

Lack of Basic Infrastructures among the Slums of Midnapore Municipality, West Bengal in compare to Indian Scenario

Bikash Dutta¹, Sutapa Rath²

1. Department of Geography, K.D College of Commerce & General Studies, Midnapore

2. M.Phil Scholar, Vidyasagar University, Midnapore

Abstract:

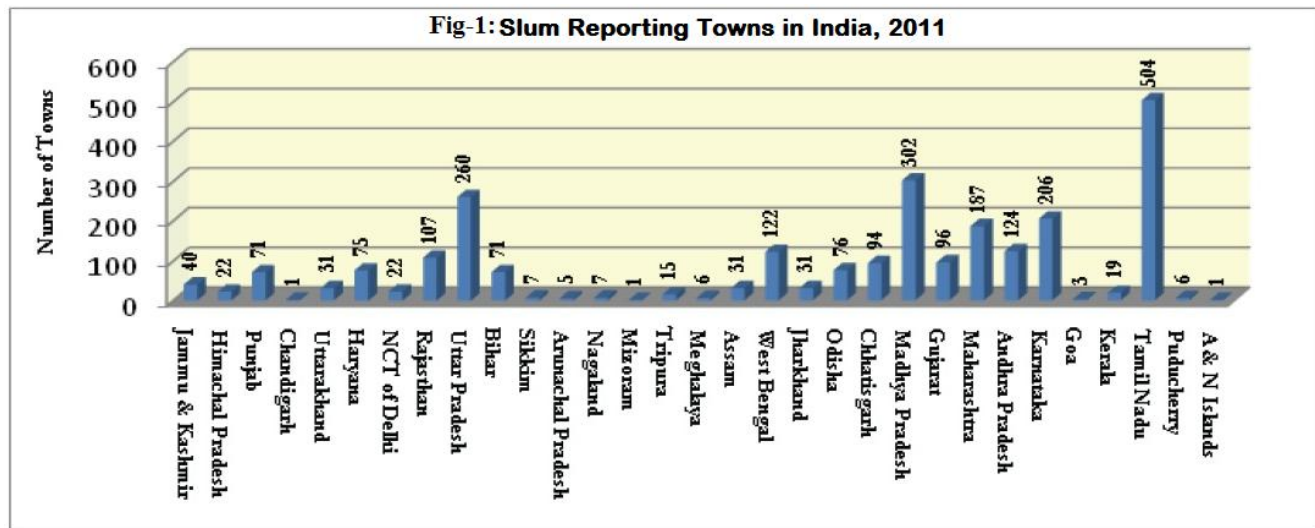
India is urbanising as well as increasing trends of the development of the slums. Slum population is increased about 3% in 2011 (26.31%) in compare to 2001 (23.5%) in India (census of India). Slum reporting town (89 to 122) with population in west Bengal is tremendously increased in 2011. Growth of slum population in small geographical space indicates the lack of basic infrastructure and social wellbeing which is recent focus of Government policy. In small town of West Bengal, the picture is so pathetic in respect to availability of basic amenities in the slum areas. Therefore, the study aims to explain the availability of basic infrastructures in the slum areas and to compare with Indian scenario of Slum's infrastructure. Data have been collected randomly from two hundred urban poor living in twenty slums (out of 185-slums) of 25-wards in Midnapore Municipality, West Bengal, by using a structured questionnaire and Census data (2001 & 2011) is used for comparison purpose. SPSS-20 software has been applied for representation of wide range of data at a glance followed by their interpretation.

Keywords: Slum, Urbanization, Poverty, Cross tabulation & SPSS-20.

➤ Introduction:

India is urbanising in terms of development of cities and small towns due to social and economic benefits. Accesses to drinking water, sanitation, health service, education opportunities are often outstandingly higher in urban areas which attract people from rural areas resulting over population within limited space. Over population exploited the limited resources and access of resources is far from their needs which eventually deteriorates the availability of basic infrastructures. So, slums development in general hallmarks of urban areas in India and Government has been introduced various types of development processes which are effectively run and at the same time counter effects are poverty, crime, sprawl, pollution, and health problems etc (Dutta, 2017).

