# Urbanization and Growth of Slums in Mirik Town: with Special Reference to Demographic and Housing Characteristics.

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Abstract: Rapid urbanization brought about by migration and natural growth has resulted in the multifarious problems in the towns and cities all over the world. One such problem is the emergence of slums. Almost 1 billion people or 32% of the world's urban population live in slums and if no serious action is taken, the number of slums dwellers worldwide is projected to rise by 2030 to about 2 billion(UN-Habitat 2001). In fact slums are the characteristics of the mega cities but nowadays it is emerging and rapidly growing even in small and medium sized towns of the hill areas. Mirik town with a total population of 11487 has the highest percentage of slum population (36.95%) among the urban centers of hill areas of Darjeeling district. Mirik, being a small sized hill town, the causes of the slum formation and its expansion are remarkably different from the ones that are applicable to other such slums in metropolises and industrial towns of the nearby plains.

## **INTRODUCTION:**

Slums are omnipresent in almost all the urban areas of the world; however their nature, extent and conditions vary from one urban area to another. Almost 1 billion people, or 32% (UN-Habitat 2001) of the world's urban population live in slums, the majority of them is in the developing world. Without concerted action on the part of Municipal authorities, National Government, Civil society actors and the international community, the number of Slum dwellers is likely to increase in most of the developing countries, and if no serious action is taken, the number of Slum dwellers worldwide is projected to rise by 2030 to about 2 billion (UN-Habitat 2001).

In India the data on Slums is available from Registrar General and Census Commissioner of India (R.G.I) and National Sample Survey Organization (N.S.S.O). As per the Census of India, 2001, 640 towns spread over 26 States and Union Territories have reported the existence of Slums. It is reported that 62 million people consisting of 2 million households are living in Slums. 9 states have not identified any Slums. According to both the N.S.S.O. report (2002) and Census of India, 2001 that every seventh person in the urban India is a Slum dweller.

The Slum Area (Improvement and Clearance) Act 1956 enacted by the Government of India, defines Slums as "any predominantly residential area, where the dwellings which by reasons of dilapidation, overcrowding, faulty arrangement of design, lack ventilation, light or sanitary facilities or any combination of these factors which are detrimental to safety, health or morals".

#### **OBJECTIVE AND METHODOLOGY OF THE STUDY:**

The objective of the present study is to find out demographic, economic, housing characteristics and amenities and facilities present in the slums of the Mirik town. The present study is based on a sample survey of the slums. Two stage sampling technique has been followed. In the first stage, 7 slum pockets has been randomly been selected out of the total 9 pockets and then from each selected pockets slum households have been randomly selected proportionate to the size of the slum households.

# Study Area:

The District of Darjeeling lies between 26°31'N and 27°13'N latitude and between 87°59'E to 88°53'E longitude. The total area is about 3,149 sq.Kms. It is bounded on the north by Sikkim, in the south by Bangladesh, West Dinajpur, in the west by Nepal, Bihar and on the east by Bhutan and Jalpaiguri district. The hills cover 1/5th of the total area of Darjeeling district. In 1988, Darjeeling Gorkha Hill Council, an autonomous body to look after the interest of the hill people of the 3 sub-divisions had been established by the Central Government with the concurrence of the State government, which was scrapped later and Gorkhaland Territorial Administrative setup was established in 2011.

At present there are 4 Municipal towns and 1 Census town in the Hilly areas of the Darjeeling District.

Name of the Urban Center	Town Status	No. of Slum Households
Darjeeling (U.A)	Municipal	2581
Kalimpong	Municipal	1582
Kurseong	Municipal	1742
Mirik	Municipal	817
Cart Road	Census Town	Not identified

Source: District Census Handbook 2001 and Respective Municipal Offices

Out of these 4 statutory towns, Mirik is the youngest of all and is in the early phase of urbanization but surprisingly has the highest percentage of slum population, almost 36.95% of its urban population live in slums and even surpasses Darjeeling town (13.45%), which is the district headquarter and is also one of the oldest Municipal towns in India.

