

## **CHAPTER-VIII**

### **SUMMARY OF FINDINGS, CONCLUSION AND SUGGESTIONS**

#### **8.1: SUMMARY OF FINDINGS**

The present chapter summarizes the findings of the primary survey on living conditions of slum dwellers in Siliguri Municipal Corporation area which are analyzed in the preceding chapters and also gives necessary suggestions for improvement of their living conditions.

The study comprises of eight chapters.

**Chapter-I** is the introductory part of the study. It includes the statement of the problem, a brief description of the Siliguri Municipal Corporation area, objectives of the study, significance of the study, research questions, hypotheses, research methodology as how the research has been conducted, the statistical tools that has been used, the chapters in which the study is divided and the limitations of the study.

In **Chapter-II** reviews of various literatures have been done and it is revealed from the studies that in India as well as in other developing countries the living condition of the slum dwellers are in an appalling state. The slum dwellers are mainly the migrants who have come to live in the slums of cities in search of employment or by the attraction of urban infrastructure. Some slums have grown up due to resettlement and eviction. The condition of migrants from villages to urban slums become pathetic as prices the migrants pay for goods and services are generally higher than in the rural areas, kinship, family which support the rural poor daily and in difficult circumstances does not exist in the urban area.

The slums are mostly illegal settlement and lack of tenure security is a problem. The houses in the slums are made of mud, plastic sheets and bricks depending on the financial condition of the slum dwellers. –Space” is found to be a major problem in the slums and the slums are generally overcrowded. Due to lack of space inside their

houses, most of their daily works are done outside, e.g. cooking, washing, stitching, studying etc.

There is problem of water scarcity in the slum areas. There is generally a single water tap connection in slums given to a group of households to be shared in common.

The slums generally lack proper sanitation and drainage facilities. Private toilets almost do not exist in the slum area and most of the slum dwellers defecate in the open. The drainage facility is also almost non-existent in the slum area.

Most of the slum dwellers work in the informal sector and earn low income. The slum dwellers live in poverty and are in debt.

Unsanitary condition results in high incidence of communicable diseases in the slum. The slum dwellers do not get proper health care facilities from government hospitals due to their weak referral system and ineffective outreach.

The level of education of slum dwellers is low. The drop out in slums is high as the children are engaged in household work or paid work in the informal sector.

The research gap has been identified.

**Chapter-III** reveals the living condition of slum dwellers of India, West Bengal and Siliguri Municipal Corporation Area in particular using secondary data sources.

In India the total slum population as per 2011 Census is 6,54,94,604 of which 3,39,68,203 (51.9 percent) are males and 3,15,26,401 (48.1 percent) are females. The decadal growth of slum population is 25.1 percent. There is an increase in literacy rate among the slum population to 77.7 percent in 2011 from 72.2 percent in 2001. The work participation rate in slums increased to 36.4 percent in 2011 from 33.1 percent in 2001. The number of slums has decreased from 56,311 in 1993 to 33,510 in 2012 but the number of slum households has increased from 5.9 million in 1993 to 8.8 million in 2012. According to 2012 NSSO report among the total 33,510 slums existed in the urban areas of India, of which 13,761 are notified and 19,749 are non-notified slums.

It is noticed that proportion of notified slums decreased in India. In 2012 the average slum size is 263 households in India. In 2012, 44 percent of slums are situated on private land and 54.7 percent slums are situated on public land but the proportion of

slums situated on private land is increasing and that of slums situated on public land is decreasing.

In 2012, the majority (59.6 percent) of houses have pucca structure and there is increasing trend of pucca structure houses in the slums of India since 1993.

In the slums of India taps are the main source of drinking water but tube well or bore hole as source of drinking water increased from 16 percent in 2002 to 20.4 percent in 2012.

There was no electricity connection in 25 percent slums in India in 1993. This proportion came down to 6.5 percent in 2012.

Proportion of slums in India with no drainage facility decreased from 31.6 percent in 1993 to 30.9 percent in 2012. In respect of underground drainage system, which is the best drainage system among the other types of drainage systems prevailing in the slums of India, the proportion of slums with underground system of drainage gradually increased from 8 percent in 1993 to 12.9 percent in 2002 to 16.8 percent in 2008-09 and to 18.6 percent in 2012.

Proportion of urban slums in India with problem of water logging declined from 60 percent in 1993 to 46 percent in 2012.

In India the proportion of slums with no latrine facility declined from 54.4 percent in 1993 to 31.3 percent in 2012. Septic tank or flush system of latrine increased from 35.1 percent to 52.7 percent in 2012.

In majority of slums in India garbage disposal is arranged by the government. The proportion of slums where arrangement of garbage disposal rests with government agencies increased from 51.7 percent in 1993 to 61.8 percent in 2012.

The proportion of slums with pucca roads within the slums in India increased from 46.5 percent in 1993 to 66.1 percent in 2012. Proportion of slums in India with pucca motorable approach roads to the slums is in majority compared to other types of roads; the proportion of slums in India with pucca motorable approach roads to the slums increased from 68.6 percent in 1993 to 71.4 percent in 2012. In 2012 in 98.4 percent slums nearest motorable road were within the distance of 1 kilometre (km.).

In 2012 the proportion of slums having a government primary school within one km. at the all-India level is 87.7 percent and rest 12.3 percent slums are situated at a distance of more than 1 km from a government primary school. In 2012 at the all-India level 47.6 percent slums are situated within a distance of 1 km from a government hospital or health centre.

The area of the study is the slum area of Siliguri Municipal Corporation which is situated in the state of West Bengal. The total slum population of West Bengal is 6,418,594 (males: 3,321,700 or 51.8 percent and females: 3,096,894 or 48.2 percent). The total number of slum households is 1,391,756. Literacy rate of 81.4 percent in the slums of West Bengal in 2011 is higher than all-India slum literacy rate (77.7 percent). Work participation rate in slums of West Bengal in 2011 is 36.5 percent; for males the work participation rate is 56.6 percent and that for females it is 15 percent.

In 2011 Census of India: West Bengal have majority (79 percent) of slum households with permanent or pucca houses. Highest proportion (24.7 percent) of slum households in West Bengal has household size 4. Highest proportion (48.7 percent) slum households have one room only. Highest proportion (55.7 percent) of slum households uses tap water for purpose of drinking. Highest proportion (51.7 percent) of slum households have source of drinking water within the premises. The highest proportion of slum households (43.8 percent) has open drainage facility for waste water outlet; there is no drainage facility in 31.3 percent slum households. Majority (84.6 percent) households have electricity as main source of lighting facility in the slums of West Bengal. Highest proportion of slum households (49.6 percent) use fire-wood, crop residue, cow dung cake, coal, lignite or charcoal as fuel for purpose of cooking.

According to NSSO 2012 report major proportion (59 percent) slums at the all-India level is non-notified slum which is 98 percent in Orissa, 97 percent in Bihar, 75 percent in Maharashtra, 70 percent in Gujarat and 68 percent in West Bengal. In West Bengal the proportion of notified slum is 32 percent and this proportion is below the national level (41 percent).

In 2012 Andhra Pradesh (79.9 percent) has the highest proportion of slums with majority of pucca houses whereas Bihar (2.9 percent) has the lowest proportion of such

slums. The states of West Bengal, Maharashtra, Uttar Pradesh, Gujarat, Odisha and Bihar have slums with majority of houses with pucca structure below the all-India level (59.6 percent).

In 2012 Tamil Nadu has the highest proportion of slums (97.3 percent) using tap water for drinking and Bihar has the lowest proportion of slums (4.6 percent) using tap as source of drinking water. In West Bengal highest proportion of slums (69.1 percent) use tap as major source of drinking water although this proportion is below the all-India level (71.4 percent) followed by 26.3 percent slums using tube wells or borehole, 4.3 percent using water of other source for purpose of drinking and 0.3 percent slums using unprotected well as major source of drinking water.