India is urbanising as well as increasing trends of the development of the slums. Slum population is increased about 3% in 2011 census (26.31%) in compare to 2001 census (23.5%) in India. Slum reporting town with population in west Bengal is tremendously increased (89 to 122) in 2011. Growth of slum population in small geographical space indicates lack of basic infrastructure and social wellbeing which is recent focus of Government policy. In small town of West Bengal, the picture is so pathetic in respect to availability of basic amenities in the slum areas.



Source: Census of India 2011: Tables on Housing Stock, Amenities and Assets in Slums (From Ministry of Housing & Urban Poverty Alleviation Report, Govt. of India, 2013)

Conventionally slums were referred to as areas of housing which are ‘environmentally and structurally deficient’ (Govt. of India, 1988). Areas with buildings are ailing for human habitation characterized by ruin, overcrowding, defective arrangement of streets, and lack of open space, sanitation facilities etc. is called as Slum (1981 census of India, as per the Slum Area Act-1956). Census of India, 2001 define Slums are densely chock-a-block areas with population around 300 (60-70 households), living in congested, dense and detrimental environment. The housing infrastructure is mostly kutcha or semi-pucca without inbuilt sanitary or drinking water facilities. Urban slum dwellers migrate from rural areas and living into cities or town with the thoughts of better education, employment and a better standard of life but the present set of circumstances like as a picture of a nightmare for them. Slums, in most of the cases, are unauthorized settlements, which gradually build up along construction, drainage & waste material dumping sites, etc., where basic facilities like water, electricity, sanitation and health services are not properly set up. And housing is so deteriorated and substandard or as unwholesome as to be a menace to the health, safety, morality or welfare of the occupants (Rathor, 2003). Census of India-2011 define “all clusters of 20-25 or more households, having no roofs or non-concrete roofs, and not having any facility of drinking water, toilets or drainage will be considered as slums”.

➤ **Objectives:**

- ✓ To explain the availability of basic infrastructures in the slum areas.
- ✓ To compare the availability of basic infrastructures with Indian scenario of Slum's infrastructure.

MATERIALS AND METHODS

The sustainability of Slums' livelihood is an exigent issue of the present economy in India. Lack of basic infrastructures is not only problems in the slum of cities, but it is now expanding in every small town like Midnapore in India. For proper analysis and interpretation of this problem both primary and secondary data have been collected. The primary data have been breed through in depth field survey and relevant questionnaires for collecting the related information from households, mainly all categories of slum neighbourhoods. Purposive sampling has been adapted to some degree in choosing the opinion of those households together who are participated in group discussion personally. 20 slums (out of 185-slums) were randomly selected from 25-wards in Midnapore Municipality, West Bengal. From each selected slum, 10 households were again randomly selected. Some valuable data and relevant Information has been extracted from government and non-government statistical reports for comparison purposes. Some statistical and cartographic techniques along with SPSS-20 Software have been applied for drawing wide range of data at a glance followed by their interpretation.

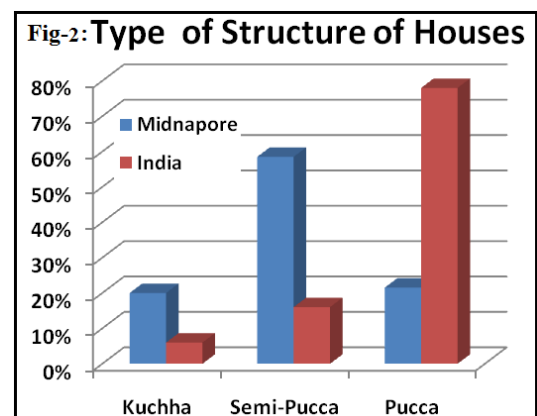
Result & Discussion:

Every household has a standard of living become manifest by imprint of their basic infrastructures i.e. housing circumstances, room density, water availability, lighting and toilet conditions, ownership of land or house and provision or location of socio-cultural institutions etc. Midnapore town, like many other class-I towns has a large slum population. By conducting household's survey, we demarcate so many problems attached with these poverty stricken slum dwellers in their daily life. Such problems are reveals in following discussion as given below:

1. Housing Infrastructures:

1.1 Type of House:

Out of 200 respondents, 20% respondents household have kuchha house, 58.5% semi-pucca and only 21.5% house are pucca. So, most of the household have semi-pucca house as an imprint of both rural and urban distribution. In compare to India, the housing conditions are not as good as the lack of Pucca houses in the slums of Midnapore town.



1.2 Materials and conditions of House or building:

Like low quality roof material the wall making material are also same. Maximum household of these area, we surveyed, used mud and bamboo as well making material of these type of dwelling units. Some households are used brick and mud as their wall making material. During rainy season these muddy wall has every possibility to collapse.

It is found that most of the house’s wall and floor constructed by brick and cement nearly 77% and 58.5% respectively, while mud contributed 20.5% and 28% for wall and floor respectively (table-2). It is also found that brick constructed floor is 13.5%.

Material for wall	Midnapore	India
Mud	20.5%	14%
Brick	77%	65%
Others	2.5%	21%

The roof making raw materials of these small settlement units is not so good to resist torrential rain or cyclonic wind. At about house’s roofed 71% by asbestos or tin or tile, 13% through thatched, 12.5% with RCC and only 3.5% by means of tarpaulin have made over their head. A good number of slum households of Brajakishore Polly (word no 17) and Kamarpara (word no-22) near Keranitola compelled to live under tripal (polythin cover) throughout the rainy season. These unfortunate people are even deprived from any type of municipal help. Besides, it is observed that 53% houses are in average condition, 34 % in underprivileged conditions and only 13% houses are under standard conditions. So, overall housing condition is not so good in compare to slums in India.

Material for roof	Midnapore	India
RCC	12.5%	49%
Asbestos/tin/tile	71%	42%
Tarpaulin	3.5%	1%
Thatched	13%	8%

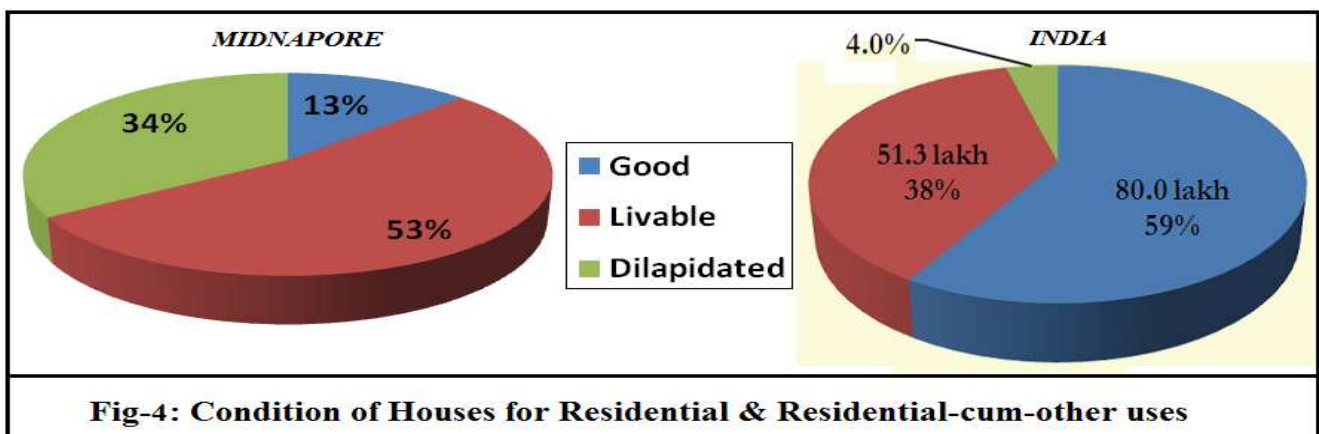
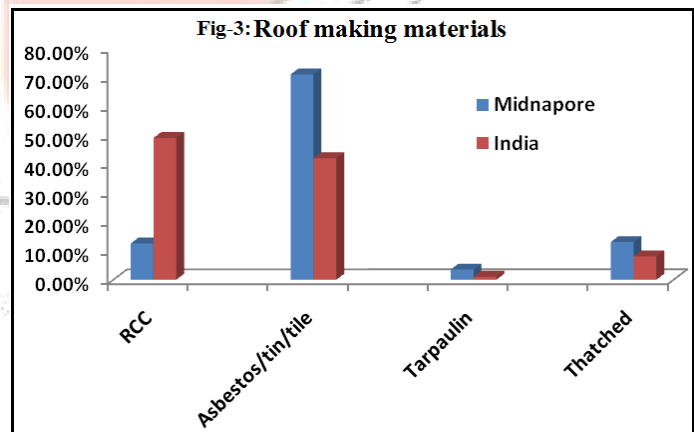