Mirik is a picturesque newly emerging town nestled in the Himalayas and falls in

Kurseong Sub division of Darjeeling district. The name Mirik comes from Lepcha word 'Mir-Yok' which means a place burnt with fire. Mirik town started as a rural market center for the surrounding Tea gardens and villages.

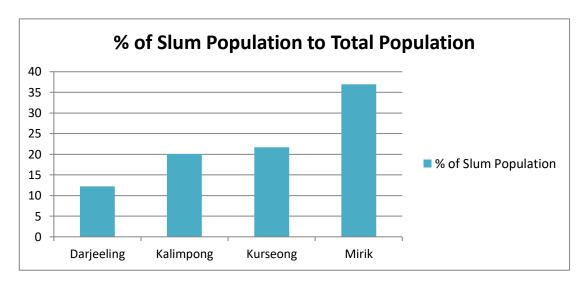


Figure (i) Source: Respective Municipality Offices (2011).

In year 1969 Tourism Department of West Bengal Government started acquiring 335 acres of land from surrounding Thurbo Tea Garden and in 1979 Sumendu Lake and Day center was inaugurated. From 1980s onwards with the steady growth of tourism a new chapter in urbanization in Mirik started. Krishnanagar which falls under ward no 5 and lies around the lake developed due to rapid inflow of tourism with construction of hotels, restaurants and financial centers like banks.

# **Urbanization and Origin of the Slums in Mirik Town:**

Municipality of Mirik was established in 1984 but it stared functioning only after 1991. It was in year 1991 when the areas were transferred to the Municipality from the Block Development Center. Within a span of 20 years two highly urbanized areas were developed in Mirik Town, i.e. Ward no 2, which is the Market center and remnant of old rural bazar and Ward no 5, which is krishnanagar whose development can be attributed to growth of tourism and which emerged as a Posh area with hotels, restaurants, banks and high class residential dwellings. Whereas, all the other wards have still managed to retain their rural characteristics but are undergoing the process of urbanization gradually.

At present there are 9 wards in Mirik with the total population of 11487 persons (2011) and out of these 9 wards all the wards except ward no 2 and 5 have slum pockets with the combined population of 4245 persons. Altogether there are 9 slum pockets in Mirik town which are spread over different wards (except ward no 2 and 5) with a combined population of 4245

persons. Ward no 3 has the highest number of slum pockets while all the other wards have 1 slum pocket each.

The slum pockets of the town can be classified into two broad categories on the basis of their origin.

- Those pockets which have originated from preexisting villages, and
- Those pockets which have originated from the labour colonies of thurbo tea estate.

Table Showing Different Slum Pockets of Mirik Town.

Sl. No	Ward No	Name of the Slum Pocket		Population
1	1	Nize Gaon Bustee		468
2	3	Upper Mirik Bustee		416
3	3	Rato Matey busty		312
4	3	Thana Line Bustee		374
5	4	Upper Deosey Dara Bustee		364
6	6	Upper Kawley Bustee		442
7	7	Rasdal Gaon Bustee		546
8	8	Mahendra Gaon Bustee		780
9	9	Sorasalay Bustee		543
	1		Total	4245

Source: Mirik Municipality 2011

All over the world the single most important factor which has been attributed for the formation of slums is migration. Almost all the urban centers of the world have experienced formation and proliferation of slums due to migration. Right from the <sup>n</sup>Burgess model of Concentric Zones (1923) to successive writers of later period, all have accounted migration for the formation of slums.

<sup>n</sup>Ernest W. Burgess, 'The Growth of the City: An Introduction to Research Project' 1923.

Mirik town being in the earliest phase of urbanization has witnessed formation of slums due to expansion of urban area rather than migration. Field surveys have revealed the fact that slum pockets in the urban center have not encountered any in migration from other areas and even intra urban migration is very insignificant and migration as whole whether rural to urban, inter urban or intra urban has not played any role in formation and growth of slums. The areal expansion of Mirik town resulted in engulfing preexisting villages and labour colonies of Thurbo tea estate and these preexisting villages and labour colonies which stilled retained their rural characteristics were identified as slums in year 2001 by the municipality.