Tamil Nadu (95.2 percent) has the highest proportion of slums having electricity for both street light and household use whereas Bihar has the lowest proportion (16.0 percent) electricity for the purpose in 2012. Rajasthan has the highest proportion (26.8 percent) slums with no electricity connection. In West Bengal the 70.4 percent slums have electricity connection for both street light and household use which is above the national level of 67.6 percent. 3.4 percent of slums in West Bengal have no electricity connection which is below the all-India level of 6.5 percent. The condition of electricity facility is in a good position in West Bengal though it is lagging behind a few states.

In 2012 the states with proportion of slums without any drainage facility above the all-India level (30.9 percent) are Chhattisgarh, Odisha, Gujarat, Uttar Pradesh, Rajasthan and West Bengal. In West Bengal the highest proportion (31.0 percent) slums have no drainage facility. The drainage facility available in slums of West Bengal is lagging behind.

In 2012 Madhya Pradesh has the highest proportion (78.5 percent) slums where neither the slum nor the approach road usually waterlogged due to rainfall whereas Bihar has the lowest proportion (4.1 percent) slums where neither the slum nor the approach road usually waterlogged due to rainfall. Chhattisgarh has highest proportion (85.4 percent) slums where the slum including the approach road is usually waterlogged due to rainfall and Odisha has the lowest proportion (9.2 percent) of such slums while in West Bengal

majority (57.7 percent) slums have neither the slum nor the approach road usually waterlogged due to rainfall and it above the national level (54.3 percent).

Uttar Pradesh has the highest proportion (66.2 percent) of slums where garbage is disposed off daily while Odisha has the lowest proportion (8.1 percent) of slums where garbage is disposed off daily in 2012. Uttar Pradesh, Chhattisgarh, Tamil Nadu, Madhya Pradesh, Maharashtra, West Bengal, Gujarat and Karnataka have slums where garbage is disposed off daily above the all-India level (56.5 percent) in the same year. In 4.4 percent of slums at the national level frequency of garbage disposal falls in "other" category where garbage is disposed off not even once within 15 days. West Bengal has the highest proportion (8.5 percent) of such slums among other states.

Karnataka has the highest proportion (84.7 percent) of slums and while Odisha has the lowest proportion (9.9 percent) of slums that have garbage disposal system which is arranged by Municipality or Corporation of the town or city. The states having slums with no arrangement of garbage disposal above the all-India level (26.8 percent) are Bihar, Odisha, Gujarat, Rajasthan, Uttar Pradesh, West Bengal and Chhattisgarh which implies poor condition of garbage disposal system in these states.

In highest proportion (32.6 percent) slums at the all-India level most residents use their own latrines; Madhya Pradesh has the highest proportion (59.3 percent) of such slums Bihar has the lowest proportion (0.3 percent) of such slums. In West Bengal proportion of slums having most residents using their own latrines is low at 18.9 percent of slums and it is lower than the all-India level. In the highest proportion (32.5 percent) slums of West Bengal most of the residents use Public or Community toilets without payment. Thus slums in West Bengal are lagging behind in respect of provision of own latrine facilities in the households.

Chhattisgarh has the highest proportion (94.6 percent) of slums that pucca road or lane or constructed path within the slum; Odisha has the lowest proportion (30.0 percent) of such slums. 70.3 percent slums have pucca road or lane or constructed path within the slum in West Bengal and the proportion is higher than the all-India level (66.1 percent). The slums of Andhra Pradesh, Bihar, Odisha, Madhya Pradesh, Karnataka, Chhattisgarh have motorable approach road or lane or constructed path to the slum above the all-

India level (78.3 percent). Andhra Pradesh, Bihar, Odisha, Madhya Pradesh and Karnataka have more than 90 percent slums with motorable approach road or lane or constructed path whereas West Bengal has 70.1 percent slum with motorable approach road or lane or constructed path but it is below the national level. In respect of motorable approach road or lane or constructed path to the slum West Bengal is lagging behind.

The highest proportion of slums having distance from nearest government hospital or health centre less than 0.5 kilometres is in Madhya Pradesh (40.3 percent) and in West Bengal proportion of such slums which is 10.6 percent is below the national level (20.3 percent) in 2012. In Bihar there is no slum where the distance from nearest government hospital or health centre is less than 0.5 kilometres. The distance from nearest government hospital or health centre is within 0.5 to 1 kilometre in 56.1 percent slums in Tamil Nadu, only in 7.8 percent slums in Gujarat; in West Bengal the proportion of such slums is 34.1 percent, the highest proportion in West Bengal. In 23.8 percent slums in West Bengal distance from nearest government hospital or health centre is 5 kilometres and above which is also above the all-India level (11.5 percent) and other states having such slums are Bihar, Gujarat and Uttar Pradesh.

The distance from nearest government primary school is less than 0.5 kilometres in 94.4 percent slums in Bihar whereas proportion of such slums is 46.4 percent in Maharashtra. Bihar, West Bengal, Chhattisgarh, Odisha, Karnataka, Madhya Pradesh and Gujarat have slums from which distance from nearest government primary school is less than 0.5 kilometres above the all-India level (59.3 percent). In major proportion (83.7 percent) of slums in West Bengal distance from nearest government primary school is less than 0.5 kilometres.

Water supply condition improved in the last 5 years prior to 2012 in the slums the proportion of which is 77.3 percent in Chhattisgarh, 74.2 percent in Bihar, 67.3 percent in Madhya Pradesh while in West Bengal it is 47.8 percent and the proportion of such slums is above the national level (42.8 percent). Deterioration of the condition of water supply in West Bengal is 5.8 percent and this level is above the national level (3 percent).

The proportion of slums where there was improvement in drainage system above the national level (33.4 percent slums) in the last 5 years prior to 2012 are in the states of Karnataka, Madhya Pradesh, Bihar, Maharashtra, Rajasthan and Tamil Nadu. In West Bengal in majority (58.8 percent) of slums there is no change in the drainage system and in 18.9 percent slums the drainage system improved which is below the national level.

In 2012 improvement in condition of road within the slum during the last five years was in more than 50 percent slums in the slums of Karnataka, Tamil Nadu and Maharashtra; more than 70 percent slums improved in the slums of Chhattisgarh, Madhya Pradesh and Bihar. In West Bengal in 36.8 percent slums there was improvement in condition of road within the slum during the last five years which is below the all-India level (47.6 percent).

The proportion of slums in the states where the condition of approach road to the slum improved in the last five years are 79.5 percent in Chhattisgarh, 74.9 percent in Karnataka, 70.4 percent in Tamil Nadu and 62.1 percent in Rajasthan and these proportions are above the national level (53.2 percent). In West Bengal the proportion of such slum is 36.8 percent which is below the all-India level. In majority (54.6 percent) of slums in West Bengal there is no improvement in the condition of approach road to the slum in the last five years.

In 88.7 percent slums in Bihar, 81.9 percent slums in Chhattisgarh and 68.3 percent slums in Madhya Pradesh electricity facility improved during the last five years. In only 34.2 percent slums of West Bengal which is also below the national level (37 percent) electricity facility improved in the last five years. Level of deterioration in electricity facility in the last five years is low, it between 0 to 1.6 percent in the states.

Improvement in street light facility in the last five years in above 50 percent slums took place in the slums of Madhya Pradesh (65.0 percent) and Karnataka (60.6 percent). In 40.6 percent slums in West Bengal there is improvement in the condition of street light which is above the national level (37.1 percent). In 57.3 percent slums in Bihar the street light facility deteriorated which implies that condition of street light facility is poor in the slums of the state; in West Bengal in 3.7 percent slums which is slightly

below the national level (3.8 percent) street light facility deteriorated. The proportions of slum where the street light facility neither existed earlier nor exist now during the last five years is 13.1 percent in West Bengal and the proportion of such slums are above the national level (10.5 percent).

In 2012 improvement in latrine facility during the last five years in more than 50 percent slums took place in the states of Chhattisgarh (61.2 percent) and Karnataka (56.0 percent); in West Bengal (32.8 percent) the improvement in the latrine facility is only slightly above the national level (32 percent). Latrine facility neither existed earlier nor exists now during the last five years and proportion of such slums is above 50 percent in Bihar (87.5 percent) and Odisha (50.6 percent) and this reveals the poor condition of latrine facility especially in the slums of Bihar. In 14.6 percent slums of West Bengal latrine facility neither existed earlier nor exist now during the last five years which is below the national level (17.2 percent). Deterioration of latrine facility in the last five years is high in the slums of Madhya Pradesh (31.9 percent). There is no deterioration in the latrine facility in the slums of West Bengal in the last five years.

