

**Social Structure Reflecting Rural Development****5.1 Introduction**

*Man is by nature a rational being whose wants and needs have been changing since the dawn of civilization. Men need society for existence as well as for the development of his quality of life* (Singh, 1986). In the context of Indian developmental planning, the development of social sector in the rural areas has always been an area of prime concern for the planners, social activists and academicians. The concept of social structure reflecting rural development emphasizes the improvement of the society in its social aspects in the rural areas. Investment in areas like education, health, medical care, housing and sanitation has been considered to be the investment for the process of social development. Hence, *social development refers to all those activities that contribute to human development for building human capital* (Pant, Pandey, 2004). Therefore for the improvement of the rural areas development of both economic and social sector is important because economic development provides affluence and alleviation of poverty and social development provides an improvement in the quality of life in its social aspects. Therefore, emphasis on social development is not only a significant factor but a prerequisite to overall development of the rural areas.

**5.2 Education**

Education is the most important factor for human resource development and it is considered as an indispensable unit of a social system. Only education can raise socio-cultural advancement and economic development of the society and therefore it is one of the ever increasing demands of the modern society. It helps to enhance knowledge, skills, talent, and raises the quality of life of the people.

Total eradication of illiteracy has been an area of prime concern of the Indian Government. Since independence, there has been an expansion of formal education at all levels. The National Literacy Mission (NLM) was introduced in May 1988 for the provision of functional literacy to non-literates in the age group of 15-35 years. Thus to promote education system in the country the Total Literacy Campaign and the Post Literacy Campaign was the principal strategy of the NLM. Further, the centrally sponsored District Primary Education Programme was launched in 1994 in order to promote high enrollment in the primary schools of the country. The scheme which has become very popular in India is the Mid-Day Meal Scheme, a centrally sponsored effort, launched on 15 August 1995. The major objective of the scheme is to increase the school enrollment and the number of attendance for

7-14 years old children in school. The National Educational Policy, 1999, has been framed to improve the educational system and to eradicate illiteracy from the country.

However, the Government of India made elementary education a Fundamental Right of every single child for 6-14 years age group through the introduction of the 86<sup>th</sup> Constitutional Amendment Act, 2002, by the provision of free and compulsory education to all children. The programme of Sarva Siksha Abhiyan (SSA) was launched in India on 2001 which attempts to provide elementary education to all children for age group between 6-14 years. However in all the districts of West Bengal the name Sarva Siksha Abhiyan (SSA) has been changed to Paschim Banga Sarva Siksha Mission on 31 October, 2006. Rashtriya Madhyamik Shiksha Abhiyan (RMSA) is an extension of SSA launched on March, 2009 throughout the country in order to universalize the secondary education for the age group between 15-16 years. Again, Saakshar Bharat Mission was initiated in India, 2009, for the promotion of adult education and particularly the female education in the areas *where there are less than 50 percent literate women, as per Census 2001* (Das, 2018).

However in 2001, Sarva Siksha Abhiyan (SSA) has been implemented in Jalpaiguri district for universalizing elementary education for children within age group of 6 to 14 years. Again, in Jalpaiguri district a Baseline Assessment Survey (BAS) had been carried out for evaluating the *infrastructure of schools, rate of enrollment, quality of education and retention of the students. Under NLMA (National Literacy Mission Authority) Continuing Education Programme (CEP) was launched in Jalpaiguri district, on 1st May 2005, for the promotion of literacy for the age group between 15-45 years. Nine districts of West Bengal came under the scheme Saakshar Bharat Mission and in Jalpaiguri district it has been implemented in 2010 and has been continuing under the supervision of Jalpaiguri Zilla Lok Siksha Samiti* (Das, 2018). However, the expansion of formal education is not yet enough to ensure education for the entire people of the country. Therefore, the central and the state governments should have the provision of adequate educational infrastructure in order to provide education for all.

