Slums: Affects on environment

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Abstract
Urban living is the keystone of modern human ecology. Cities have increased and expanded rapidly worldwide over the past centuries. Cities are sources of employment and education, and they are the engines for economic growth. However, they are also sources of poverty, inequality, and health hazards from the environment. Environmental decay in a city is essentially caused by rapid urbanization and the mismatch in the provision and maintenance of housing and infrastructure. These include exposure to lead, air pollution, traffic hazards, and the "urban heat island" amplification of heat waves. As the number of urban consumers and their material expectations rise and as the use of fossil fuels increases, cities contribute to the large-scale pressures on the biosphere including climate change. In this paper, environmental problems of slum and informal settlements in India, will be introduced and analysed.

Keywords: Keystone, ecology, Employment, Economic growth, poverty, Environmental decay, rapid urbanization, urban heat island, informal settlement.

INTRODUCTION

The concept of slums and their definition vary considerably across the States depending upon the socio-economic conditions or local perceptions. There are regional differences in the names by which slums are known in India. In Delhi, slums are commonly called 'Jhuggi – Jhompdi', whereas in Mumbai they are called 'Jhopadpatti or Chawls'. Other known names are - 'Ahatas' in Kanpur, 'Bustees' in Kolkata, 'Cheris' in Chennai and 'Keris' in Bangalore. But physical characteristics in most of these slums are essentially the same. They are usually a cluster of hutments with dilapidated and infirm structures having common or no toilet facilities, suffering from lack of basic amenities, inadequate arrangement for drainage and for disposal of solid wastes and garbage. These inadequacies make the living conditions in slums extremely suboptimal, unhygienic and results in usually higher incidence of air and water borne diseases for the dwellers. (Census Of India 2011 - Circular No. 8)

The definition used in the 2001 Census for 2011 Census. The definitions of different types of slums and codes to be assigned are as follows:

I. All notified areas in a town or city notified as ‘Slum’ by State, UT Administration or Local Government under any Act including a ‘Slum Act’ may be considered as Notified slums and assigned code 1;

II. All areas recognized as ‘Slum’ by State, UT Administration or Local Government, Housing and Slum Boards, which may have not been formally notified as slum under any act may be considered as Recognized slums and assigned code 2;

III. A compact area of at least 300 populations or about 60-70 households of poorly built congested tenements, in unhygienic environment usually with inadequate infrastructure and lacking in proper sanitary and drinking water facilities. Such areas should be identified personally by the Charge Officer and also inspected by an officer nominated by DCO. This fact must be duly recorded in the charge register. Such areas may be considered as Identified slums and assigned code 3; (Census Of India 2011 - Circular No. 8)

UN-HABITAT defines a slum household as a group of individuals living under the same roof in an urban area who lack one or more of the following

- Durable housing of a permanent nature that protects against extreme climate conditions.
- Sufficient living space, which means not more than three people sharing the same room.
- Easy access to safe water in sufficient amounts at an affordable price.
- Access to adequate sanitation in the form of a private or public toilet shared by a reasonable number of people.

India is a third world country that suffers from poverty, malnutrition, diseases, unhealthy conditions, and more, in Indian slums. Most of India's population is currently living in a slum. Every year, hundreds of thousands of men, women, and children die around the world and India alone is responsible for 25% of the deaths. (Slum Dwellers to double by 2030: United Nations Human Settlements Programme (UN-HABITAT) report, April 2007).

As the slums get crowded, the environment gets...
overpopulated and as a result, there is twice as much trash, corpses, and human excretion. The physical environment of the slums depends on the outcome of facilities of habitation, available water, toilets, drainage, and lighting. Unfortunately, high levels of pollution, lack of basic needs, and room-crowding are some of the basic characteristics of slum housing.

- The word “slum” is often used to describe informal settlements within cities that have inadequate housing and neglected, miserable living conditions. They are often overcrowded, with many people crammed into very small living spaces.

- These settlements lack basic municipal services such as water, sanitation, waste collection, storm drainage, street lighting, paved sidewalks and roads for emergency access. Most also do not have easy access to schools, hospitals or public places for the community to gather. Many slums have been subserviced and unrecognized for long periods, over 20 years in some cities.

- Like all informal settlements, housing in slums is built on land that the occupant does not have a legal claim to and without any urban planning or adherence to zoning regulations. In addition, slums are often areas where many social indicators are on a downward slide; for example, crime and unemployment are on the rise.

- All slums are not the same, and some provide better living conditions than others. Likewise, slum dwellers are not a homogeneous population, but a diverse group of people with different interests, means and backgrounds.

- Slums are also a significant economic force. In many cities, as much as 60 percent of employment is in the informal sector of the urban population.

- Today, more than one billion people in the world live in slums. In the developing world, one out of every three people living in cities lives in a slum.

### Reasons for development of slums

Slums are not a new phenomenon. They have been part of the history of most cities, particularly in the early years of urbanization and industrialization as populations boomed. Slums are generally the only type of settlement affordable and accessible to the poor in cities, where competition for land and profits is intense.

There are two main reasons why slums develop: population growth and governance.

#### Population growth

Countries around the world are urbanizing rapidly as more people migrate from rural areas to the cities and natural population growth continues to occur. Today, more than half the world’s population resides in urban areas. More than 90 percent of this urban growth is taking place in the developing world. Urban migration happens for a number of reasons:

- **The pushing and pulling forces of migration.** Some people migrate because they are pushed out of their place of origin by factors such as natural disasters or sustained ecological changes. Others are pulled to a new destination by better job prospects, education, health facilities, or freedom from restrictive social or cultural realities.