In majority of the slums there is no change in the garbage disposal facility during the last five years which is 74.3 percent in Tamil Nadu, 73.8 in Rajasthan, 55.4 percent in Gujarat and 54.3 percent in West Bengal in 2012 and it is above the national level (50.4 percent). In West Bengal the proportion of slums where the garbage disposal facility neither existed earlier nor exists now is 17.9 percent which is above the national level (13.6 percent); in Bihar the proportion of such slums is 74 percent. This suggests that the Bihar has poor garbage disposal facility.

As in Census 2011, Siliguri Municipal Corporation has the third highest slum population (1,22,958) in West Bengal. Kolkata Municipal Corporation has the highest slum population (14,09,721) followed by Asansol Municipal Corporation, Siliguri Municipal Corporation, Haora Municipal Corporation, Durgapur Municipal Corporation and Chandannagar Municipal Corporation. Slums of Siliguri Municipal Corporation occupies the fifth position among the slums of six Municipal Corporations in respect of literacy rate. The literacy rate (74.8 percent) in 2011 in the slums of SMC area is low in

comparison to the literacy rate in the slums of India (77.7 percent) and West Bengal (81.4 percent).

In **Chapter-IV** the employment and income condition of slum dwellers of Siliguri Municipal Corporation area is analyzed.

Among 911 slum dwellers in Total (Inner and Outer slums combined) slum area though highest proportion (26.9 percent) of slum dwellers are below 14 years of age and are not taken into consideration as workers or non-workers for not belonging to the working age group. 20 percent in the slum area are unemployed (i.e. persons above 14 years of age not engaged in any paid occupation and also excluding housewives) of which majority (56.6 percent) are female. Among 434 slum dwellers 26 percent are unemployed in Inner slum where as among 477 slum dwellers in Outer slum 14.5 percent are unemployed. Work Participation Rate in the total slum area is 50 percent; Inner slum: 47.3 percent and Outer slum: 52.7 percent. Work Participation Rate is higher in Outer slum compared to Inner slum area.

36.5 percent slum dwellers at present are engaged in paid occupation. The majority of the slum dwellers work in informal sector. Among 911 slum dwellers who are in paid occupation the highest proportion 9.1 percent work as labourers (both skilled and unskilled) which include porter, sweeper, sales woman, shop assistant in ration shop, cloth shop, optical shop, medicine shop, furniture shop, hardware shop and flower shop, agent of tourism company, worker in a company or factory like plastic company, bottle company, flour mill, phenyl & bleaching factory, press, tyre company, nursing home, restaurant and hotel, storehouse of wheat and rice, sweet meat factory, photo lamination shop and garage. 5.9 percent slum dwellers are engaged in manufacturing and repairing and tailoring, 5.2 percent slum dwellers work as maid servants and all are female slum dwellers, 5 percent are construction workers, 4.8 percent are rickshaw puller, rickshaw van puller or driver, 3.4 percent slum dwellers have own small shops or business and 3.1 percent are hawkers. The highest proportion of slum dwellers of both the Inner and Outer slums is working as labourers.

Among 911 slum dwellers in the Total (Inner and Outer combined) slum area majority (63.6 percent) of slum dwellers belong to the age group 0-30 years. The highest proportion (42.3 percent) slum dwellers are below 14 years and hence did not reach the working age. 37.8 percent slum dwellers of the total slum area in the age group above 14 years to 30 years are not engaged in any paid job. In this age group the highest proportion (24.5 percent) slum dwellers are unemployed and the highest proportion (6.6 percent) slum dwellers engaged in paid job are working as labourers. In the age group 31-40 years the highest proportion (25.3 percent) slum dwellers are housewives and are hence not engaged in paid work. In this age group those engaged in paid work the highest proportion (17.1 percent) slum dwellers are working as labourers. In the age group 41-50 years the highest proportion (24.3 percent) of slum dwellers are housewives and among those engaged in paid work the highest proportion of slum dwellers are engaged as labourers and rickshaw pullers or drivers. In the age group 51 years and above the highest proportion (29.1 percent) of slum dwellers are unemployed. In this age group the highest proportion of slum dwellers are engaged as small business or shopkeepers and manufacturer or repairer or tailor. It thus suggests that in all the age groups the highest proportion of slum dwellers are not engaged in any paid jobs. The highest proportion of slum dwellers engaged in paid work is found to be working as labourers in both the Inner slum (9.0 percent) and Outer slum (9.2 percent). The highest proportion of labourers is found in the age group 14-30 years in both the slums (Inner slum: 51.3 percent and Outer slum: 40.9 percent).

Among 911 slum dwellers major proportion 576 (63.2 percent) slum dwellers do not earn any income. Among these slum dwellers 42.5 percent slum dwellers are below 14 years of age and are have not attained the working age, 31.6 percent are unemployed and 25.9 percent are housewives. Among the income earners the highest proportion, 127 (13.9 percent) of slum dwellers earn monthly income in the range Rs. 3001- Rs. 5000, in this category highest proportion (22.8 percent) of slum dwellers are construction workers, 21.2 percent are labourers, 18.9 percent are rickshaw pullers or drivers, 16.5 percent are manufacturers or repairers or tailors, 9.5 percent are hawkers and also 9.5 percent are small businessmen or shopkeepers, 0.8 percent are maid servant

and also 0.8 percent are pensioner. Slum dwellers those who earn monthly income above Rs. 5000, in this group highest proportion (30.9 percent) of slum dwellers are labourers; there are no slum dwellers working as maid servant in this group of income. In the lowest income group Rs. 1-Rs. 2000 the highest proportion (52.2 percent) slum dwellers are maid servants. In Inner slum as well as Outer slum the highest proportion among income earning slum dwellers earns monthly income in the range Rs. 3001- Rs. 5000.

**It is thus evident that the main source of earning of the slum dwellers is the informal sector and hence the earning of the slum dwellers is low. The research question number four is answered.**

Among 200 households the highest proportion of slum households , (47.5 percent) have monthly household income in the range of Rs. 5001- Rs.10000 followed by 37.5 percent having monthly household income up to Rs. 5000 and 15.0 percent above Rs. 10000. In the monthly household income range within Rs. 5000, the highest proportion (60 percent) belongs to Inner slum and 40 percent belong to the Outer slum area. In the monthly household income range above Rs.10000 the highest proportion (70 percent) belongs to Outer slum and 30 percent belong to the Inner slum area.

The average monthly household income is Rs. 7187.65 in the Total (Inner and Outer combined) slum area; it is Rs.6005.50 in Inner slum and Rs.8369.80 in Outer Slum. The variation in the monthly household income level as found out by using Standard Deviation (S.D.) is Rs. 3289.94 in Inner slum and Rs. 4895.75 in Outer slum. It is found that monthly household income is higher in Outer slum compared to Inner slum but inequality in monthly household income is higher in Outer slum compared to Inner slum. **Testing the hypothesis-1 it is found that there is significant variation of average monthly household income between Inner and Outer slums.** Therefore the average monthly household income is higher in Outer slum households compared to Inner slum households.

**Among 200 slum households the highest proportion (47 percent) slum households have migrated in the year 1990 or earlier (old migrants), 29 percent households have migrated after 1990 (new migrants) and in case of 24 percent households, the**

**present head of household has not migrated (i.e. they lived in the slum from their birth) are “non migrants”.** The research question number one is answered. Although the slum dwellers are poor but among them a higher proportion of those households where the head of household is an “old migrant” to the slum (migrated in 1990 or earlier) are comparatively richer among the other slum households that are “new migrants” (migrated after 1990) and the households where the head of household lived in the slum from birth (non migrant) as in the Total (Inner and Outer combined) slum area among the 30 (15 percent) households that earn monthly household income above Rs. 10000 the major proportion, (76.7 percent) households have migrated in the 1990 or earlier followed by 13.3 percent households that that have migrated after 1990 and 10 percent households where the head has resided in the slum since birth and are non migrants.

