is no agency or institution (state or central) that is willing to assess the needs and on that basis identify and fulfil the demand. Therefore, the urban poor see the futility in expressing their demands to those with the capacity to fulfill them. However, supply-side techniques alone cannot solve infrastructure problems- public sector agencies need to become more responsive to customer needs. Other than the engineering or logistical aspects that govern availability of services issues related to 'land' also pose serious constraints towards extension of basic infrastructure services to slums that can positively impact health and sanitation.

KEY WORDS-Environment, Health.**INTRODUCTION-**

Inadequate nutritional intake due to non-availability of subsidised ration or availability of poor quality ration makes the slum dwellers prone to large number of infections and water borne diseases. Inability to access basic services results from a series of man made institutional bottlenecks (like legal status of non-notified settlements or the scattered poor/street (homeless) people) that prevent the poor from accessing services created primarily in their name. Lack of education and information further aggravates the situation as residents depend on unreliable sources **for prevention and cure. POWER** Deficiency of power is a major problem in the state of Karnataka. Though the city of Bangalore is spared from frequent power cuts, thanks to the IT industry, the one exception to this problem are the slums in Bangalore. Power cuts are frequent and untimely. The slum residents are unaware of the timings of the power cuts which affect their normal routine. The most affected are the students living in the dingy hutments. As power cuts are normal with the onset of the summer, the students are the worst sufferers as they need to prepare for their final exams which are scheduled in March and April, thus power supply hampers the academic performance of the students. Compounded to this is the high cost of electricity where in Bangalore was one of the highest in India.

Poisonous snakes and scorpions have come to haunt the residents of KSRTC slum after the Bangalore Electricity Supply Company (Bescom) disconnected power supply in the wake of Friday's tragedy in which a 20-year-old housewife and her seven-month-old son were burnt alive. As short-circuit was suspected to be the reason for the outbreak of fire in Nisha Hussain's house, the electricity company officials have disconnected "illegal" power supply to all the 300 houses in the KSRTC Slum, which is also known as Ragi Gudda slum in J.P. Nagar second phase.

Apart from the dread of snakes and scorpions making their way into the electricity-deprived houses, the inhabitants of the slums are forced to send their school-going children to prepare for their forthcoming annual examinations under streetlights in the vicinity.

Though most of the breadwinners in the slum are daily wagers, there are an estimated 150 students, including 55 girls, who are studying in various primary and high schools nearby, said Kuppamma, an elderly resident of the slum. "Without power supply, we are forced to send the children to study under the streetlights," she added.

The children are equally anxious. "Examinations are nearing and the students do not know how to prepare without power supply," S. Rajasekaran, a Class 8 student of Government High School in Marenahalli, told *The Hindu*.

The students are not comfortable studying under kerosene lanterns either. "We are afraid of snakes and scorpions, particularly after sunset when our homes are dark. We chased away three snakes from our houses on Sunday," Rajasekaran said. "We have to run for safety when snakes enter our houses while we are studying," Kamala Rani, a native of Tamil Nadu and student of another school, said while pointing to the absence of streetlights also in the slum.

The slum is surrounded by weeds, bushes and a few drains, considered as a breeding place for snakes and scorpions. Often snakes wander into the slum, catching its residents unawares. Assistant Executive Engineer of the electricity company Manjunath said that they had to disconnect all illegal power connections at the slum to avert any possible electrocution cases. Another official said that they are even contemplating registering *suo moto* cases against the slum dwellers for stealing power. Meanwhile, the power company officials said that they will not resume power supply until the Karnataka State Slum Development Board comes forward and makes out an application for providing temporary power connection.

A board official said that the matter relating to power supply will be discussed with senior officials as well as the power company officials. "We will take some positive steps", the official said. Water is a basic necessity for all human beings. In the slums availability of water is a major issue. Though water is available, the quantity, quality and the distance to fetch water remains a big issue. In India only 36% of available water is potable and most of diseases confronted by the urban poor are water borne. Keeping this in mind a survey of four slums was conducted as part of the thesis to find out the issues related to the distribution of water.

Nellorepuram slum is located in the KR Puram CMC, in the constituency of Varthur and constitutes Ward No 24. This is one of the oldest slums among the four studied and is about 50 years old. It is an authorized slum and is among the list of slums as declared by the Slum Board.

