Case Study of Slums : Ara

Shiv Kumar Singh
Lecturer of Geography, B.N.I. College, Indour Rohtas (Bihar) India.

Abstract: A case study of slum is an important area of research in geography . The development of slums have become a very significant problem in india and abroad . However , few works have been done exclusively on slum s such ; rather the tend to examine the issue as part of larger urban studies . There is as paucity of material on aspect such as the problems identifying delimiting slums and the related parameters which may help to asses their geographical characteristics as well as the problem of urban renewal in the context of spatial pattern and distribution of the slums within the city. In the present study the author proposes to make the geographical interpretation of the various processes of slum development and urban renewal and reconstruction. The city of ara has been selected as a case study. An attempt has been made to classify the slum areas of ara in to a number of categories based on qualitatively quality based on quantitative and quantitative parameters. The study is based on intensive field study selection of samples and analysis of data .The plan for the renewal of some slum areas has also been proposed.

GEOGRAPHICAL BACKGROUND:

The city of ara is situated on 84°.43'10" east longitude and 25°.33'35" north latitude. It is 22kms south of the ganges and 13kms, west of river sone . Ara is only 50kms from patana. The state capital ,98kms from the historic place of sasaram and 79 kms from Buxar .The national highway no. 30 and mainline of the east central railway pass through the city. Ara is the 7th largest city of bihar . It was the headquarters of old sahabad district since 1787 A.D . Its municipality was formed in 1865 A.D .The area of city is 30.97 sq/kms. Area has been a focus of administrative commercial activity in the western south bihar plain from the medieval Days . The physical character of the site has been the dominant factor in the growth and layment of the settlement throughout the ages its situation in agricultural belts helped it is grow as a chief collecting and distributing center of the region. The city is very old and is the most important urban center of bihar west of river sone . The growth of the city has followed the well known models of urban growth presently it is divided in to 32 wards .

The city of ara extends over an area of 3,136,32 hectares and has a population of 2,03,395 according to 2001 census figures in 1991 there were 1,57,082 persons .the population has increased rapidly and so has increased the density of population from 50 person per hectare in 1991 to 65person per hectare in 2001 . There is high concentration of population in the central area, while the peripheral areas are sparsely populated. The average level of literacy is 78.02 percent, while 85.80 percent of the males and 68.78 percent of the females are literate. Main workers constitute 19.87 percent marginal workers 1.61 percent and non workers 78,52 percent of the total population, among the workers cultivators constitute 2.44 percent agricultural labours 7.93 percent , household industrial workers 4.33 and other workers 84.29 percent of the total workers. Secondary and tertiary workers were highly concentrated in central part of the city.

IDETIFICATION OF SLUMS: The slums of Ara have been identified on the basis of certain criteria. These include density of houses,

density of population, accommodation density(persons per houses),types of houses, shortage of houses, per room occupancy , age of the buildings, etc. Physical condition of the area has been given primary importance , in the identification of slums. On the basis of these parameters , twenty slum pockets have been identified in Ara These have been classified into four categorise.

First category of slums has three slums, namely Khtira Mohalla , Moti Tola and Waliganj.In these mohhallas civic amenities like tap water , street light, drainage system etc. are in bad conditions . The second category of slums includes Chandawa, Dharahara, Mirganj, Nawada, Shivganj, Singhi and Tarimohalla. These are spread over 39 hectares, covering 27.08 percent of the slums of Ara. The third category of slums has 7 slums, namely Abarpur-Chik Toli, Anait, Bahiro, Balbatra, Bhalhipur and Moulabagh. These cover about 47 percent slum area of Ara , Pirpur, Pakari and Sital Tola are included in the forth category of slums. (fig. 1)

FACTORS OF GROWTH OF SLUMS:-
The slums of Ara have grown because of extreme overcrowding and poor physical condition of buildings in the older parts of the city and lack of planning in all parts. Apart from over-crowding, other problems are also associated with the slums of the city . These are unplanned and haphazard growth, lack of public utility services, and inclusion of rural pockets within the municipal limits and poverty and cultural backwardness. A special problem relating to the whole of Ara is the encroachment of open land and roads by beggars, vagrants and destitute. The existing problems of congestion, traffic bottlenecks and poor utility services are likely to multiply rapidly with the growth of population.