The proportion of Hindu households earning higher income is greater compared to the Muslim households; it is found that among the 169 Hindu households in the Total (Inner and Outer combined) slum area the highest proportion (49.7 percent) of Hindu households earn household monthly income within Rs. 5001- Rs.10000 where as among the 31 Muslim households the highest proportion (48.4 percent) of Muslim households earn household monthly income up to Rs 5000. The Hindu and Muslim households are financially better off in Outer slum compared to Inner slum.

Among 170 slum households belonging to the General caste highest proportion, (45.9 percent) earn monthly household income in the range Rs. 5,001- Rs. 10,000 and among 30 slum households belonging to the Scheduled caste the highest proportion of households, (56.7 percent) earn monthly household income in the range Rs. 5,001- Rs. 10,000. The financial condition of General Caste households is poorer in Inner slum compared to those of Outer slum.

Among the 123 (61.5 percent) households having mother tongue Bengali the highest proportion (51.2 percent) households earn monthly household income in the range Rs. 5001- Rs.10000. Among the 54 (27 percent) households that have mother tongue Hindi the highest proportion (42.6 percent) households earn monthly household income in the range Rs.5001- Rs.10000. Among the 18 (9 percent) households that have mother

tongue Urdu major proportion (55.6 percent) households earn monthly household income up to Rs. 5000. Among the 5 (2.5 percent) households that have mother tongue Nepali the major proportion (60 percent) households earn monthly household income in the range Rs.5001- Rs.10000. Thus it is revealed that households having mother tongue Urdu are poorest among the households having mother tongue Bengali, Hindi or Nepali. The households having Urdu as mother tongue in the Inner slum are poorer compared to those in the Outer slum.

Among 30 households having household income of above Rs. 10000, the highest proportion, 63.3 percent of households have 3 and above income earning members. Among 105 households having one income earner the highest proportion 56.2 percent households are earning up to Rs. 5000. The relationship between monthly household income and number of income earners is directly proportional and hence with the increase in number of earning members in the slum households the monthly household income also increases. This relationship is evident in both the Inner and Outer slums. The slum dwellers are small earners so the income of single earning member is too less to meet the needs of the family in the slum household. Therefore the small amount of income earned by each family member of the slum households adds to a big amount of monthly household income and hence the monthly household income increases with the increase in number of household earners.

All the 6 single member households earn up to Rs. 5000, among 147 households having 2-5 members the highest proportion of (51 percent) households earn Rs. 5001- Rs.10000 followed by 40.8 percent households earning within Rs. 5000 and among the 47 households which has more than 5 family members 42.6 percent households have household monthly household income above 5000 to Rs. 10000 and 38.3 percent households have monthly household income above Rs. 10000. There is direct relationship between Family size and Monthly Household Income; the higher the family size the higher is the monthly household income. **Testing the Hypothesis-2 significant positive relationship is found between monthly household income and family size in Inner slum ( $\chi^2=14.650$ ,  $p=0.005$ ), Outer slum ( $\chi^2=22.140$ ,  $p<0.001$ )**

**and Total (Inner and Outer) ( $\chi^2=36.866$ ,  $p<0.001$ ) slum area.** Therefore with the increase in family size there is increase in monthly household income in the slum area. Among the six uni-member households all the households earn monthly household income up to Rs. 5000. Among 150 nuclear type slum households the highest proportion of households, (51.3 percent) earn in the range Rs.5001- Rs.10000 followed by 40 percent households that earn up to Rs. 5000. Among 44 joint family type households the highest proportion, (40.9 percent) households earn monthly household income in the range Rs.5001- Rs.10000 followed by 38.6 percent households that earn monthly household income above Rs. 10000. Therefore a positive relationship between monthly household income and family type is evident as proportion of joint family type households increases the monthly household income increases. In the income range above Rs.10000 majority of slum households in Inner slum (55.6 percent) and in Outer slum (57.1 percent) are joint family type. Therefore a positive relationship between monthly household income and family type is also found in Inner slum as well as Outer slum.

In **Chapter-V** the consumption pattern and housing condition of the slum dwellers is analyzed.

The average monthly food expenditure in the Total slum area (Inner and Outer slums) is Rs. 3522.93. The average monthly food expenditure in Outer slum is Rs. 3815.00 with Standard Deviation (S.D.) of Rs. 1097.32 and the average monthly food expenditure in Inner slum is Rs. 3230.87 with S.D. of Rs. 1022.68. The average monthly food expenditure in Outer slum is higher compared to Inner slum but variation as measured using S.D. is higher in Outer slum compared to Inner slum; thus inequality in average monthly food expenditure is high in Outer slum as there is greater inequality of monthly household income among households of Outer slum compared to Inner slum.

The average monthly non-food expenditure is Rs. 1774.73 in the Total (Inner and Outer) slum area; the average monthly non-food expenditure is Rs. 1906.41 with S.D. of Rs. 1184.92 in Outer slum and it is Rs. 1643.05 with S.D. of Rs.1371.16 in Inner

slum. The average monthly non-food expenditure is higher in Outer slum compared to Inner slum but variation in average monthly non-food expenditure is higher in Inner slum compared to Outer slum as households in Outer slum are spendthrift compared to households in Inner slum

**In Total (Inner and Outer) slum area the highest average monthly expenditure on food is incurred on cereal which is Rs. 1898.02. The average monthly expenditure on cereals is highest among all food items in both Inner as well as Outer slum but it is higher in Outer slum (Rs. 2019.00) compared to Inner slum (Rs. 1777.05). Highest proportion of the non-food expenditure is incurred on energy consumption (kerosene, gas, electricity and firewood) and the average monthly expenditure is Rs. 468.84 in Total (Inner and Outer) slum area. It is higher in Outer slum (Rs. 521.87) compared to Inner slum (Rs. 415.80). Thus it is evident that among the food and non-food items slum dwellers of Siliguri Municipal Corporation area spends major proportion of their income on cereals and so the research question number five is answered.**

In the Total (Inner and Outer) slum area among 75 (37.5 percent) households earning monthly household income within Rs. 5000 major proportion, 93.4 percent slum households spend up to Rs. 3500 on food items. Among 30 (15 percent) slum households earning monthly income above Rs. 10000, 53.3 percent spend within Rs. 3501- Rs. 5000 and remaining 46.7 percent spend above Rs. 5000. Among 95 (47.5 percent) slum households earning monthly income Rs.5001- Rs.10000, 93.7 percent households spend in the range of Rs.2501- Rs. 5000 on food items. There exists a positive relationship between monthly household income and food items. As the monthly household income increases expenditure on food items also increases. In Inner slum as well as in Outer slum such a relationship exists.

In the Total (Inner and Outer) slum area among 75 households earning monthly household income up to Rs. 5000 majority (60 percent) households spend up to Rs.1000 on non-food items monthly, highest proportion (47.4 percent) households among 95 households having monthly household income in the range Rs.5001- Rs.10000 spend in the range Rs.1001- Rs.2000 on non-food items monthly. Among 30 households earning

monthly household income above Rs.10000, 40 percent households spend above Rs. 3000 on non-food items and also 40 percent households spend Rs. 1001- Rs. 2000. Households belonging to lowest income earning group (earning up to Rs. 5000) do not spend above Rs. 3000 monthly on non-food items and those in the highest income group (earning above Rs. 10000) do not spend below Rs. 1001 monthly on non-food items. Therefore a positive relationship is noticed between monthly non-food expenditure and monthly household income; with the increase in income there is increase in monthly non-food expenditure. In both the Inner and Outer slums too such relationship exists. In Outer slum 10 percent households among 30 households those earning up to Rs. 5000 spend above Rs. 2000 on non-food items while none of the households in Inner slum are able to do so. This suggests that the Outer slum dwellers are spendthrift compared to Inner slum dwellers.

