



Research Review on Socio-Environmental Status of Slum Dwellers

KEYWORDS

slums, malnutrition, Dharavi, unskilled, migrants, squatter settlements

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ABSTRACT Every year there is influx of migration from rural areas to urban areas in search of better income and comfort. Migration may be inter state or intra state. It includes both skilled workers such as painter, carpenter, cobbler, masons etc. while unskilled include labourers. Along with these migrants there is transfer of poverty from rural areas to urban areas. Both the push and pull factors are equally responsible for urbanization. The primary concern of these jobless poor is of employment. The only amenity they need is place to sleep. They often select place which is near to their job market and saves transport costs. Due to high cost of land in metropolitan cities they cannot afford a piece of land as the result of which they often select neglected areas or open space available along sewage drain, roadside, railway tracks, unstable slopes and form slum there. Generally, these locations are in the area which is unfit for human habitation. In the present paper review on social and environmental aspect of slum dwellers is taken into consideration.

1.Introduction

The United Nations (UN) projects the world's urban population to grow by 2 billion before 2030. More than 90% of this growth will take place in the least developed countries, and will be concentrated in the bleakest parts of the city-human settlements known as slums. Already nearly a third (32%) of the world's population and more than three-fourths (78%) of the least developed countries urban population live in slums. Today's slums are unprecedented in their sheer magnitude, their rapidity of growth and their worldwide distribution.

A slum is a compact area with 300 residents or which had 60-70% of the households having poorly congested rooms with inadequate infrastructure, lack of proper sanitation and drinking water facilities (Slum Survey, 2001). Slum is a residential area that has been constructed illegally and where housing condition is not in compliance with current planning and building regulations (UN, 1996). Slum includes dwelling which on account of overcrowding, dilapidation, and lack of ventilation are detrimental to the safety, health and social morale (Census of India, 1961).

India is a developing economy and slum population is growing at an alarming rate. In 1980, 17.5% of urban population was residing in slums. It is now reported that one third of the total slum population lives in cities like Kanpur, Mumbai, Kolkata, Nagpur, Chennai, Delhi, Bangalore, Hyderabad etc. Asia's largest slum is found in Mumbai i.e. Dharavi. In cities with population over one million nearly one fourth (24.1%) of the population is residing in slums. Nine states / union territories (UT) namely Himachal Pradesh, Nagaland, Mizoram, Sikkim, Arunachal Pradesh, Manipur, Dadra and Nagar Haveli, Daman and Diu and Lakshadweep have not reported any slum population in their cities or town (Census, 2001). Table 1.3 shows the Statewise slum population. Roadside squatter settlements in India are not organized. Migrants squat on any available land in the pursuit of their trade. Squatter settlements are unhygienic and exposed to environmental ill effects.

According to UN-Habitat report (2002), a contagious settlement with households that lack security of tenure, structural quality, access to safe water, access to sanitation facilities is known as slum. Durand and Royston (2002) estimated that between 25 to 70 percent of urban dwellers in developing world are living in slum like conditions. In a study conducted by Sheuya (2007), it was revealed that overall a billion people

in the world live in slums where, environmental determinants lead to diseases.

In India, cities with million plus population nearly have one fourth of their population living in slums (Census, 2001). Slums have become an inevitable part of the major Indian metropolitan cities. The situations in metropolitan cities like Mumbai, Kolkata, Delhi, Chennai, Bangalore, Hyderabad and Kanpur etc. is becoming worse year by year because of mushrooming of slums (Gowda and Shivashankara, 2008). Mumbai is the most populated city inhabited by highest percentage of slum dwellers in comparison to other million plus cities (Singh, 2006). Slum locations are often built on hazardous geography, such as landslide or flood-prone areas, or unsafe or polluted environments. Moreover, their residential status limits their ability to fight for the right to a safe environment. In 1984, the accidental release of Methyl Isocyanate (MIC) from a pesticide factory in Bhopal killed more than 20,000 slum residents. This factory was built nearby already existing slums (Dhara, 2002). The uncontrolled migration and haphazard growth of slums are creating physical, demographic and environmental imbalances in Punjab, Haryana and Himachal Pradesh and demands for upgradation of urban infrastructure (Kumar, 2007).

1.1 Environmental and housing conditions in slums

Slums in cities of most developing countries are characterized by poor infrastructure facilities such as solid waste disposal, sewage disposal, and drainage which lead to environmental degradation and in absence of sufficient number of community toilets, these people are forced to excrete in the open (Bhardwaj, 2007). The accumulation of garbage in four informal settlements in Nairobi city, namely Kawangware, Korogocho, Viwandani and Njiru was found to be a consequence of lack of dumping sites in the communities and the inability of the city council to collect the garbage for appropriate dumping (Amuyunzu and Taffa, 2004). The authors also reported that the uncollected garbage often accumulated and blocked drainage and the poor drainage turned the informal settlements muddy and impassable during the rainy seasons. In another study, Kimani et al. (2007) reported that informal settlements in Nairobi continues to be characterized by poor living conditions, including lack of affordable house, clean water, inadequate toilet facilities, poor garbage disposal and drainage mechanisms. The slum dwellers of Ghana also lack basic environmental facilities such as sanitation, drinking water supply, electricity etc. (Osumanu, 2007).