Fig-4: Condition of Houses for Residential & Residential-cum-other uses

1.3 No's of sleeping room and Room Density:

Maximum households of backward areas of the town, we surveyed, compelled to use a single room for their dwelling purpose. As they have to share a small room, generally it put forth a blockage against performing the desired job of each and every family member with in a similar period. Students are the worst suffers. They had to face a lot of problems if they desired to study late at night.

Most of the household's have 1-2 sleeping room almost 74%, 3-4 rooms nearly 20.5% and more than 5-rooms is very low nearly 5.5%. The average no's of room per households is 2.22 and standard deviation is 1.31, i.e. there is slight difference of sleeping rooms among the household because of 68% households have 1-3.5 rooms.

In case of room per members determined by room density, of the household, it is quite different from no's of sleeping room (Room density is calculated by dividing no's of sleeping room by total no's of members of the household).

For the most part of the household, no's of sleeping room per person is less than 0.50 nearly 78.5%, whereas 17.5% and 4% household have 0.50-1.00 and more than 1-room per person respectively. This situation indicates that indoor congestion and pollution much more prevails in the study area.

It is also found that some poverty gulfed families in Adibasipara and Rangamati, at the North-eastern and South-western part of the town, compelled to live with their domestic cattle due to poor accommodation.

1.4 Separate kitchen and bathroom:

It is found that 49.5% households have no separate kitchen and 67% households have no separate bathroom which is lower than average condition of India's slum population. Therefore, indoor air pollution and terrible sanitation conditions tremendously grasp the health condition of these slum populations.

1.5 Land and House Ownership:

Among all the housing related problems the most important is the land where these unfortunate slum dwellers live is not in their own possession. The dwellers of Kamarpara live over the land of previous

No's of sleeping room	Midnapore	India
1-2	74%	75%
3	20%	12%
>4	4.5%	9%
No Exclusive Room	1.5%	4%

Separate Kitchen	Midnapore	India
Has Kitchen	50.5%	68.66%
Does not have Kitchen (Inside the room)	49.5%	31.34%

Bathroom Facility	Midnapore	India
Yes	33%	67%
No	67%	33%

Land & House Ownership	Midnapore	India
Owned (Patta)	52%	70%
Rented	8%	26%
Any others	40%	4%

landlord. Maximum households of Kabardanga near Tantigeria at the western part of the town build up over the municipal land. So there is every possibility of being evicted by govt. or municipality at any time.

Every household have required a own house or shelter to minimize their living cost as well as for

their safe breathing, but in the study area, 50.5% household have no house tenure ship, only 46% have one house tenure ship and 3.5% have other house's tenure ship. In case of land tenure ship, 52% have a patta (revenue land), 25% households now under living on possession certificate land provision by municipality where 14.5% and 4% households living through encroachment of public and private land respectively. Though maximum of this slum dweller have no proper or legal records of the land over which they built up their dwelling units, inhabitants of Kamarpara, Gowalapara make an exceptional example. They escaped from other congested slums of the town forcefully or legally and they shared an ample land, situated at the central part of the Midnapore town.