In the Total slum area (Inner and Outer slum combined) among the 200 households majority (66.5 percent) households spend up to Rs. 50 per month on healthcare, the highest proportion, 47.4 percent households are in the income group of Rs. 5001-Rs. 10000 per month, followed by 40.6 percent earning up to Rs. 5000 per month and 12.0 percent earning above Rs. 10000 per month. This implies that health condition of majority of the slum dwellers is not very bad. There is no significant relationship between monthly expenditure for medical purpose and monthly income of households in the Total (Inner and Outer slum combined) slum area. In the Outer slum none of the households spend above Rs. 500 on healthcare whereas 3 percent of the households spend above Rs. 500 in the Inner slum; 6 percent of the households spend within Rs. 101- Rs.500 in Outer slum whereas 10 percent of households spend so in Inner slum. This suggests that the health condition of Outer slum dwellers is better than the Inner slum dwellers.

Among 200 households the highest proportion, 56 percent households spend up to Rs. 250 per month on education. This implies that expenditure on education is less in the slum area. Monthly expenditure on education is up to Rs. 250 in 55 percent households in Inner slum and 57 percent households in Outer slum. In the Total (Inner and Outer slum combined) slum area among the 75 households earning monthly household

income up to Rs. 5000, monthly expenditure on education is up to Rs. 250 in majority (73.3 percent) households and only 1.3 percent households spend above Rs. 1000 on education. Among 30 households earning monthly household income above Rs. 10000, for 43.3 percent households monthly expenditure on education is up to Rs. 250 and for 10 percent households it is above Rs. 1000. Therefore a positive relationship between monthly expenditure on education and monthly income of households is noticed. **Testing the Hypothesis-3 it is found that there exists a significant relationship between monthly household income and monthly household expenditure on education in Inner slum ( $\chi^2=16.352$ ,  $p=0.012$ ) as well as Outer slum ( $\chi^2=13.666$ ,  $p=0.034$ ) and also taking together both the slums ( $\chi^2=24.866$ ,  $p<0.001$ ). Therefore it is found that with the increase in monthly household income, monthly household expenditure on education increases.**

The average total monthly household expenditure (includes monthly household food expenditure, monthly household non-food expenditure and monthly household expenditure on intoxicants) is Rs. 5415.42 in the Total (Inner and Outer slum combined) slum area. The average total monthly expenditure is higher in Outer slum (Rs. 5872.31) than average total monthly expenditure in Inner slum (Rs. 4958.52). Variation in monthly total expenditure in Outer slum (S.D. = Rs.1968.00) is lower than that in Inner slum (S.D. = Rs. 2017.26). Therefore slum dwellers of the Outer slum area are able to spend more and also there is more equality in capacity to spend than their counterpart in Inner slum. **Testing the Hypothesis-4 significant variation (F-value=10.513,  $p= 0.001$ ) of average total monthly household expenditure between Inner and Outer slums is found. Therefore the total monthly household expenditure in Outer slum is higher than that in Inner slum.**

The average monthly household savings is Rs. 1772.24. In the Inner slum area the average monthly household savings is Rs. 1046.98 with S.D. of Rs. 1716.34 where as in the Outer slum the average monthly household savings is Rs. 2497.49 with S.D. of Rs. 3700.74. Though the average monthly household savings is higher in Outer slum than Inner slum the variation or inequality in savings is also much higher in Outer slum households compared to Inner slum.

The correlation between monthly household income, monthly total household expenditure and monthly household savings in the slum area is found to be positive and the correlation is very highly significant ( $p < 0.001$ ) in the Inner slum, Outer slum and Total slum area (Inner and Outer slums combined) and hence with increase in monthly household income there is increase in monthly total household expenditure and monthly household savings in the households of Inner slum, Outer slum and Total (Inner and Outer slums combined) slum area.

Testing the impact of the independent variable- family size, household income, food expenditure and non-food expenditure on household savings (dependent variable) in the slum area by using multiple regression technique it is found that coefficient of determination is very near to 1 and all the regression coefficients relating to independent variables are highly significant in the Total (Inner and Outer) slum area and also separately in Inner slum area and Outer slum area. Household savings is positively related with family size and household income and it is negatively related with household food expenditure and household non-food expenditure in the Inner slum and Outer slum and Total (Inner and Outer) slum area.

The average expenditure on consumer durables is Rs. 11836.62 in the Total slum area (Inner and Outer slums), the average expenditure on consumer durables is Rs. 7492.84 with standard deviation of Rs. 6832.89 in the Inner slum and in the Outer slum average expenditure on consumer durables is Rs. 16180.40 with standard deviation of Rs. 32936.39. Therefore though the slum dwellers of Outer slum are wealthy compared to Inner slum but inequality in distribution of wealth is high in Outer slum compared to Inner slum. **Testing the Hypothesis-5 significant difference (t-value=2.583, p-value =0.011) of expenditure on household consumer durables between Inner and Outer slums is found and therefore the expenditure on consumer durables of sample slum households of Outer slum is significantly higher compared to Inner slum households.**

The highest proportion (39.5 percent) of slum households among 200 households in the Total (Inner and Outer slums) slum area spends above Rs. 10000 on consumer durables. Among these households highest proportion (55.7 percent) earn monthly household

income of Rs. 5001-Rs.10000. Compared to the other income groups highest proportion (86.7 percent) of highest group of income earning households (earning above Rs.10000) spend the highest amount (above Rs. 10000) on consumer durables whereas the highest proportion (42.7 percent) of lowest group of income earning households (earning up to Rs. 5000) spend lowest amount on consumer durables (up to Rs.3000). There is a positive relationship between expenditure on consumer durables and monthly income of households. In the monthly household income group of up to Rs.5000 highest proportion (66.7 percent) of households in Inner slum spend up to Rs. 3000 on durable goods whereas in Outer slum highest proportion of households 56.7 percent spend Rs. 5001- Rs. 10000. It appears that households in Outer slum are spendthrift compared to Inner slum.

Higher proportion (65.9 percent) of slum households has taken loan in Outer slum area and it is 34.1 percent in Inner slum among the 44 households in the total slum area that have taken loan. Most of the households in the Total (Inner and Outer slums) slum area have taken loans for purpose of business followed by health loan, housing loan, marriage loan and food loan. The average business loan amount is Rs. 47411.76 (average loan amount: Inner slum - Rs. 39285.71, Outer slum – Rs. 53100.00). Loan amount taken for purpose of business is higher in Outer slum compared to Inner slum. Majority of the households in the Total (Inner and Outer slums) slum area have taken loan from micro-finance institutions (52.3 percent), 43.2 percent from friends and relatives, 2.3 percent from Government and 2.3 percent from private bank.

Among 200 households in the slum area majority (76 percent) households live in their own houses. In Inner slum and as well as Outer slum 76 percent households live in their own houses.

Among the 200 households in the Total (Inner and Outer slums) slum area majority (89.5 percent) households have semi-permanent structure of houses. There are permanent houses only in the Outer slum area. Proportion of flimsy houses is higher in Inner slum compared to Outer slum.

Among 911 slum dwellers highest proportion (90 percent) slum dwellers live in semi-permanent houses and highest proportion of these slum dwellers (64 percent) are up to

30 years of age. People of younger generation are higher in the slum area those live mostly in the semi permanent and flimsy houses.

Among 200 slum households majority (55 percent) have only 1 room. The situation is better in Outer slum as 45 percent households in comparison to Inner slum where 65 percent households have only one room and similarly 30 percent households in Outer slum whereas only 7 percent households in Inner slum have 3 or more rooms. Among the 110 households that have 1 room in highest proportion (86.4 percent) households 2-5 members reside followed by 8.2 percent households that have more than 5 members and 5.5 percent households have one member. Thus the slum area is overcrowded. In Inner slum among 65 households having 1 room majority (78.5 percent) of households have 2-5 members followed by 12.3 percent households have more than 5 members whereas in Outer slum among 45 households having 1 room the highest proportion (97.8 percent) households have 2-5 members followed by 2.2 percent households that have more than 5 members. This suggests that Inner slum is more overcrowded compared to Outer slum.