Ray (2002) also reported that slum dwellers of Calcutta reside in unhygienic environmental conditions manifested by overcrowding and poor building materials. Due to poor drainage system water logging in the slums of Tamilnadu becomes critical during monsoon seasons and rain water often enters into houses of these poor people as only 5% of the households had well drainage system (Sundari, 2003). The lack of infrastructural facilities including waste collection and sewerage, public transportation, education and electricity supply affect all aspects of life. Sundari (2003) revealed in her findings that 79% of migrant households of Chennai lived without latrine facility and used open fields for defecation. Only 13% of the migrant households living in these slums were found to have access to the community toilets, provided by the municipality. Likewise, Mehta (2004) revealed that five million slum residents were living without toilets facilities in Mumbai. In another study, Gupta et al. (2007) reported poor environmental conditions in the urban households of the slum dwellers of Chandigarh, as only 33.4% of the urban poor were found to have access to the sewerage system in comparison to 98% in case of urban areas. Owing to absence of sufficient number of community toilets, the people residing in slums of Jammu are forced to excrete in the open (Sharma, 2009).

The situation of sanitation in Accra metropolitan area, Ghana was reported to be very serious, as provision of toilets facilities was related to the household wealth. Pit latrines were common in low income households while flush toilets dominated wealthy groups (Boadi, 2002). More than 90% of all urban poor of Tmale were found to store solid waste inside their house for at least 24 hours before taking outside (Osamanu, 2007).

Most of the communicable diseases are commonly found in the slums due to poor housing conditions and environmental factors which account for 25% of all preventable ill-health (WHO, 1998). Ballantyne and Oelofse (1999) reported that slum dwellers of the Mizamoyethu community of Africa lives in poor housing conditions and for them it is the first element that needs to be upgraded if quality of life is to be improved. According to World Bank report (1993), most of the environmental burdens in African cities results from lack of affordable housing for the poor which lead to the formation of slums and squatter settlements.

Malik et al. (2002) studied the working environmental conditions of child labourers in a slum area of Kolkata. 18% of the working children were found working under total exposure to sun and rain, 11.3% in open air, 20% in ill-ventilation, 17.3% in inadequate light and remaining worked in overcrowding conditions. The poor living conditions are commonly exhibited in slums of Indian cities. In Tamilnadu, 43.4% of the slum dwellers were found living in kutcha houses, out of which nearly 53% had single room accommodation and rest had two room structures (Sundari, 2003). Hayami et al. (2006) documented that in Delhi the condition of slum dwellers was highly miserable as the shelter was made up of mud, brick, tin and bamboo.

Similarly, the problems of indoor pollution in Tmale region of Ghana were commonly found in low wealth households owing to congested rooms and lack of ventilation (Osamanu, 2007). Koshal (2003) reported that the indoor environment of houses in Sagar district of Madhya Pradesh was permeated by cow-dung that accounted for high levels of indoor odour pollution. The slum dwellers of Jaipur located along the roadside were found prone to the ill effects of the dust, smoke, intense noise and air pollution (Goyle et al., 2004). Thapa (2003) surveyed slum areas of Jammu city and observed that congestion was common in these slums and the heights of roofs were quite low, ventilation was poor and sanitation was absent.

1.2 Water quality status in slums

According to WHO report (2003), poor water quality is a lead-

ing cause of morbidity and mortality worldwide and a defining danger to life in slums. Growing number of poor people who lack basic needs, such as access to clean water and food are more susceptible to diseases driven by malnourishment and air, water and soil pollutants (Pimentel, 2007). The conditions of slum dwellers of Sub-Saharan countries were found to be highly miserable, as not only the quality but availability of drinking water was also a major issue in these countries. In Nairobi, 94% of slum residents were found buying domestic water from the vendors and paid about 8 times more for it than their non-slum counterparts. In addition, water supply was irregular and vendors were found to charge increased prices indiscriminately. Hygiene was also compromised during periods of water shortage (Kimani et al., 2007). Likewise, members of slum settlements in Nairobi city used sewerage water, rain water and water from broken pipes for various purposes such as drinking, washing etc. (Amuyunzu and Tafta, 2004).

1.3 Health and disease related issues in slum areas

Slums adversely affect the health status of inhabitants due to lack of basic infrastructure and health services (Yusuf, 2007). In Manila and Philippines, children living in squatter settlements were found to be nine times more prone to tuberculosis (TB) than children living in other areas (Fry et al., 2002). Overcrowding in slums is common cause of psychological stress and increases the rate of disease transmission due to frequent contact (Sundari, 2003).