# **Demographic Characteristics:**

The density of population in Mirik town as per 2011 Municipality report is 1767 per sq.km and the decadal growth rate of population was 30.18 in (1991–2001) and 25.66 in (2001-2011). The literacy rate in Mirik town is higher than the national average i.e. 74%, to 59.5% respectively.

The sample size of 5% of slum households were surveyed on the basis of door to door survey using questionnaire method, altogether 7 slum pockets were chosen for the survey and they were grouped into two categories in respect to distance from the main road. The following characteristics were identified from the field study.

#### **Income:**

Three income groups were identified among the slum dwellers from the field survey are, medium income group (Rs100000-Rs199999/annum), low income group (Rs50000-Rs99999/annum) and very low income group (Rs10000-Rs49999/annum). 55% of the total households fall under low income group category and almost 28% of the households fall under very low income group, whereas only 16.6% of the households fall under middle income group category.

#### **Household Size:**

When the family sizes are grouped into 3 classes keeping the income as the base, it is found that almost 53.33% of the households fall within the family size category of 4-5 members, with in this size 56.25% of the households fall in low income group. It has been found out that only 5.88% of the households in very low income category have family size of more than 6. Whereas, 20% of the households in middle income group have family size of 6 and more than 6.

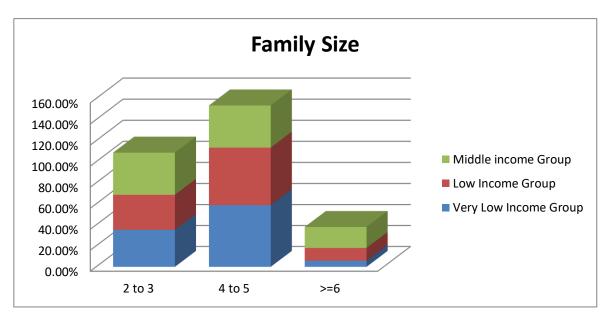


Figure (ii) Source: Field Survey

# Literacy:

Eight educational levels have been identified and the sample population has been grouped on the basis of that and those levels are as follows,

- (i) Literates
- (ii) Below Primary level
- (iii) Primary Level
- (iv) Below High School Level
- (v) High School Level
- (vi) Higher Secondary Level
- (vii) Graduate Level
- (viii) Post Graduate Level.

The literacy rates of the slum dwellers of Mirik town is higher than the National average, 82% of the slum dwellers are literates and 11% of them are post graduates. Generally, the literacy rate for female population is lower than male population i.e.48% and 52% respectively, but only 25% of those are gainfully employed. When we group the sample population on the basis of literacy according to different age groups, it seems that slum dwellers have positive attitude towards education, because the younger age groups have 100% literacy rate i.e. age

group between 5 to 29 have 100% literacy rate and tends to decrease from 30 years onwards, whereas 59+ age group population have only 42% of literates (fig iii).

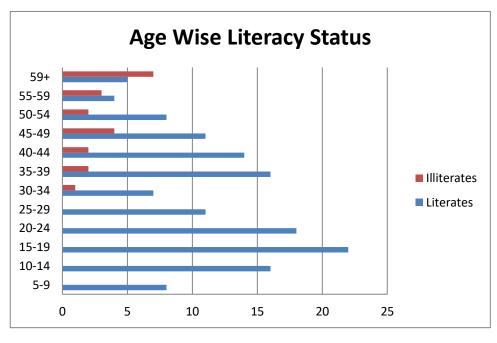


Figure (iii) Source: Field Survey

# **Occupation Structure:**

The slum dwellers of different slum pockets are engaged in different occupations like agricultural labours, tea garden labours, teaching and different services. These different slum pockets which have originated from preexisting villages and labour colonies have still though retained some of the rural characteristics in terms of occupation pattern but are gradually undergoing changes and the change in occupation pattern is more evident in those slum pockets which are close to the main road than those which are away from it (fig iv).