### **5.2.1 Educational Institutions of the sampled villages of Jalpaiguri district**

Educational institutions are those, which imparts primary, secondary and tertiary education to the illiterate and uneducated persons of the country. It has a great impact on literacy as it serves the base of educational structure. The educational facilities available in the sampled villages of Jalpaiguri district ranges from primary schools to higher secondary schools. However, none of the college has been found in the sampled villages of the district. On the basis of the data available for Census, 2011, it is observed that achievement with

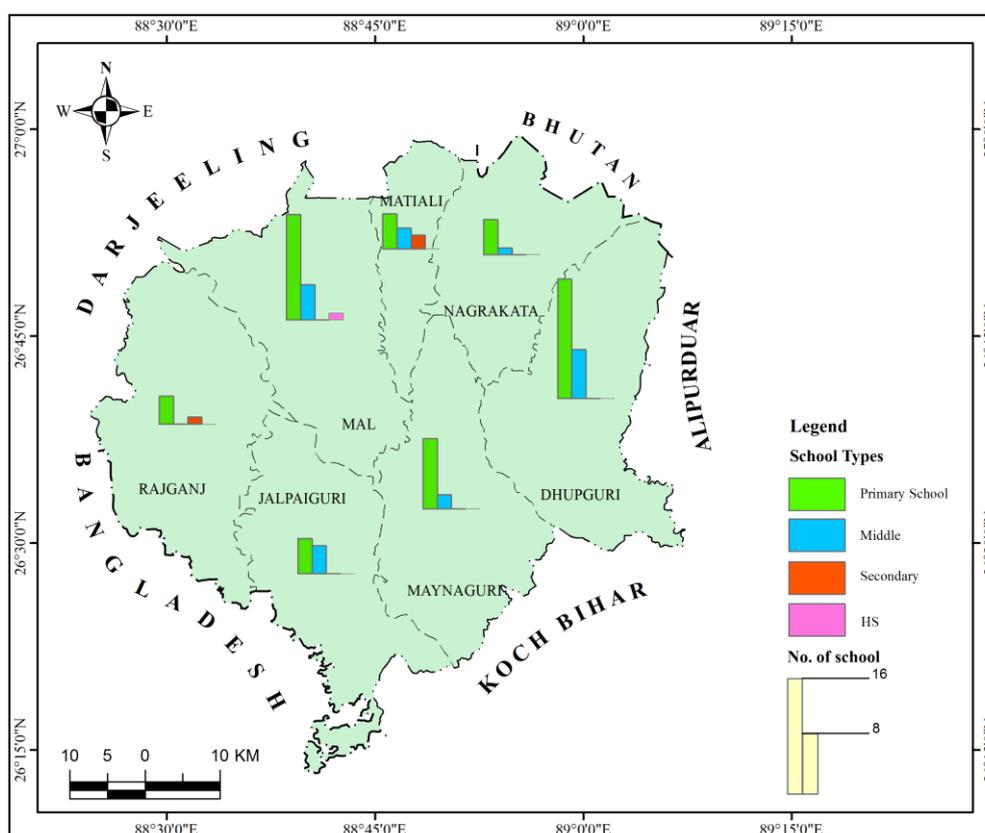
regard to primary schools in the sampled villages of Jalpaiguri district is significant as compared to the numbers of middle, secondary and higher secondary schools.

**Table 5.1: Numbers of Educational Institutions**

C.D. Blocks	Primary school	Middle School	Secondary School	Higher Secondary School
Rajganj	4	0	1	0
Jalpaiguri	5	4	0	0
Maynaguri	10	2	0	0
Dhupguri	17	7	0	0
Mal	15	5	0	1
Matiali	5	3	2	0
Nagrakata	5	1	0	0
Total	61	22	3	1

*Source- Village and Town Directory, Census, 2011*

According to government source, there are 61 primary schools in the sampled villages of the seven blocks of Jalpaiguri district (Village and Town Directory, Census, 2011). Table 5.1 highlights that primary school is widely distributed in the villages of Dhupguri block followed by Mal, Maynaguri, Jalpaiguri, Matiali, Nagrakata and Rajganj blocks.