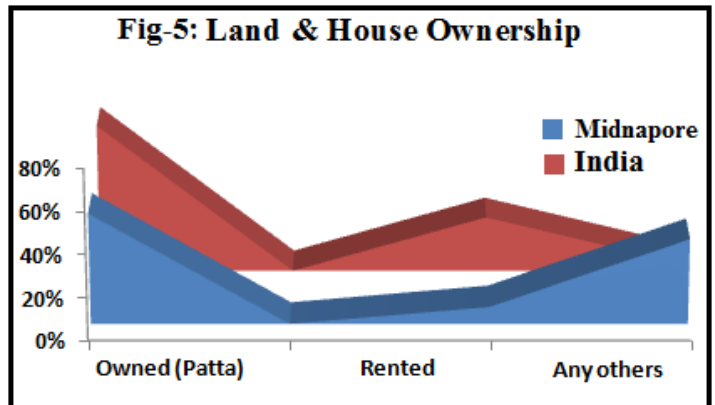
1.6 Pay rent for house:

It is noticeable that out of 200 households, 8% pay rent for their living in other house and 8.5% are living in house as a part of agreement. Most probably who paid rent for their dwelling migrated from villages for seeking employment or enjoy better standard of living.

2. Sanitation and Drainage Infrastructure:

2.1 Accommodation of toilet:

Insufficient accommodation of proper toilet is also a burning problem of these slum dwellers. Due to paucity of proper vacant land, municipality failed to construct sufficient number of toilets. As a result, 33.5% families have to share only a single toilet. In the slum brajakishore Polly at word no. 17, all most all the 65 households compelled to use two municipal toilets which is quite impossible. These municipal toilets are also not cleaned routinely. Besides municipal toilet, the slum dwellers of Kamar Para (word no.22) also build up some community toilets (3-4 families jointed) to avoid their toilet related problem and day to day jostling with their neighbour also. As there is simple land in occupancy of the inhabitant of this slum have a separate toilet for each family in which 21.5% flush toilet, 36.5% pit toilet and 10.5% have



Accommodation of toilet	Midnapore	India
Flush toilet	21.5%	79.3%
Pit toilet	36.5%	8.5%
Others	10.5%	3.1%
No facility/Uses open	31.5%	10.1%

others type of toilet system. 31.5% inhabitants used open land for toilet which has also a negative impact on environment in compare to India's average Slum's condition.

2.2 Sources of Drinking water and Purification Related Problem:

As far as most of the households are in town generally depends upon municipality water supply and in the study area 38.5% household's sources of drinking water is piped supply and 34.5% uses community tap in their own ward or dwelling site

(87%), while 17.5% household have private tap of drinking water in their own house (8%). It is also found that some household have a tube well nearly 9.5%. So, in order to drinking water availability, collection and supply, the overall situation somewhat developed in the study area.

Most distinguished feature of water related issue of this area in the improper distribution of municipal tap. Such as all these slums except Brajakishore Polly, Rangamati and Adibasipara (word no-17, 24 & 18) have provided a numbers of municipal tap (about a municipal tap per 10-12 households) where as in brajakishore Polly all about 60 households depends just on a single municipal tap. So this misdistribution of tap water is also a severe problem of these areas, as result suffering from severe water scarcity. Municipal tap or tube well is not in so enough to meet the needs of this poverty devoured victims of this area. In summer this problems attains its maximum limit.

But so as to purification of drinking water, the picture is rather poles apart. Only 26% household purify drinking water in which 14% uses water filter, 9.5% strain by cloths and 2.5% household boiling water for the purpose of purification. 74% household have yet not been concern about purification of drinking water even if water supply is as good as to some extent. Therefore, it may be wrap up that most of the household yet have not been apprehension about their health as they have lack of consciousness.