In the Total slum (Inner slum and Outer slum area combined) area among the 75 households earning monthly household income up to Rs. 5000 the major proportion (72 percent) of households have only 1 room to live in. Among the 30 households earning monthly household income above Rs. 10000 the highest proportion (50 percent) households have 3 or more rooms to live in followed by 36.7 percent households that have 2 rooms. Hence a direct relationship is noticed between number of rooms in slum households and monthly household income of the households. Therefore with the increase in monthly household income the number of rooms of household increases as the household either constructs new rooms or takes rooms on rent. In the income group "up to Rs. 5000", in Inner slum, 75.6 percent households whereas in the Outer slum 66.7 percent households live in 1 room and 2.2 percent households in Inner slum and 10 percent households in Outer slum live in 3 or more rooms. In the income group "above Rs. 10000", in Inner slum, 22.2 percent households whereas in the Outer slum only 9.5 percent households live in 1 room and 33.3 percent households in Inner slum and 57.1 percent households in Outer slum live in 3 or more rooms. So a direct relationship is

noticed between number of rooms in slum households and monthly household income of the households in Inner and as well as Outer slum.

Among 200 households majority (51.5 percent) of households have floor area within 51-80 square feet. The highest proportion of households in both the Inner slum (63 percent) and Outer slum (40 percent) has houses of 51–80 square feet area

Among 200 slum households 88.5 percent households have supply of electricity and 11.5 percent households do not have supply of electricity. A slightly higher proportion of slum households in Inner slum (13 percent) do not have electricity compared to Outer slum (10 percent).

Among 177 slum households in the Total (Inner and Outer) slum area that have supply of electricity highest proportion (72.3 percent) households have Independent electricity connection. In Inner slum major proportion (75.9 percent) households have independent type of electricity connection whereas in Outer slum major proportion (68.9 percent) of households has independent electricity connection.

75 percent households in the Total (Inner and Outer) slum area have availability of street lights while it is absent in 25 percent households. In Inner slum 50 percent households do not have street lights in the slum area whereas in Outer slum all the households have facility of street light in the slum area.

Among 150 slum households in the Total (Inner and Outer) slum area all (100 percent) slum households have street lights in working condition.

Among 200 slum households highest proportion (49.5 percent) of households have pipelines on the road as main source of drinking water followed by 32.5 percent households having private hand pumps or wells and 18.0 percent having public hand pumps or wells as main source of drinking water. Among 100 households major proportion (68 percent) slum households in Inner slum depend on pipelines on the road for drinking water whereas in Outer slum highest proportion (55 percent) households have private hand pumps or wells for purpose of drinking water. Pipelines on the road are situated at a distance from a few households. Some slum households in the Inner slum area face shortage of drinking water due to insufficient supply of water from pipelines on the road.

Among 200 slum households highest proportion (64.5 percent) households are connected to open pucca drainage system, 23 percent slum households are connected to open kutchra drainage system and 12.5 percent households have irregular water with no drains. The slum area as a whole does not have the better drainage facilities – Underground and Covered pucca drainage systems. Major proportion of slum households in Inner slum (85 percent) are connected to open pucca drainage system whereas the highest proportion of slum households in Outer slum (44 percent) slum households only are connected to open pucca drainage system. Therefore Inner slum households have better drainage facility compared to Outer slum households.

In the Total (Inner and Outer) slum area among the 200 slum households 57 percent households reported that the slum area and especially drains in this area get water logged during monsoons. 60 percent slum households in Inner slum and 54 percent slum households in Outer slum area reported of water logging in the slum area and drains of this area. Thus problem of water logging is higher in Inner slum compared to Outer slum.

Among 200 slum households in the Total (Inner and Outer) slum area the highest proportion (38.5 percent) households have separate arrangement for bathing, 36.5 percent have private shared arrangement and the bathing place is shared by a few households; either by tenants or by owners of different households, 17.5 percent use public bath for bathing and 7.5 percent households bathe in open space. In Outer slum highest proportion (57 percent) of households has separate arrangement for bathing. In Inner slum highest proportion (46 percent) of households has private shared arrangement for bathing and only 20 percent households have separate bathing facilities. Lack of space for accommodation of bathroom in Inner slum in comparison to Outer slum is probable reason for not having bathroom facilities in Inner slum.

Among 200 slum households highest proportion (40 percent) households use private toilet; higher proportion of households in Outer slum (58 percent) compared to 22 percent households in Inner slum have private toilets. Problem of space in Inner slum and also the poorer financial condition of Inner slum households are the reasons for not

having private toilet in Inner slum households. There are no septic tanks or flush latrine system toilets in the slum households.

Arrangement of garbage disposal is made by Siliguri Municipal Corporation solely in the slum area. Among 200 slum households in majority (62.5 percent) households in the Total (Inner and Outer) slum area garbage disposal is carried out daily. In higher proportion of slum households in Outer slum (75 percent) compared to Inner slum (50 percent) households garbage disposal is carried out daily.

In the Total (Inner and Outer) slum area among 200 households majority (88.5 percent) of households have ration card for all family members and 11.5 percent households do not have ration card for all family members. A slightly higher proportion of households in Inner slum (12 percent) households compared to Outer slum (11 percent) households do not have ration card for all family members. Among 23 slum households in the total slum area, all family members of which does not have ration cards 43.5 percent households state the reason of migration for not having ration card followed by 39.1 percent households that mentions that they had applied but were not yet provided. Among 177 households in the total slum area that have ration card 87.6 percent households opine that they do not get the essentials from the ration shop properly. Majority of slum dwellers have Above Poverty Line (APL) ration card even though they belong to the below poverty line level and hence also do not get essentials sufficiently. A slightly higher proportion of households in Outer slum (91 percent) compared to 84.1 percent households in Inner slum do not get the essentials from the ration shop properly.

Among 200 households in the slum area 96.5 percent households opine that they have voter identity card for their family members of 18 and above years of age. among 7 households in the total slum area the family members of eligible age of those does not have voter card 57.1percent have not applied or approached, 14.3 percent have applied but not provided and 28.6 percent have "other" reasons; lose of voter identity card or not having required documents.

There was no improvement in the last five years prior to the survey in most of the basic amenities that are provided to the slum households - garbage collection, electricity

supply to the sample slum area, electricity supply to the houses of the sample slum households, approach road to the slum, street light in the slum, garbage disposal in the slum, ration facility for the slum dwellers and transport communication facility connecting the slum area. This may be due to recent change in state government during the period of survey and hence it would take time for new government to take action in this regard. Among 200 households in the Total (Inner and Outer) slum area slum dwellers of 12.5 percent households (all households belonging to Outer slum area) opine that there was improvement in the condition of road in the slum during the last 5 years. In the total slum area among 200 households in respect of water supply 12.5 percent households and also in case of drainage facility 12.5 percent households report that these conditions have worsened during the last 5 years and all these households belong to the Inner slum.

**It is thus revealed that slum dwellers receive basic services- electricity, street light, water supply, drainage, bathroom and latrine facilities, garbage disposal arrangement, ration card, voter card which are mostly provided by the Government and during the last five years of the period of survey the condition of most of the facilities have remained unchanged. Hence the research question number two regarding basic services received by the slum dwellers and the status of basic services that are provided by the Government is answered.**

**Lack of space and overcrowding of slum households best reveals the pathetic condition of slum households and thus the research question number three is answered.**

In **Chapter-VI** the situation of health of slum dwellers of Siliguri Municipal Corporation area is analyzed.

**During the last one year from the time of survey the highest proportion of slum dwellers suffered from cold and cough (905 slum dwellers suffered among the 911 total slum dwellers). Fever, skin problem and diarrhoea are other diseases which are vector borne disease that large proportion of slum dwellers suffered. This suggests that the root cause of the disease is that slum dwellers do not have**

**adequate knowledge of health and hygiene. Thus the research question number six is answered.**

The highest proportion of slum dwellers suffers from hypertension, a lifestyle disease among the long term ailments. Higher proportion of slum dwellers of Inner slum suffered from long term ailments in comparison to Outer slum.

Though number of deaths occurred during the last two years from the time of survey is very few, the deaths in the slum area are results of lifestyle diseases- Cancer, Asthma and CVA (Cerebrovascular accident) or stroke; no vector borne diseases have resulted in the deaths. All the deaths have occurred in Inner slum.