**Fig. 5.1: Educational Institutions of Jalpaiguri district**

*Source- Village and Town Directory, Census, 2011*

The institution which provides education from class V to VIII has been considered as the middle school or the junior high school. Among the sampled villages 22 middle schools

have been obtained in the villages of Jalpaiguri, Maynaguri, Dhupguri, Mal, Matiali and Nagrakata blocks of Jalpaiguri district (Fig. 5.1). The institution which has the provision of imparting education from class V to X has been considered as the secondary schools and there are only 3 secondary schools in the sampled villages of Rajganj and Matiali blocks of Jalpaiguri district. Higher secondary school provides education from class V to XII and there is only one higher secondary institution in the sampled village of Mal block of Jalpaiguri district.

Table 5.1 presents that the sampled villages of *Dhupguri block have the highest number of educational institutions as compared to the sampled villages of the other blocks* (Das, 2018). It is due to the fact that the block lies in the eastern part of Jalpaiguri district and is connected to NH-31 and NH-31c which provides a better means of transport in the block. Thus, *high degree of accessibility by the roadways has played a significant role in the development of educational institutions in the block* (Das, 2018) of Jalpaiguri district.

### 5.2.2 Non- Formal Educational Institutions of the sampled villages of Jalpaiguri district

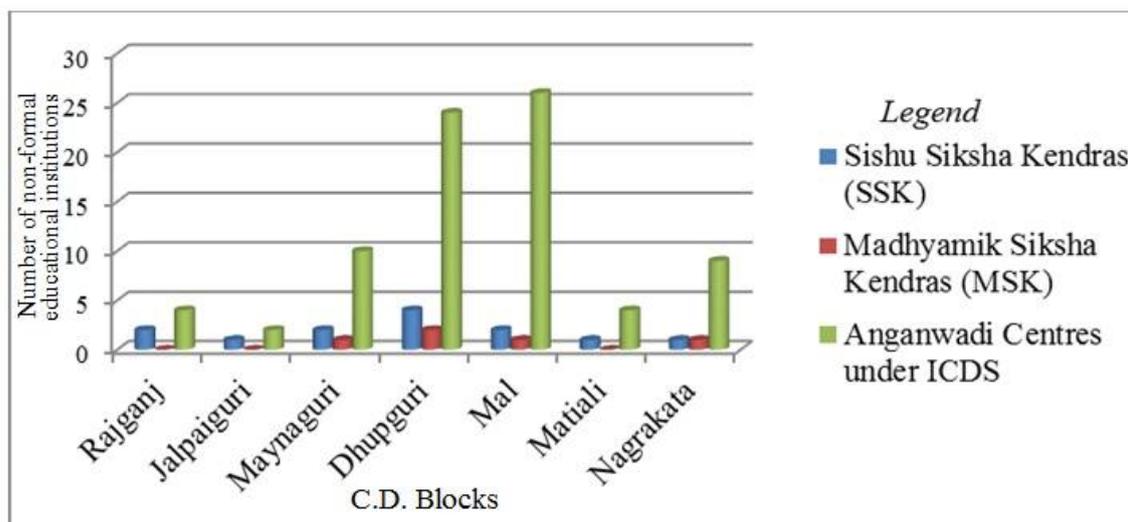
The central and the state governments have formulated various plans for the elimination of illiteracy in the country. The Panchayat and Rural Development Department, Government of West Bengal in 1997-98 planned a programme as Shisu Shiksha Karmasuchi, and have decided to construct Shishu Shiksha Kendras (SSK), for the rural areas where there were at least twenty children deprived of getting access to any existing primary school. Similarly, with the objective to enhance accessibility to secondary education Madhyamik Siksha Kendras (MSK) were constructed and Jalpaiguri district is no exception. Table 5.2 discloses that there are 13 SSK and 5 MSK obtained in the sampled villages of Jalpaiguri district.