- **Low incomes from agriculture.** Most people in rural areas work in the agricultural sector, which is highly dependent on weather. Also, rural land is limited, its fertility sometimes low or declining, land holdings are small, farm debts are high, and many households have become landless. As a result, overall rural incomes are low.

- **Better job prospects.** In comparison with rural areas, urban areas offer dramatically increased job opportunities. In addition, because urban cultures are often less constrained than those in villages, cities can also offer greater prospects of upward social mobility.

- **People know what cities can offer them.** Most migrants make a deliberate choice to stay or leave in rural areas. Improved transport, communications and links with earlier migrants have all made rural populations much more aware of the advantages and disadvantages of urban life, especially regarding job opportunities and housing.

- **Urban migration is often a survival strategy for rural households.** Sometimes, rural households split into several groups located in different places—rural areas, small towns, and big cities—in order to diversify their sources of income and be less vulnerable to economic downturns.

### Governance

Another reason slums develop is bad governance. Governments often fail to recognize the rights of the urban poor and incorporate them into urban planning, thereby contributing to the growth of slums.

In addition, many countries simply cannot respond to rapid urbanization quickly enough. People are coming to cities far faster than the planning process can incorporate them. Often, they find their own land and build a shack before the government has a chance to learn of their existence.

The attitude of a government towards urbanization is also an important component. Some governments take a hostile approach to urbanization. They believe that if they provide urban services to the poor, it will attract urbanization and cause the slums to grow. The problem with this view is that very few people come to the city for water or services—they come looking for work.

In other cases, governments take more of a passive approach to urbanization. They either do not have the planning tools to deal with the rapid urbanization that is happening, or the tools in place are not sufficiently responsive to the reality on the ground.

### Location of slum development

Location of slums development in the city is anywhere and everywhere. Mainly it is directly related to workforce. Slum dwellers firstly prefer the location of land is nearer to the workplace and within the city. Then they prefer the land where basic amenities such as water are available and it should be near to the main transport network.
That is why slums generally develop near the industries, wholesale-markets, godowns, railway stations and even in residential areas. They generally use public-transport or slow moving vehicles such as cycle, rickshaws etc. because it is economical.

Primary indicators of slums
1. Population density – Population density of that area
2. Infrastructure – Accessibility to public services such as road, water supply, sewerage in that area
3. Income – Income of the residents living in that area
4. Social status – Social status of the residents living in that area
5. Construction material of houses – Construction materials used in the houses of that area
6. Legal aspect – Land ownership status in that area
7. Health and sanitation – Health and sanitation status of the houses in that area.

Roll of slums in the city

All cities have their slums and their informal settlements. Their extent, proportion and character vary not merely with income level but also with the socio-political or legislative environment and law-enforcement system. Ironically, it is not so much the absence of a legal framework and its application that leads to slums and informal settlements; its very presence can frustrate efforts to pre-empt and prevent their formation and growth.

Slums are not only unavoidable; they are a mark of success of a city. The formation of slums is an integral part of the process of growth and development of a city. Only in a static (stagnant?) city does the state and status of its constituent parts remain unchanged. This is not to say that each part of a city must go through a cycle of development, deterioration and renewal, but that at any given moment of time, there are parts that have seen better days, and parts that are being newly developed or renovated. The extent of deterioration is, of course, relative, and the worst "slums" of a city may still be better than most parts of many. The decline and renovation of some cities may be piecemeal and hardly visible on the outside or to outsiders, and an area may continue to be held in esteem even as properties within it are gutted and remodelled, while retaining their facades.

Need of slums

Just as slums and slum dwellers need cities to survive, so do cities need slums to flourish. With large numbers competing for work in cities, it is easier to pay low wages. However, a worker still needs to live, and without the informal settlements, the minimal acceptable salary would really hit the pockets and the profits of the rich.

Measures to prevent the development of new slums:

There are two main measures by which we can prevent the development of new slums.
1. Legislative measure.
2. Planning measure.

Legislative measure:- There are basic things a government can do to prevent new slums from developing. One is to recognize that urbanization is going to happen. Sometimes governments believe that adopting alternative policies, such as focusing on rural development, will stop urbanization. This approach is rarely effective.

Planning measure:- Once governments accept the reality of urban growth, the next step is to plan for it and determine where the new residents will live. Authorities should identify land and plan for its settlement even if money is not available for urban services. Once people settle on that land and feel that they have a right to live there, they will begin investing in it. Over time, the area will upgrade incrementally.

CONCLUSION

- Countries need to recognize that the urban poor are active agents and not just beneficiaries of development.
- Developing cities requires local solutions. Local authorities need to be empowered with financial and human resources to deliver services and infrastructure to the urban poor. Cities should draw up local long-term strategies for improving the lives of slum dwellers.
- Local governments should develop strategies to prevent the formation of new slums. These should include access to affordable land, reasonably priced materials, employment opportunities, and basic infrastructure and social services.
- Public investments must focus on providing access to basic services and infrastructure. Working with the urban poor, cities need to invest in housing, water, sanitation, energy, and urban services, such as garbage disposal. These services and infrastructure must reach the poor living in informal settlements.
- The transportation needs and safety concerns of a city’s poorest residents should be a high priority in planning urban transportation systems, which can expand the choices people have regarding where to live and work.
- Building codes and regulations should be realistic and enforceable and reflect the lifestyle and needs of the local community. This means, for example, that they may have to be flexible enough to allow housing that is built incrementally, out of low-cost materials and on small plots of land.

REFERENCES

[1] Census of India 2011- Circular No. 8