Type of fuel also has considerable effect on the health of individual. In the urban slums of Surat, two third of girl child were found to have history of persistent cough whereas 52.8% of girl child of Middle Income Group (MIG) area suffered from same problem. The difference in these two groups was attributed to variation in the type of fuel they used, as kerosene and wood were the main cooking fuel used by the poor slum dwellers while LPG was common in the later case (Vipul, 2008). Similarly, daily-integrated exposure of infants and women to Respirable Suspended Particulates (RSP) in two slums of Delhi during cooking were low in kerosene-using houses than those of wood-using houses (Saksena et al., 2003).

Injection Safety Awareness and health related knowledge among slum population located near Nehru Place (Ambedkar camp) in South Delhi, India was very weak as only about 51% of the respondents were found aware about the transmission of diseases through unclean syringes (Misra et al., 2003). The awareness and attitude towards AIDS in slum of Chennai was very poor as only 67% of males and 55% of females were aware of the sexual mode of transmission. About 34% of males and 50% females opined that AIDS is a hereditary disease (Kalasagar, 2006). Thus, there is intense need for addressing HIV/AIDS, TB, and vector borne diseases in informal settlements and mobilization of health services for these urban poor (David et al., 2007). Slum dwellers constitute a major portion of urban population and most of these are usually migrants from rural and tribal areas and prone to the risk of acquiring HIV (Mishra et al., 2008).

The health and medical facilities in the migrant households of Coimbatore was found to be negligible, as the hospitals were available within a radius of 1 km for about 60% of the migrants. Though free health care facilities were available from the nearby Government hospitals for minor ailments, the slum dwellers had to spend on medicines for major health problems, which was beyond their ability. The number of household borrowings on ground of health had also increased from 65 (8%) before migration to 135 (17%) after migration (Sundari 2003). The accessibility and utilization of the healthcare services among a migrant community inhabiting slums of an eastern Indian city Bhubneshwar was very poor. They had to travel and spend a lot of time as there was no Government hospital or clinic in the vicinity and about 73% of the households visited private practitioner including

unqualified practioners available in their town (Babu, 2008).

The five leading illnesses among children aged under-5 years in four informal settlements in Nairobi City, namely Kawangware, Korogocho, Viwandani and Njiru were identified as respiratory tract infections, diarrhoea, malaria, skin problems and malnutrition. The mothers linked these illnesses to lack of adequate and clean water, unsafe waste disposal systems, lack of adequate and nutritious food and air pollution (Amunyunzu and Taffa, 2004). Vaid et al. (2005) reported that slum dwellers of Vellore town of Tamilnadu were more vulnerable to childhood morbidity than those of non slum dwellers. Infant Mortality Rate (IMR) was 37.9 per 1000 live birth, which was attributed to poor antenatal and postnatal care. Gladstone et al. (2008) reported that morbidity in Vellore town due to respiratory and gastrointestinal illness was higher among urban slum dwellers.

Puri et al. (2006) stressed that the infant mortality is greatly correlated with place of deliveries, neonatal and antenatal practices. They reported that 84% mothers in urban setup and 72.1% in slum setup were registered at Government institutions for their deliveries. Sinha (2006) conducted a study in Sangam Vihar, an urban slum of Delhi and revealed that prenatal mortality was 37.54 per 1000 births. In another study, Gupta and Pandey (2007) reported that 97.0% of the deliveries were conducted in institutions such as nursing homes, hospitals etc. in case of new urban colonies of East Delhi, while it was only 29.0% for the slum dwellers of same locality. Likewise, the Antenatal Care (ANC) among women of slum areas and non slum area of Mumbai was found to be quite different as in case of non slum area 74% of women received 3 or more ANC check up whereas in case of slum area only 55% women received the same (Madhiwalla, 2007).

Gupta et al. (2007) reported that the level of care during deliveries was quite low among the females of slum areas where 68% of the deliveries were carried out in the houses, without a skilled birth attendant such as nurse, mid-wife or doctor in slum areas as compared to 21% and 7% deliveries in the rural and urban areas of Chandigarh. The antenatal check up of pregnant mothers of slum areas was only 27.8% while it was 88.4% in the rural and 93.4% in urban areas of Chandigarh. The prevalence of various harmful practices regarding care of newly born babies like, application of kajal, delay in initiation of BF (Breast Feeding) was prevalent in slums of Chandigarh (Puri et al., 2008).

Conclusion

In India, the large metropolitan cities are growing very rapidly and unfortunately slums are growing many times faster. Poverty, agony, misery, exploitation, humiliation, insecurity, inequalities, and environmental degradation are also multiplying tremendously in the recent decades. These are indeed manifestations of our society and faulty planning. This crucial problem is aggravating with increasing migration from both rural and urban areas. It needs an urgent attention and immediate remedies. In sum, as regards the syndrome of poverty, distressed migration and ecological degradation in India, it is required to look for a novel approach. Concrete plans and its effective implementation for the benefits of national growth and migrants are absolutely necessary. The effective policy needs to be framed for the development not only in rural but also in small and medium sized cities. There is an urgent need to generate job opportunities in all regions of India so as to reduce the gap of inequalities. This will assist in combating with poverty, human misery and agony.

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