Table-9: Sources of drinking

Sources of drinking	Midnapore	India
Tube well & Well	9.5%	23.34%
Tap Water (Piped supply)	90.5%	74.12%
Others	-	2.69%

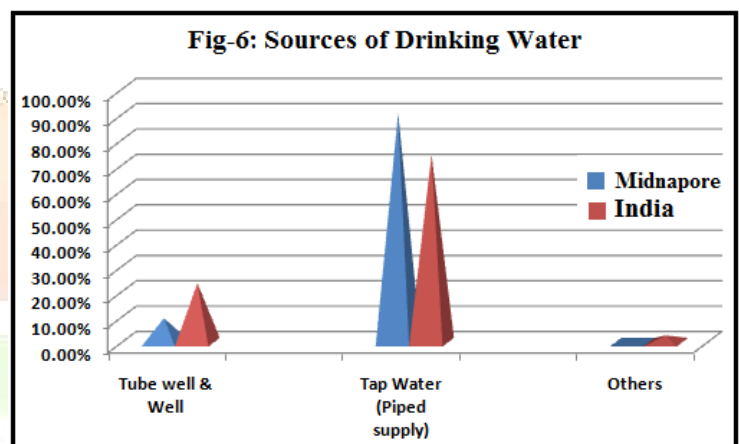


Table-10: Location of drinking water sources

Location of drinking water sources	Midnapore	India
Within the premises	8%	57%
Near the premises (<100 mtrs.)	87%	32%
Away from the premises (>100 mtrs.)	5%	11%

2.3 Sources of Lighting Related Problems:

The study reveals that 96% household have electricity and 8% household make use of kerosene for the purpose of lighting in their house. Apparently it is more practicable to developing sign. Few families have no electricity for their poverty. The lances of the slum plunged into darkness at every night there is no municipal electricity facilities as the people of this slums migrated from other areas and they have no proper occupancy over the land on which the live in, they have completely devoid from electricity service from WBSEB (West Bengal Electricity Board).

Table-11: Sources of Lighting

Sources of Lighting	Midnapore	India
Electricity	96%	90.5%
Kerosene	4%	6.2%
Solar Energy	-	0.3%
Any Others	-	0.4%
No Lighting	-	0.5%

2.4 Fuel Related Problems:

From the standard categorization of fuel for cooking, it is found that 36.36% households uses LPG, 11.91% household uses biogas, kerosene and electricity for cooking. In the modern age till 34.80% households uses wood for cooking and coal/lignite, charcoal uses 9.72% and 6.27% respectively. As far as some households are uses wood for cooking because of low economic stability.

Table-12: Fuel used for cooking

Fuel used for cooking	Midnapore	India
LPG	36.36%	51%
Biogas, Kerosene & Electricity	11.91%	14.5%
Coal/Lignite/ Charcoal/ Wood	50.79%	33%
Others	0.93%	0.30%

3. Education Related Problems:

Carelessness to education is the most common fact of this poor area. According these slum dwellers, as they have to toil day night to earn their bread, there is no such time as well as interest on education. The old aged persons, as we surveyed, are completely illiterate (use only thumb

Table-13: School or Institution available in the locality

School or Institution	%
Pre-school/AGNW	19.77
Primary school	50.57
High school	28.52
College	1.14

Source: Field Survey

impression where necessary) and young groups have gave up their studies after primary education. Young boys compelled to give their study for sake of searching job and to earn money. Through few are interested

Table-14: Distribution of Slums by Distance from primary School

	Distance from primary School (in Km)				
	<0.5	0.5-1	1-2	2-5	5 and Above
Midnapore	60.50	35	4.10	0.40	-
India (NSS 534-2009 Report)	52.9	33.7	10.9	2.2	0.3

their poverty does not allow them to continue their study. After primary education most of the girls forced to give up study as they have to enter into their married life. Sarba shiska avijan is not so popular in this area

for the indifferent role of the government about this. Though the mid-day meal programme in this area able to draw the attention of children of this area it leaves its negative impact also. According to some People of these areas, mid-day meal programme badly affected meritorious students of these areas as it spoils their concentration for study.