In Total (Inner and Outer) slum area as well as in Inner and Outer slum area the highest proportion of households (50 percent) are located 1-2 kilometres away from Government hospital.

**Among 200 households in Total (Inner and Outer) slum area the major proportion (53.5 percent) households approach private hospital or nursing home or dispensary or clinic only for healthcare; such proportion of households is higher in Outer slum (64 percent) compared to 43 percent in Inner slum. 28 percent households that avail both of the government hospital and private hospital or nursing home or dispensary or clinic for healthcare and only 18.5 percent households approach only government hospital for healthcare. The reasons cited for not availing of the treatment from Government hospital are greater distance from Outer slum household and treatment not good and time consuming. It is noticed that the household approach Government hospital only in case of severe illness where large sum of money is required for treatment. Therefore research question number seven is answered.**

Among 37 slum households approaching only Government hospital for healthcare the highest proportion, (59.5 percent) households earn monthly household income up to Rs. 5000 followed by 35.1 percent households earning monthly household income within Rs. 5001- Rs. 10000 and only 5.4 percent earning monthly household income above Rs. 10000. It therefore suggests that as household income increases proportion of

slum households approaching only Government hospital decreases and this tendency is noticed in both the Inner and Outer slums.

Among 200 households majority (82.5 percent) of households use allopathic treatment for healthcare.

**Testing Hypothesis-Six a highly significant relationship between monthly household income and source of finance for medical expenditure of slum households in Inner slum ( $\chi^2=39.756$ ,  $p<0.001$ ), Outer slum ( $\chi^2=52.540$ ,  $p<0.001$ ) and as well as taking together both the slums ( $\chi^2=94.835$ ,  $p<0.001$ ) is found and hence as household income increases there is less dependence of households on borrowing or assistance from friends or relatives and major proportion of households depend on own income as source of finance for medical expenditure.**

In **Chapter-VII** the Educational scenario of slum dwellers of Siliguri Municipal Corporation area is analyzed.

It is found that the education level of the slum dwellers is low. Among 911 slum dwellers in Total (Inner and Outer) slum area the highest proportion (37 percent) of slum dwellers has acquired the primary (Classes I to IV) education followed by 34.5 percent illiterates and 15 percent slum dwellers are educated up to the secondary or higher secondary level of education. 0.5 percent slum dwellers in the Total slum area are graduates and 0.2 percent slum dwellers are post graduates. The slum dwellers do not have technical or vocational education. Literacy rate among the slum dwellers is 62.7 percent; among the male slum dwellers it is 69 percent while the literacy rate among the female slum dwellers is 56.7 percent. Therefore literacy rate among male slum dwellers is higher than female slum dwellers. The literacy rate in Outer slum (63.3 percent) is higher than the literacy rate in the Inner slum (62.1 percent).

The highest proportion (47.7 percent) of slum dwellers in the Total (Inner and Outer) slum area those who are up to 30 years of age are literate up to the primary level (Classes I to IV). The major proportion of slum dwellers above 30 years of age is illiterate. The situation is similar in both the Inner and Outer slums.

Among 745 Hindu slum dwellers the highest proportion (39.2 percent) are literate up to the primary level (Classes I to IV) where as among 166 Muslim the highest proportion (36.8 percent) are illiterates. Education level is lower among the Muslim slum dwellers compared to the Hindu slum dwellers in the Total (Inner and Outer) slum area. The literacy rate in the Total (Inner and Outer) slum area is higher among the Hindu slum dwellers at 63.4 percent compared to the Muslim slum dwellers (59.6 percent). In the Inner slum it is observed that among 93 Muslims highest proportion (37.6 percent) have attained the secondary or higher secondary level of education where as among 341 Hindus highest proportion (37.5 percent) of Hindus are illiterate but the level of literacy of the Muslim slum dwellers is low compared to their Hindu counterpart in the Outer slum as among 404 Hindu slum dwellers the highest proportion (46.5 percent) are literate up to the primary level (Classes I to IV) and among 73 Muslim slum dwellers the highest proportion (46.6 percent) are illiterate. The literacy rate among the Muslim slum dwellers (69.3 percent) is higher in the Inner slum compared to the Hindu slum dwellers (60.1 percent) while the literacy rate of the Hindu slum dwellers (66.2 percent) is significantly higher than Muslim slum dwellers (46 percent) in Outer slum.

Among 789 General Caste slum dwellers in the Total (Inner and Outer) slum area the highest proportion (36.7 percent) literate up to the primary level (Classes I to IV) where as among the 122 Scheduled Caste slum dwellers the highest proportion (39.4 percent) are illiterate. Thus the literacy level of the General Caste slum dwellers is better in comparison to the Scheduled Caste slum dwellers.

The level of education in the Total (Inner and Outer) slum area is low among the slum dwellers having mother tongue Bengali compared to the slum dwellers having mother tongue Hindi, Nepali and Urdu as highest proportions of slum dwellers- among 508 slum dwellers having Bengali as mother tongue is illiterate (38.4 percent), among 275 slum dwellers having Hindi as mother tongue are educated up to the Primary level (Classes I to IV) (42.5 percent), among 17 slum dwellers having Nepali as mother tongue are educated up to the Primary level (Classes I to IV) (64.7 percent) and among 111 slum dwellers having Urdu as mother tongue are educated up to the secondary or

higher secondary level (33.4 percent). The education level of slum dwellers having Urdu as mother tongue is better in Inner slum compared to the slum dwellers of other mother tongues as the highest proportion among 93 slum dwellers having mother tongue Urdu the highest proportion (37.6 percent) are educated up to the secondary or higher secondary level whereas highest proportion of slum dwellers of other mother tongues are illiterate. The highest proportion of slum dwellers of all mother tongues in Outer slum are educated up to the Primary level (Classes I to IV) and hence the educational status is similar.

There is no definite relationship between individual monthly income earned from paid work and level of education as it is noticed in the Total (Inner and Outer) slum area that among 576 slum dwellers earning no income the highest proportion (42 percent) slum dwellers are educated up to the Primary level (Classes I to IV) and among 81 slum dwellers earning monthly income above Rs. 5000 the highest proportion (35.8 percent) are also educated up to the Primary level (Classes I to IV).

**Therefore the poor educational status of primary, secondary and higher education, technical and vocational education among the slum dwellers is revealed. The research question number eight is answered.**

Majority (87.5 percent) of the households in the Total (Inner and Outer) slum area is located at a distance of up to 1 kilometre from Primary and High schools.

Majority (51.5 percent) of fathers and also majority (67.6 percent) of mothers of children of the slum households are illiterate. Higher proportion of fathers and mothers of children of slum households are illiterate in Inner slum compared to Outer slum.

At present time the proportion of never going to school children and drop outs in the slum households is less in the slum area. Among 200 households in the Total (Inner and Outer) slum area 7.5 percent households have never going to school children and 23 percent households have drop outs. Proportion of drop out households is higher in Inner slum in comparison to Outer slum area as among 46 households that have dropped out children at present time 63 percent households are in Inner slum and 37 percent households are in Outer slum.

Among the 73 drop outs 74 percent are male and 26 percent are female, hence the proportion of male drop outs is higher compared to female drop outs. Majority of drop outs 44 (60.3 percent) are within 10-16 years of age. Majority 43 (58.9 percent) slum dwellers dropped out from Bengali medium Institutions. Drop out has occurred in Government Educational Institutions only.

**Majority of drop out has occurred at the High (Classes V – XII) level as among 73 drop outs in the Total (Inner and Outer) slum area 45 (61.6 percent) slum dwellers dropped out at this standard of education.**

**Among 94 never going to school and drop out slum dwellers at present time the highest proportion 31 (33.0 percent) dropped out because of lack of interest in studies followed by 30 (31.9 percent) slum dwellers the reason been inability to meet the expenditure on studies, 17 (18.1 percent) dropped out for not performing well in studies, for 8 (8.5 percent) slum dwellers the reason is the need to take care of household chores and this responsibility is solely seen in respect of female slum dwellers, for 7 (7.4 percent) slum dwellers the reason is the need to increase household income and the burden is noticed to fall solely on the male slum dwellers and 1 (1.1 percent) slum dweller never went to school for physical disability. Hence the research question number nine regarding the standard or class the maximum dropout of slum children occurs and the causes behind the dropout of the slum children is answered.**

As monthly household income increases the presence of drop outs in the household decreases as among 46 households having drop outs 58.7 percent households earn monthly household income up to Rs.5000 followed by 41.3 percent households earn monthly household income in the range Rs.5001- Rs.10000; there are no drop outs in household that earn monthly household income above Rs.10000.

