ABSTRACT

The term “Slum” has been defined as a physically deteriorated area where economically poor human beings try to live an organized life of their own. The study area is Siliguri Municipal Corporation. Siliguri is located in Darjeeling district of West Bengal. The Siliguri Municipal Corporation lies between latitude $26^0 41^/N$ to $26^0 46^/N$ and longitude $88^0 23^/E$ to $88^0 28^/E$. Siliguri is located on the banks of the Mahananda river and spread over an area of 48.3 square kilometers. Siliguri Municipal Corporation comprises of 47 wards. Out of 47 wards, there are 14 wards which spread over adjacent Jalpaiguri district and the rest fall in Siliguri sub-division of Darjeeling district. The Mahananda river flows through the middle of Siliguri and has bifurcated it into two, namely north-western and south-eastern segments. According to 2011 census out of 47 wards in Siliguri Municipal Corporation (SMC) only 36 wards have slum population . There are 154 notified slums & 33 non notified slums identified in Siliguri Municipal Corporation. Total number of households of 154 notified slums is 35134. The total population in these slums is 161876. Among them 78162 (48.29%) are females. The remaining, 83714 (51.71%) are males . In total population scheduled caste population constitute 39.52% (63973) & scheduled tribe constitute 10% (16188) of total slum population.

Siliguri is one of the fast growing urban center of West Bengal . Due to rapid growth of population, transport & communication, industrial activities & job opportunities there is inflow of labour from the surrounding areas & neighbouring states, as a result of this inflow there is growth of unauthorized settlements which effect the existing Land Use pattern of the city. In 1991 Siliguri was a Municipality It consist of 30 wards only . Out of 30 wards only 16 wards had slum population. Total number of slums of 16 wards were 64 . Total slum population was 54958. From the above total it can be inferred that the number of slums as well as slum population of Siliguri Municipal corporation is increasing rapidly over the year.

In 2001 the number of slums increased to 154. The per decadal variation (1991-2001) of number of slums is 140. Siliguri Municipal Corporation was incorporated in 1994. some parts of Jalpaiguri & Darjeeling district was included in Siliguri Municipal Area. The number of wards also increased . The number of wards of Siliguri Municipal corporation increased to 47 from 30 wards. The total number of slums in 47 wards became 154 . The data supplied by Poverty Allevation (U.P.E) cell of SMC

showed 154 slums as notified slums . The total slum population of 154 slums in 2001 was 153589 & the growth rate i. e. per decadal variation (1991 -2001) of slum population is 179. In 2011 the total number of slums of Siliguri Municipal corporation (SMC) increased to 187 from 154 slums in 2001 . The total number of notified slums is 154 & non-notified slums is 33 in 2011. The growth rate i.e. per decadal variation (2001-2011) of number of slums is 21.43 percent. The slum population increased to 175411 in 2011 from 153589 in 2001, The growth rate i.e. per decadal variation (2001-2011) is 14% . Comparing the Land use Map of 2004 and 2018 it is found that the percentage of increase in industrial and recreational land is very less during the period (2004-2018) but the area under residential land has increased tremendously. This is due to increase in population. The area under open space has decreased from 12.52 Percent in 2004 to 7.75 Percent in 2018 mainly due to encroachment of the area by unauthorized settlements of urban poor. Karl Pearson's coefficient of correlation shows that there is a negligible correlation between Areal growth rate and population growth rate with r value 0.067 which is statistically insignificant. There is a moderate correlation between Areal growth rate and Household growth rate though it is statistically insignificant with r value 0.054.With increase in area the household and population also increases. It is observed from the Land use Map also that there is decrease of open spaces as the urban poor encroach the open spaces and make households there. The areal growth rate table shows that the slum area is increasing rapidly as more people are encroaching the open areas. The population and households are also increasing rapidly.

The sex ratio of surveyed slums varies between 743 to 1032 females per thousand males. It is found that Sraban Nagar of Ward 18 and Vivekananda Colony slum of Ward 7 has sex ratio more than 1000 females per thousand males. Among the surveyed slums it is observed that Vivekananda Colony slum has highest sex ratio 1032 in Siliguri Municipal Corporation. It is observed that lowest sex ratio is found in Sitala Para slum (743) of Ward No 31. Intra state migration is higher than inter state migration. Maximum number of slum dwellers have migrated from the surrounding districts. Intra state migrants constitute 39.04 Percent. It is also found that 0.56 Percent are residential households in the surveyed slums. Regarding reason for migration it is found that majority (26.4 Percent) migrated for job in SMC. It is found that among the surveyed females 66.67 Percent are married. The average family size of slum households in India is 4.7 where as the average family size of

surveyed slum households in Siliguri Municipal Corporation is 5.2 which is more than the National Average. The chi-square value is 60.64 at 0.05 significance level which shows there is a significant relation in educational status of slum dwellers with family size. So we can say education is related with family size of slum dwellers. It is found that among the surveyed slum population 39.72 Percent are literates and 60.28 percent are illiterates.

Among social groups highest percentage of population belongs to scheduled caste i.e. 33.21 percent. Majority of the slum dwellers live in Kutcha houses which comprises 82.30 percent. Pucca houses are built by those whose source of income is high. Majority of the surveyed households age are found less than 5 years i.e. 87.36 percent. It is found that of the total 1852 surveyed population 1010 (55 percent) respondents are earning and 842 (45 percent) are not earning. Majority of the households (53.65 percent) monthly income ranges between Rs 2500 to Rs 5000 and 21.35 percent households monthly income is below Rs 2500. The study reveals that the poorer the households the probability of having less assets are high. Low cost assests like utensils are present in almost all houses but high cost assets are owned by households having little high income. Expenditure pattern of slum dwellers depends on income, size of household and fooding habit. The study reveals that expenditure pattern is not fixed. It changes from event to event. It is found that food and rice together represent 43 percent of total household expenditure. The chi-square test shows that only income variable of socio-economic characteristics of slum dwellers have relationship with the house occupied.