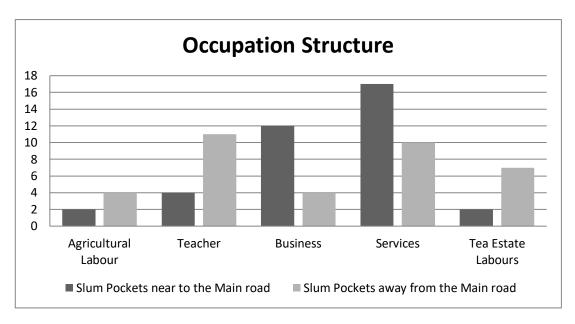


Figure iv Source: Field Survey

## **Others:**

Male-female composition of the surveyed households shows little variation with 48.7% of population comprises of females and 51.3% of males.

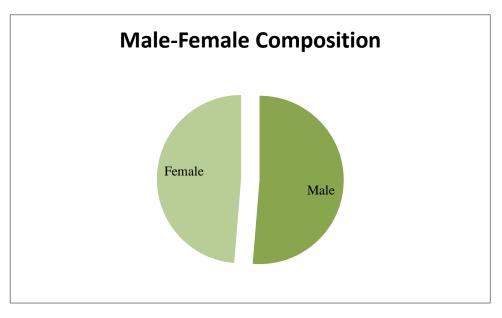


Figure v Source: Field Survey

Nepali is the most dominant language spoken among the slum dwellers. All the slum dwellers are Nepali speaking population. Regarding the faith professed by the slum dwellers, 66.66% of them are Hindus followed by Buddhists (26.66%) and Christians (6.67%). 46.66% of the slum dwellers are generals, 35% of them are S.T. followed by O.B.C.s (28.33) and S.C.s is few (6.67%).

# **Housing Characteristics:**

The housing conditions and neighbourhood conditions in hilly areas not only depend upon income but are also influenced by the nature of the slope and accessibility. Gradient of the slope and accessibility not only play an important role in influencing housing types and sites but also determines the availability of different facilities like water supply, street lights, garbage disposal, etc.

## **Nature of House:**



Mirik town as a whole has been developed over three categories of slope i.e. gentle 1:10, moderately steep 1:5 and steep 1:3. When the types of houses are grouped into 3 classes keeping the slope as the base, it is found that almost 37% of the houses are found in moderately steep slope zone and 35% of the houses are located in steep slope. 63.33% of the total houses are pucca in nature. In the gentle and moderately steep zone 71% and 68% respectively have pucca houses, whereas, only 47% of the total houses of the steep zone are pucca in nature. The majority of the kutcha(27.27%) are located in moderately steep zone. Majority of the houses in the slum pockets of Mirik Municipality are unplanned in nature (86.6%).

Keeping income as the variable influencing housing conditions, it is found that very low income group have only 17.66% of its total houses with walls made up of bricks and cement and

29.42% have mud walls, followed by wood (41.14%) and tin and wood (11.78%). 100% of the houses in the middle income group have walls made up of bricks and cement.

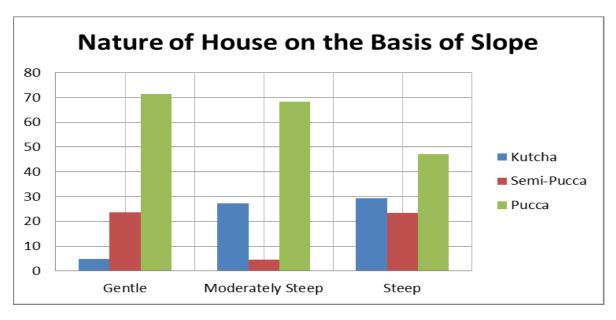


Figure vi Source: Field Survey

## **Number of Stories:**

When the number of stories of houses is grouped into 3 classes keeping the slope as the base, it is found that 67% of the houses 1 storied and are found in steep slopes. Houses having more than 3 storied are found only in gentle and moderately steep areas.