In the study area, 19.77% household have provision of preschool, 50.57% household have primary school, 28.52% and 1.14% household have provision of high school and college's facility in their locality respectively.

Carelessness to education is the most common fact of these poor areas. According these slum dwellers, as they have to toil day night to earn their bread, there is no such time as well as interest on education.

Conclusion & Policy Implications:

As slums are optical symptom of poverty, slum dwellers are explicitly worse off than non-slum dwellers. In general, the urban poor in each state and city are in the most disadvantaged position regarding all the indicators presented in this study, and the scale of the differentials for many indicators is very high. Living condition of urban Slums dweller is considerably poor in socio-economically according to the survey findings. Most of places where slum dwellers live are unhygienic. In rainy season they are more vulnerable to the diseases because most of the slums are in the low lying areas. These slums are not only congested places, but also have kuccha to semi-pucca houses with underprivileged condition, high room density, open sewerage and lack of private toilets etc. Wherever community toilets are available they are not properly maintained and as a result people resort to open defecation. Furthermore, still half of households with no house tenure ship, uses wood for fuel, less conscious about drinking water purification, superstitious, lack constructive thoughts and ambitions as well as deprived from most of central govt. and municipal poverty alleviation scheme etc are the major phenomenon of these slums. Therefore, high prevalence of diseases among poor households living in slums indicates leading unhealthy environment, which necessitate a variety of solutions and actions. While some actions require immediate implementation such as introducing social welfare schemes, some actions need to be taken on a long-term basis changing the negative attitude of the poor dwellers, general public and increasing accurate knowledge about poor communities. The required changes need to be reflected in policies and laws; attitude of the government, general public and service providers, NGO's; and different organization.

REFERENCES

- Agarwal S. Taneja S. "All Slums are Not Equal: Child Health Condition among the Urban Poor". Indian Pediatrics. Vol 12- March 17, 2005.
- Ben-Porath, Y. (1967). The Production of Human Capital and the Life of Earnings, *Journal of Political Economy*, 75(4), 352-356.
- Bhunia, S. (2008) "Access to basic amenities and its impact on environment in urban slums of paschim Medinipur", phd thesis, Vidysagar University,.
- Canabal, M.E. (1997). *Poverty Among Puerto Ricans in the United States*, Working Paper Series, No. 32, June. Julian Samora Research Institute.
- Census of India: <http://censusindia.gov.in/>; (2001 and 2011).
- CPRC (Chronic Poverty Research Centre) (2005). *Chronic Poverty Report 2004-2005*. A publication of Chronic Poverty Research Centre. Manchester: Institute for Development Policy and Management, University of Manchester.
- Dutta, B. (2017). *Study on Causes of Poverty among the Slums of Midnapore Municipality, West Bengal*. International Journal for Scientific Research & Development. Vol. 5, Issue 05, 2017. ISSN (online): 2321-0613
- Fitzpatrick, Kevin and Mark LaGory. 2000. 'Unhealthy Places: The Ecology of Risk in the Urban Landscape'. New York: Routledge
- Frankenberger, T. 1992. *Indicators and data collection methods for assessing household food security*. In *Household food security: Concepts, indicators, measurements. A technical review*, ed. S. Maxwell and T. Frankenberger. New York and Rome: UNICEF and IFAD.
- "India : Urban Poverty Report 2009". Ministry of Housing and Urban Poverty Alleviation, Government of India.
- International Institute of Population Sciences (IIPS), Ministry of Health and Social Welfare, Government of India. (2009) "Health and living conditions in eight urban cities." Based on NFHS-3 2005/6. Deonar, Mumbai, India
- Intra Family Distribution of Dietary Energy - an Indian Experience. ... Government of India (GOI) (1988) Seventh Five-Year Plan: Mid-Term Appraisal.
- Jalan, J. and M. Ravallion (1998). *Determinants of Transient and Chronic Poverty: Evidence from Rural China*, World Bank Working Paper No. 1936, June.
- Jappelli, T. (1999). *The Age-Wealth Profile and the Life-Cycle Hypothesis: A Cohort Analysis with a Time Series of Cross-Sections of Italian Households*, Working Paper, No. 14, January. Centre for Studies in Economics and Finance.
- Krieg, J.L. (2001) "WHAT IS URBAN POVERTY?." Conexion mosaico. Calle Ollita