PROPOSED PLAN FOR SLUM AREAS: Planning for all slum pockets of Ara cannot be undertaken in a study like this. Therefore, two mohallas for the case study have been chosen. These sample Mohallas are Abarpul chik Toli (Kajitola)

and Nawada. Abarpul chiktoli Mohalla represents the third category of slum. It has been selected these people go to nearby fields and their children go to open drains flank for toilet. Therefore, the open surface drains serve the dual purpose of disposal of sullage and storm water. The problem of water logging is found in almost all parts of this area. The haphazard disposal of arbage and sewage on main streets and lanes and by-lanes creates insanitary condition.

A sample survey reveals that only 41.83 percent houses have pipe water supply. About 1.33 percent houses depend upon tube-well water and 56.84 percent houses have no water supply. This shows that a large preportion of people depend on public tube walls and public pipe water supply. Other amenities like electricity is not spread out all over the area. More than 38 percent houses have no electricity connection.

The density of population is 276.9 persons per hectare. This figure is not high in comparison to average density of slum dwellers in other areas of the town. The accommodation density is 5.20 persons per room. According to sample survey, more than 75 percent of the worker are angaged in trade, for planning because it is the worst area and is situated nearby the main commercial centre of Ara. Nawada represents the second category of slum. Nawada has been selected for planning because it is also one of the worst areas and is situated nearby Ara Railway station.

CASE STUDY OF ABARPUL CHICK TOLI AND NAWADA SLUMS:-Abarpul chick Toli slum area is situated towards eastern side of chowek and south of chouse-koilwar road near Ramgaria bride. The area is roughly 10 hectares.

The surface of the area is generally flat but western portion of the area is water-logged low land. The general slope is toward west and south-west. The drainage lines run parallel to the roads. Main storm drainage which   drains the area run along western boundary of the area. During the heavy monsoon the storm water gushing in the open drains

besides the main roads overflows and inundates to lanes and by-lanes. Sewers discharge suffrage and sewage. So, the condition is appalling. About 56.18 percent houses of this area have service latrines and 25.42 percent houses have no latrine.

Commerce and labour work, while more than 23 percent are secondary workers. About 47.58 percent people earn income upto 150/- per month, 43.22 percent people of this area earn an income between Rs 151 to 500 per month and only 9.22 percent earn above?. 501/- per month. It shows that more than 90 percent families come under low income group. It is Muslims dominated area. The lower castes of Hindus are also there but they are very poor.

The structural condition of houses shows that about 11.38 percent houses are good, 29.11 percent are fair (medium) and 59.1 percent are poor. It means that about 60 percent house are in dilapidated condition. Poor ventilation is also a problem. (Fig. 6.1)

This area is not marked by a heavy traffic. Chausa-Koilwar Road is the only main   and busy road. It is a pucca road. Except it, all roads, lanes and by-lanes of this area are kutcha. Lanes and by-lanes are 4 to 8 feet wide only. The problem of approach road is very acute in this area. Not Egan rickshaw can enter in the interior parts.

Nawada slums pocket: Nawada slums pocket is situated north of Ara railway station and it is a residential as well as partially commercial area. This slums area has sprawled-up between the station road in the east and K.G. road in the west. In the north this area is sprawled-up to west Nawada Mohhala. On the south it is delimited by Nawada street road and superintendent engineer canal office, Ara. The slums area is flanked by the planned colonies of club Road residential area and professor colony in the west and north- west respectively. It covers an area of 7 hectares witch is 1.86 percent of the total area of slums of Ara. It represent a slum of category second (Fig. 6.2) .

The general slope of this area is From north to south and north- west to south-east. This has resulted in chronic water-logging, particularly towards the south east of the area. The drainage lines run parallel to the roads. The drains of this area is open. During the heavy monsoon the storm water gushing in the open drains beside the main roads overflows and inundates the lanes and by lanes. A sample survey indicates that 65.6 percent houses have service latrines and 20.98 percent houses have no latrines. The open drains serve the dual purpose of disposal of swllage and storm water. Due to the absence of proper layout of streets in this area, no satisfactory storm drainage arrangement exists. The extreme insanitary condition, water-logging and open drains create the appalling condition of this area.