Regarding sources of drinking water it is found that out of the total surveyed households only 17.70 percent access water from private sources and 82.58 percent access water from public sources. There are three different ways of access to toilets namely shared latrines, own toilets, and public community toilets. In absence of toilet, open defecation is widespread. Only 21.07 percent of households had toilet facilities. The remaining people use hanging latrines or practice open defecation. 40 percent households have hanging latrines, 32 percent use Pit latrines and 28 percent use sanitary latrines. Only 5.9 Percent respondent dump waste in fixed places, 78.36 percent reported no fixed place for dumping waste, 6.47 Percent dump waste in pot, 5.9 Percent dump waste in other places and only 3.37 Percent dump waste in SMC dustbin. The percentage of dumping waste in SMC dustbin is very low as SMC dustbin are located far form the households . It is found that majority of the slums

have no internal roads. So SMC trucks have problem in going inside the slums. For this SMC dust bin are low. About 76.97 Percent households reported about non existence of drainage facility and only 23.03 Percent households reported about existence of drainage system infront of their households. About 14.32 Percent households reported about open drains infront of their house. Regarding distribution of internal roads within slums 70.79 Percent households reported that there are no internal roads within slums. About 10.67 Percent households have non-motorable pucca, 8.99 Percent have non-motorable Kutcha, 3.93 Percent have motorable Kutcha and only 5.62 Percent households are connected with motorable Pucca.

From the field study it is found that although street lights are there but majority of the households fail to take electricity connection. It is found that out of 356 households 64.04 Percent had no electricity connection and only 35.96 Percent have electricity connection in their houses. For analyzing the Respondent's satisfaction level with loaded factors like public institutions, public utilities etc Likert scale technique is used. It is found that the percentage of dissatisfaction is highest among the respondents with each loaded factors. The chi- square statistic proves that there is significant correlation in the level of residents satisfaction with infrastructural facilities in the slums.

Out of total 1852 respondents 1716 (93 Percent) were affected by diseases. The basic sources of treatment of disease were hospitals, health centre, clinics, chemist shop etc. Slum dwellers mostly went to hospital (40.09 Percent) followed by health centre (29.95 Percent) and chemist (10.78 Percent) for treatment of disease. According to duration and severity of disease, health facilities are selected by the studied slum dwellers. About 33.46 percent respondents preferred to go to qualified doctors, 17.03 Percent perfered to go where medicine is available and 15.93 Percent is seen to choose nearness of health facilities. The studied slum dwellers have given 1st position for qualified doctors.It is found that only 4.55 Percent of the respondents were not patronizing health care facility. The reason for not patronizing health facilities were lack of money, to maintain confidentiality , religious barrier etc. The health workers who visited slums distributed different health materials to the people in the area in which they work. It was noted that 38.76 percent of households had been visited by the health workers. Majority of the respondents (52.90 percent) reported health workers distributed health materials. Antenatal care (ANC) is the care of women during pregnancy. This care is given after conception and continuous throughout

pregnancy. The aim is to achieve healthy mother and child at the end. It is found that 37 percent of pregnant women visited ANC more than 3 times followed by 35 percent women who visited 3 times. About 10.53 percent women never visited ANC during pregnancy. It was found that 89.47 percent of women respondents who were pregnant received ANC and 10.53 percent did not receive ANC. Out of total 600 married women 418 (69.67 percent) women were having children. Respondents reported four places of delivery namely Matri Sadan, Govt Hospitals, Nursing Home and Own residence of respondents. About 56.46 percent women opted Govt Hospitals , 21.53 percent own residence , 20.10 percent Matri Sadan and only 1.91 percent Nursing Home for child delivery. This study reveals that due to poor socio economic condition majority opted Govt Hospitals as delivery charges are very normal. Only in complicated cases respondents have gone to Nursing Home for child delivery. Regarding family planning method it is found that less than 50 percent of the respondents in selected slums use family planning method. It is found that out of total 1852 studied population 455 (25 percent) were children. 54.73 percent of children in studied slums were not fully immunized. Majority of the respondents reported they don't know vaccine is needed (58.63 percent). Regarding immunization of children it is found that majority (82.98 percent) of the children had Polio immunization. Followed by BCG (68.79 percent) , Measles (56.74 percent) and DPT (53.90 percent). The chi- square test proves that Environmental and socioeconomic factor affect the health condition but physical factor has no affect on the health condition of slum dwellers.

For slum improvement in Siliguri Municipal Corporation various scheme have been launched like IHSDP, ILCS, HUP, Gitanjali, HFA, SJSRY, NULM, NUHM. In IHSDP schemes, main criteria was slums should have land titles. As a result many slums were excluded from this scheme. The largest slum Sraban Nagar was also excluded from the scheme. As a result out of 154 notified slums only 94 slums were included in this scheme. The study also reveals that slums where dwelling units started work is still incomplete. The ILCS scheme has eradicated all dry latrines and manual scavengers but the practice of open defecation is still there among the slum dwellers. The EST&P scheme has provided skills to unskilled urban poor. NUHM scheme has improved the health of slum dweller to some extent but practice of family planning method is still less among the slum dwellers.