Mz.2 Lt. 10b. Colonia Tepalcates. Chimalhuacán, Estado de México: MÉXICO
C.P.56334-CR 56331

- Mincer, J. (1970). The Distribution of Labor Incomes: A Survey with Special Reference to the Human Capital Approach, *Journal of Economic Literature*, 8(1), 1-26.
- Mitlin, Diana (2003). *The Economic and Social Processes Influencing the Level and Nature of Chronic Poverty in Urban Areas*, CPRC Working Paper No 29. Chronic Poverty Research Centre, Institute for Development Policy and Management, University of Manchester.
- NEC, NSO and IFPRI (2001). *The Determinants of Poverty in Malawi, 1998: An Analysis of the Malawi Integrated Household Survey, 1997-1998*, An Unpublished study. The National Economic Council (NEC), Lilongwe, Malawi, The National Statistical Office (NSO), Zomba, Malawi, and The International Food Policy Research Institute (IFPRI), Washington, DC, USA, June.
- Oduro, D. Abena and Ivy Aryee (2003). *Investigating Chronic Poverty in West Africa*, Working paper No.28. Manchester: Chronic Poverty Research Centre, Institute for Development Policy and Management, University of Manchester.
- Okojie, C.E.E. (2002). *Gender and Education as Determinants of Household Poverty in Nigeria*, Discussion Paper No. 2002/37. United Nations University: World Institute for Development Economic Research.
- <http://www.planningcommission.nic.in/plans/planrel/11thf.htm>,2013
- Rakodi, C. 1995. 'Poverty Lines or Household Strategies?' *Habitat International*, 19, 4: 407-426.
- Rathor, A (2003). *Slum Dwellers: Curse on Development*, 1st edition, ISBN: 81-7625-383-9, Sarup & Sons publication, 2003, New Delhi.
- Reimers, F. (1999). Educational Chances of the Poor at the End of the XX century, *Prospects*, 29(4), 1-13. Roberts, Bryan. 1994. 'Informal Economy and Family Strategies' *Journal of Urban and Regional Research*, 18, 1: 6-23
- Sen, Amartya K. 1981. *Poverty and Famines*. Oxford: Clarendon.
- Sen, A.K. 1987. *Poverty and Famine: an essay on entitlement and deprivation*. London: Clarendon.
- . 1984. "Rights and capabilities." In Amartya Sen, ed., *Resources, Values, and Development*. Oxford: Blackwell.
- UN Human Settlement Program (2003). "The Challenge of Slums: Global Report on Human Settlements."
<http://www.UN-HABITAT.org/pmss/getPage.asp?page=bookView&book=1156>
- Urban Health Resource Center. (2007) "Standard of living index based reanalysis of National Family Health Survey (NFHS-3): India and state reports."

International Institute for Population Sciences (IIPS) and ORC-Macro,
Mumbai, India.

<http://www.uhrc.in/name-CmodsDownload index-req-getit- lid-92.html>

.....1992. 'Poverty in India: Concepts, Research and Reality' in Harris et al (eds.) *Poverty in India: Research and Policy*. Bombay: Oxford University Press.

.....1997. *Inequality Re-examined*. Cambridge, Massachusetts: Harvard University Press.

.....2013. 'State of Slums in India: A Statistical Compendium', - Ministry of Housing and Urban Poverty Alleviation , National Buildings Organisation, Government of India