In **Chapter-VIII** the summary of findings which have been analyzed in previous chapters are given. Also this chapter draws the conclusion of the research work and gives suggestions for improvement of the living condition of the slum dwellers of Siliguri Municipal Corporation area.

## **8.2: CONCLUSION**

The study finds that the living condition of the slum dwellers of the Siliguri Municipal Corporation is poor. In respect of the physical aspect of the living condition lack of space and overcrowding reveals the pathetic condition of the slums and this condition is severe in the Inner slum compared to Outer slum. The housing condition in respect of structure of houses, number of rooms, toilet and bathroom facility especially in the Inner slum requires improvement. Water supply, street light facility in Inner slum and drainage facility in Outer slum need to be improved. The economic condition of the slum dwellers presents a grim picture. The monthly household income is higher in Outer slum compared to Inner slum but the inequality in income is higher in Outer slum compared to Inner slum. Per capita income and savings are also high in Outer slum compared to Inner slum. Work participation rate is low at 50 percent. The slum dwellers mostly work in the informal sector because this sector does not require much skill and education which majority of slum dwellers lack in and jobs are also easily available in this sector and hence they earn low income. As the income is low the consumption level is also low but the expenditure on food, non-food items and also on consumer durables is higher in Outer slum compared to Inner slum. The Outer slum dwellers are spendthrift compared to their counterpart in Inner slum. The social condition in respect of health reveals that the slum dwellers suffer mostly from vector borne diseases but the lifestyle diseases are a cause of concern as recent deaths have occurred only due to lifestyle diseases. The proportion of lifestyle diseases is higher in Inner slum compared to Outer slum. There is greater dependence on private nursing home, hospital, dispensary and clinic by slum dwellers in the slum area compared to government hospital as it is more time consuming and treatment is not good; the Outer slum dwellers avail of the private healthcare facilities more compared to the Inner slum dwellers. The literacy level is low in the slum area and female literacy rate is lower than male literacy rate. The overall education level is also low as there are very few slum dwellers those who have acquired higher education. Drop outs have occurred in government educational institutions only. Proportion of drop out households is higher in Inner slum in comparison to Outer slum area. It is evident that the living condition of

Inner slum dwellers is comparatively poorer than Outer slum dwellers. The government is required to take steps to improve the living condition of the slum dwellers.

### **8.3: SUGGESTIONS**

On the basis of the study, we suggest the measures to improve the living condition of the slum dwellers.

- The poor financial condition of the slum dwellers is the cause of poor physical, economic and social living condition of the slum dwellers. To make the slum dwellers employable job-oriented and cost-effective vocational education which caters to the requirement of the current job market is to be provided to the slum dwellers. It is noticed from the survey that highest proportion of slum dwellers belong to the younger generation, up to 30 years of age and also none of the slum dwellers have received vocational education so far therefore awareness regarding vocational education is necessary which can be provided from schools, through media or by organizing awareness programmes in the slums.
- The slum dwellers are unable to spend money as well as time only on studies as they have to support their families, such facilities are to be made so that they can earn while learning. So at least above the 14 years of age school curriculum could be modified to cater to the requirements of the current job market along with imparting formal education with the help of ITI or District Industry Centre (DIC)
- The slum dwellers are to be made aware of the various employment and entrepreneurial programmes and schemes of the Government for the unemployed and underemployed- Swarna Jayanti Shahari Rozgar Yojana (SJSRY), Start-up India, Stand-up India, Skill India, Pradhan Mantri Mudra Yojana (PMMY), Pradhan Mantri Kaushal Vikas Yojana (PMKVY) etc. The Siliguri Municipal Corporation may make a database of the slum dwellers of the employable age and take initiative to make the slum dwellers aware and also take benefits of this programmes and schemes.

- As a part of Corporate Social Responsibility the private sector may be involved in providing required job training to the slum dwellers so that they become employable for the available jobs.
- The slum dwellers are mostly working in the unorganized informal sector. Among the slum dwellers engaged in paid work the highest proportion are working as labourers. They do not have any financial or social security. So the slum dwellers are to be encouraged to invest in health and accident insurance and pension funds with contribution from the side of employers too; since the saving habit of the slum dwellers is less they have to be made aware of the necessity of savings. Recently in the years 2014 and 2015 some schemes of the government like Pradhan Mantri Jan Dhan Yojana, Atal Pension Yojana, Pradhan Mantri Suraksha Bima Yojana, Pradhan Mantri Jeevan Jyoti Bima Yojana have been introduced, so awareness programme regarding such schemes of government are to be held in the slums. The councillors of the wards with the nodal officers of scheduled banks may held meetings with the heads of the slum households and encourage them to save a part of their income in banks and post offices and also make them aware of these schemes so that the slum dwellers get the information personally and benefit from these schemes.
- As noticed from the survey that the slum dwellers are forced to go to private healthcare facilities as treatment from government healthcare facilities is time consuming and also the treatment is not good; the slum dwellers lose days of work and hence the day's income because of their type and nature of job. Also the government facilities are distant from Outer slum area. The government and Non Government Organizations (NGOs) could set up special camps for treatment within the slums. Small government health units may be set up in the slums to minimise the problem of child birth at home. More government hospitals with modern facilities to treat not only minor illness but also major illness like cancer, heart disease etc are required so that the slum dwellers do not have to go to private hospital and nursing home or out of Siliguri for treatment

and also overcrowding and excessive pressure of patients in existing hospital and medical college can be reduced.

- In case of major illness out-of-pocket expenditure becomes huge for the slum dwellers to afford. Government may arrange for medical loan facilities at nil or very low interest rate to the poor. Swasthyasathi scheme of Government of West Bengal is a good move in bringing respite to the lives of the poor slum dwellers. The slum dwellers are to be made aware of the scheme and proper monitoring by government agencies are to be made so that the benefit reaches the slum dwellers.
- The slum dwellers lack in knowledge of hygiene and health which causes various vector borne diseases, moreover there is a rise of lifestyle diseases and risk of deaths related to it and hence either government agencies or NGOs may held awareness programmes in this regard. Free yoga centres may be set up in the slums so that rise of lifestyle diseases may be prevented in the slums.
- Arrangement of adult education system is required for the slum dwellers as the major proportion of slum dwellers above 30 years of age is illiterate. .
- It is found from the survey that sufficient supply of water is a problem in the slum area especially in the Inner slum. So rain water harvesting is needed and the water can be supplied to the slum households by use of solar water pumping system which will in turn also save electricity.
- Underground drainage facility is necessary to be developed in the slum area.
- Septic tank or flush latrine system is to be constructed in the slums as none of the slum households have this system of latrine and also the households are to be provided with separate latrine facility as major proportion of households in the slum area especially the Inner slum dwellers do not have this facility.
- Overcrowding is a major problem in the slums. Therefore houses are to be provided to the slum dwellers so that the slum households have adequate rooms for all its members. The Siliguri Municipal Corporation should take proper initiative that the slum dwellers avail of the facilities of Pradhan Mantri Awas Yojana-Urban which aims at Housing for All by 2022.

- Majority of slum dwellers those who have ration cards do not get the essentials sufficiently. Most of them have Above Poverty Line (APL) card even though they belong to the below poverty line level. The slum dwellers are to be provided with appropriate cards and also it is to be monitored that they get all the essentials sufficiently.
- The slum dwellers lack awareness regarding nutrition, better education, facilities provided by the government and job opportunities. The policy makers are to organize awareness programmes in the slums to make the inhabitants aware about all these aspects for improving their living standards.