The sample survey shows that 60.15 percent houses have water supply. Only 37.89 percent houses have pipe water supply and 1.96 percent houses have tube-well water supply. Such data show that large proportion of population of this area depend upon public tube wells and public pipe water supply. Other amenities like electricity is not spread out all over the area. Only 28 electric poles and 26 public hydrants are there in this area. More than 35 present houses have no electric connection and at present there is no park or play-ground in this area.

The density of population of this area is 339.57 persons per hectare. This figure is very high in comparison to the average density of slum dwellers of the town. The accommodation density is 6-8 persons per room. This shows that the area is crowded but has degenerated owing to lack of planning. 58.96 percent of the workers are engaged in primary and secondary occupations and remaining 41.04 percent are engaged in tertiary occupations. Nearly 82.62 percent of the people have an earning of less than 500/- per month. More than 90 percent of the people are Hindus, out of with 80 percent belong to backward community and scheduled caste.

The structural condition of houses show that about 12.21 percent houses are good,

28.89 percent are fair (medium) and 58.90 percent are poor or bad. Houses are in dilapidated condition and were constructed without leaving any space for roads or gardens. Besides, the public utility service necessary for the growing population were not provided, new roads, sewers, drains, water supply, garbage, dumps etc. We're not constructed in proper way; and conservancy service not introduced, leading to the growth of extremely unhygienic condition in this area.

PLAN PROPOSALE: Under the short term schemes kutcha lanes are to be made metalled and five feet brick pavement are to be provided. Two 20 feet wide roads are to be constructed for the improvement of the circulation. For both residential areas underground drainage and septic latrines have been proposed. One commercial Centre is also proposed for each unit. Tap water supply is to be improved. For the purpose both public hydrant and house connection should be done on the initiative of the government. Dustbin boxes are also to be installed at needed sites.

The long term strategy is not to allow the slum to grow. For this purposes the built-up area is to be reconstructed and redeveloped. That can not be done easily. It is suggested to do it phase-wise. Highly dilapidated houses are to be identified first and they will be replaced by a better one. Such replacement will take longer time. No unplanned house is to be allowed to appear in the periphery of the slum. Instead of allowing the growth of slum or unplanned house, some areas may be taken for developing green belt. Though these programs need time, if they are done the benefit will reach the people.

CONCEPT OF NEW NEIGHBOURHOOD COLONIES: For improving the existing slum and for preventing other areas from becoming slum, new neighborhood colonies are needed. It should be of two types. The first type of people is the future population including immigrant. The population projection for Ara shows that the city will have a population of more than

2.5 lakh in the year 2011. Thus , there will be an addition of about 50000 heads over the figure for 2001 (2,03,395). The second type of people are those who will be shifted from the existing slums areas and will need new open spaces for accommodation. About 9.55 percent land of the total area of municipality is open space. A large tract of land situated to the extreme south, north and east of the city is open. These areas are available for the expansion of new neighborhood colonies.

The present tendency of urban development is to decentralize the urban population into different communities or neighborhood units. Perry saw the neighborhood units as ensuring that all residents were within convenient access to an elementary school, adequate common play places and retail shopping facilities. The size of the new neighborhood colonies is highly variable. Ebenezer Howard proposes 30,000 persons in a new neighborhood, Abercrombie 60,000, while in the plan of Chicago it varies between 4000 and 1,21,000, Robert Omen considered 800 to 1200 and James silk Buckingham trough it to be 10,000. Slarence stein thought that 8000 would be the size required to support an elementary school.

The master plan of Ara indicates that the total population of 15000 would be optimum for a complete neighborhood. A population quantum of 15000 is a convenient basic unit for determining the size of the neighborhood. This standard as envisaged for Ara may be taken as the base for proposing neighborhood colonies here. No details are being worked out, as the exact location of these neighborhood units would depend upon the master plan for Ara.

REFERENCES

1.   Mumford, L. (1961) : The city in history, London.

2.   Desai, A.R. and Pillai, S.D. (ed.) (1968) : Slums and urbanization, popular Prakash an, Bombay, p.

3.   Bose, A. (1977) : "India : The urban

*****