Geographical boundaries – The slum locality is bounded by HAL property on its western and southern sides, J layout on its eastern side and Jagadishnagar on its northern and northeastern sides. Tared main roads also surround the slum on all its sides.

Distribution of facilities – A study of the distribution of WatSan facilities highlights the following:

Public drinking water facilities – Among the public drinking water facilities that are available include public taps, water tanks, handpumps/borewells, and open wells.

There are about 35 to 40 public taps located at various points in the locality in almost all the bylanes within. However as per feedback received from FGDs, there are 15 taps according to the youth and 10 according to the children.

Water is supplied once a week for about 2 hours. It is mainly the women and children who fetch water. There are fights at the taps according to the children.

About four water tanks are also located in Nellorepuram; however they are more concentrated in the southern part of the slum except one on the eastern main road. There are also three handpumps located on the eastern and western main roads along the slum boundaries, with one of them being a motorable one. Lastly, there is one open well also located in the southern part of the locality. Supply of Cauvery water is approximately 200 metres away from the locality and is fetched by people.

Sanitation –

In terms of sanitation, there are two public toilets in the locality. While Sulabh International is running one of the toilets, the other has been constructed by the Slum Board. The former is a toilet cum bath complex with six toilets and three bathrooms and uses the pay-and-use scheme. The one constructed by the Slum Board has two toilets for men and two for women; use is free and staff coming from the Slum Board maintains all the toilets.

Both the toilets are located in the southern part of the slum locality. Feedback from FGDs indicates that people are not satisfied with the two public toilets and have voiced their need for individual toilets, since they feel that public toilets are difficult to maintain. Lack of individual toilets and ill-maintenance of public toilets has let many people using open spaces in and around the locality to relieve themselves.

In terms of type of sewerage system observed, most of the drains in the locality are open drains (both L-shaped and U-shaped) and mainly concentrated in the southern part of the locality. The drains that pass through the toilets are covered, while around other houses in the same part of the locality, they are mainly open ones. Participants from the FGDs have stated that the community does the cleaning of the drains on a regular basis.

However, there is a need to have UGDs along with individual toilets. Garbage disposal sites are few and far between in the locality. However, it has been observed that none of them are places, which can be called dustbins from where garbage is collected by the Municipality. Also most of these ‘dumping places’ are located outside the boundaries of the slum.

Issues raised during FGDs

- While youth identified water, toilets, drainage and roads as the major problem areas, children mentioned drainage, garbage and a playground as the problems.
- The main problems were highlighted by the youth were toilets and roads while children did not mention any. When asked about the problem specific to women, the youth mentioned the lack of toilets and the children did not reply.
- The FGD groups agreed on the need for piped water for their locality. Both groups clearly expressed willingness to take individual connections as well as for paying for the connection. The youth and children specified Rs 500 as the payment they would make for a connection. They were also willing to make payment on a monthly basis for usage.

CONCLUSION-

- The youth seemed aware of water borne diseases. They reported that there were incidents of water borne diseases like dysentery and they mentioned typhoid, fever, and skin diseases as caused by contaminated water. The children did not seem to know.

BIBLIOGRAPHY

- Ferraz, Claudio, and Bruno Ottoni.** 2013. “State Presence and Urban Violence: Evidence from the Pacification of Rio’s Favelas.” Unpublished paper.
- Field, Erica.** 2005. “Property Rights and Investment in Urban Slums.” *Journal of the European Economic Association* 3(2–3):

-
- Field, Erica.** 2007. "Entitled to Work: Urban Tenure Security and Labor Supply in Peru." *Quarterly Journal of Economics* 122(4):
- Field, Erica, and Michael Kremer.** 2006. "Impact Evaluation for Slum Upgrading Interventions."
- Bates, Robert H.** 1981. *Markets and States in Tropical Africa: The Political Basis of Agricultural Policies.* Berkeley, CA: University of California Press.
- Bernardo, Antonio E., and Ivo Welch.** 2001. "On the Evolution of Overconfidence and Entrepreneurs." *Journal of Economics & Management Strategy* 10(3)
- Besley, Timothy.** 1995. "Property Rights and Investment Incentives: Theory and Evidence from Ghana." *Journal of Political Economy* 103(5):
- Bleakley, Hoyt.** 2010. "Health, Human Capital, and Development." *Annual Review of Economics* 2:
- Bowles, Samuel, Steven N. Durlauf,**