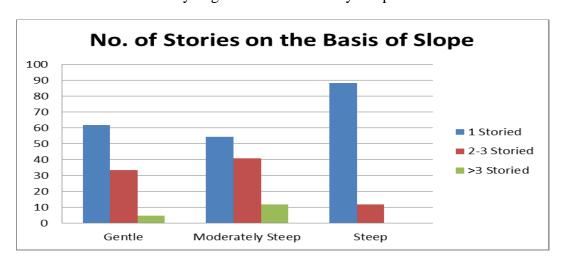


Figure vii Source: Field Survey

#### **Number of Rooms:**

Slums are generally characterized by large sized family and one or two roomed houses. In the surveyed slum pockets only 1 household has 1 roomed kutcha house with 3 family members. Only 12% of the households have 2-3 roomed houses, 56.6% of households have houses with 4-5 rooms and 30% of the households have rooms more than 6. Middle income groups generally have rooms more than 6 and their family size also tends to be large i.e. 6 and above, very low income groups live in 2-3 roomed houses.

#### **Wall Conditions:**

Keeping income as the variable influencing housing conditions, it is found that very low income group have only 17.66% of its total houses with walls made up of bricks and cement and 29.42% have mud walls, followed by wood (41.14%) and tin and wood (11.78%). 100% of the houses in the middle income group have walls made up of bricks and cement.

#### **Roof Conditions:**

Roof types also vary with the income level. Only 17.62% of the houses in very low income group have R.C.C. roofs, whereas, 58.87% of the houses have tiled roofs and 23.51% have asbestos roof. In low income group category 9.10% of houses have asbestos roof and 78.78% of the houses have R.C.C. roofs. 100% of the houses in the middle income groups have R.C.C. roofs.

#### **Kitchen and Toilet Conditions:**

87% of the surveyed slum households have separate rooms for kitchen while the rest 13% have rooms which double as bed room as well as kitchen. 3 categories of kitchen have been identified during the survey i.e. Kutcha, Semi-Pucca and Pucca. 30% of the kitchens are Kutcha in nature, 62% of the households have pucca kitchen where as only 8% of the kitchens are semi-pucca in nature. 43.3% of the kitchens are separate out of which 50% are kutcha, 11.5% are semi-pucca and 38.5% are pucca. 56.7% of the kitchens are attached and 10% of those are kutcha, 6.66% are semi-pucca and 83.33% are pucca in nature.

All the surveyed households have single toilets out of which 21.66% are kutcha and are built away from the house and are made from locally available building materials like bamboo and sometimes polythene sheets are also used. Most of the households (99%) located in slum pockets which are far from the main roads have toilets which are kutcha in nature.

#### **Door and Window Conditions:**

All the households have used locally available materials for making doors, wood and bamboos are often used for making doors in the hills. When the households are grouped according to the income levels into different groups, all the households falling in the middle income groups have doors made from wood whereas with the decrease in the income level there is also increase in use of bamboo for making doors (fig. viii).

# **Door Conditions**

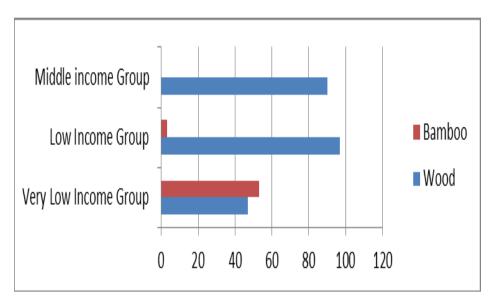


Figure viii Source: Field Survey

Five materials have been used to make windows and the quality of materials also vary with income level (fig ix)

## **Window Conditions**

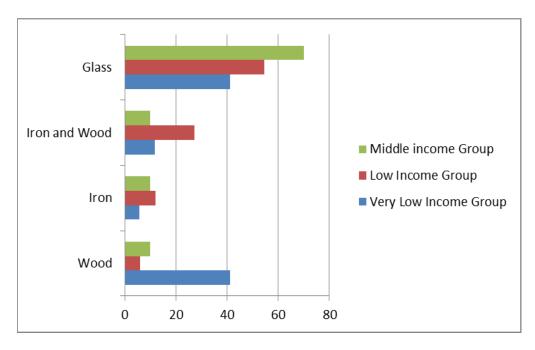


Figure ix Source: Field Survey

## Source of Drinking Water and Disposal of Garbage:

When slum pockets are grouped according to the distance from the main road, the various basic municipal facilities tend to decay with the increase in distance as inaccessibility increases with distance in difficult hilly terrain.

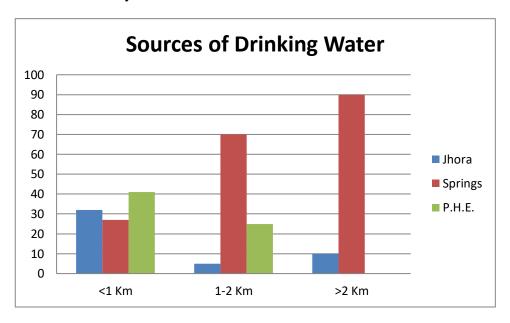


Figure x Source: Field Survey

Those slum pockets which are near to the main road (within a radius of 1 km) receive more facilities than those which are away from the main road (more than 2 km). Regarding water supply, there main sources of water supply have been identified in Mirik town, i.e. jhoras, natural springs and P.H.E. supply. Though P.H.E. supplies water regularly yet their services are confined only around those areas which are near to the main roads or to the market center, their services fade away as the inaccessibility increases, even in those areas where P.H.E. supplies water, it is not enough and people fend for themselves from jhoras and natural springs. These jhoras and springs run dry during the summer season and aggravate the problems of the people. The municipality uses vans to collect solid wastes in Mirik town and these vans can reach only those areas which have wide roads and people living in those areas where roads are narrow and slopes are steep, they tend to throw garbage along the roadsides and in jhoras, thereby polluting them and making them unfit for use as source of water.

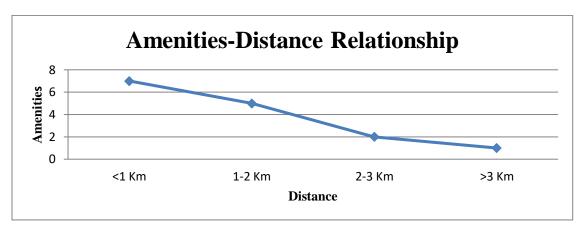


Figure xi Source: Field Survey

The various amenities present in the different slum pockets of Mirik town, like community halls, street lights, water taps, etc. all tend to decrease with the increase in distance.

## **Conclusion:**

Mirik as compared to other urban centers in the district is very new and has been experiencing rapid growth since the last two decades, but incidentally has the highest percentage of the slum population than the other towns in the district. Though, the causes for the growth of slum pockets in Mirik are different from the factors which have operated and are operating in those urban centers. Rapid areal expansion has led to development of numerous slum pockets in Mirik. Since Mirik is in its earliest phase of urbanization therefore its chances of correcting the problems arising out of urbanization like growth and proliferation of slums is very good. Therefore, concrete steps must be taken by the municipality from the very beginning. Building by laws must be implemented very strictly by the municipality. Special officers can be appointed by the municipality to look after the sanitation of the slum dwellers. Various housing projects and slum welfare schemes of both the central and state governments must be implemented as soon as possible as it has only been implemented in two slum pockets and has covered only 30% of the slum households. Priorities and potentialities of the slum dwellers must be identified for eg. bamboo basket making and weaving has been found out to be known by many slum dwellers therefore small scale industries and cottage industries could be established in the slum pockets. Fair price shops have to be located within the slum pockets. Basic municipality facilities must be extended even to those areas which are not easily accessible and far. Since most of the slum dwellers fend water themselves from jhoras and springs which are rain fed and run dry therefore rain water harvesting can be introduced. The various slum pockets of Mirik town can be categorized as 'slums of hope' and if supervised and developed properly, will contribute a lot to economic and social growth of the town.

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