**Table 5.2: Numbers of Non- Formal Educational Institutions**

C.D. Blocks	Sishu Siksha Kendras (SSK)	Madhyamik Siksha Kendras (MSK)	Anganwadi Centres under ICDS
Rajganj	2	0	4
Jalpaiguri	1	0	2
Maynaguri	2	1	10
Dhupguri	4	2	24
Mal	2	1	26
Matiali	1	0	4
Nagrakata	1	1	9

*Source- Gram Panchayat Office and Field Survey, 2015-16*

The ICDS (Integrated Child Development Scheme) is a unique programme for early childhood care and development and it is the Anganwadi Centres through which the ICDS Scheme delivers its services with the objective of early childhood education, improving health, nutrition and development of children along with the pregnant women. There are 79 Anganwadi centres obtained in the sampled villages of the district. However, Dhupguri block is highest in terms of non-formal educational institution followed by Mal, Maynaguri, Nagrakata, Matiali, Rajganj and Jalpaiguri blocks (Fig. 5.2).



**Fig. 5.2: Non-Formal Educational Institutions of Jalpaiguri district**

*Source- Gram Panchayat Office and Field Survey, 2015-16*

### 5.2.3 Distance to Educational Institution

The distance to educational institution has a crucial impact on accessing educational facilities. During the course of field survey 2015-2016, it has been observed that 36.98% households travel below 1 km for the educational institution. The students have been benefitted from the availability of schools within their village and are therefore facilitated by the walking distance to educational institutions. Table 5.3 depicts that the highest percentage of households having accessibility to educational institution at a distance below 1 km is 49.38% in Nagrakata block followed by Matiali block with 45.00%. The lesser the distance to educational institutions the greater is the educational facility for the children in the study area. It has been observed that 43.01% households travel more than 1 km for the educational institutions where the highest percentage of households is obtained in Matiali block with 55.00% followed by Nagrakata block with 50.62%.

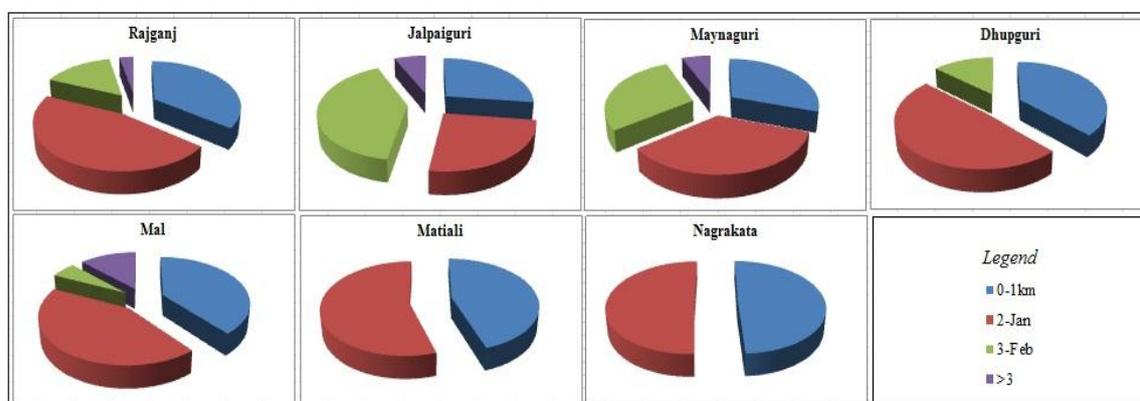
During the field survey it has been obtained that 14.93% households travel within 2 to 3 km from their household to educational institutions. The highest percentage of households has been found in Jalpaiguri block with 40.68% followed by Maynaguri, Rajganj and

Dhupguri blocks. Likewise, 5.06% households travel above 3 km, from their households to the educational institutions in the sampled villages of the district (Fig. 5.3).

**Table 5.3: Distance to Educational Institution**

C.D. Blocks	0-1 km	1-2 km	2-3 km	>3 km
Rajganj	35.38	46.15	15.38	3.08
Jalpaiguri	27.12	25.42	40.68	6.78
Maynaguri	30.11	34.66	28.98	6.25
Dhupguri	37.80	48.80	13.40	0.00
Mal	39.00	43.00	5.50	12.50
Matiali	45.00	55.00	0.00	0.00
Nagrakata	49.38	50.62	0.00	0.00
Total	36.98	43.01	14.93	5.06

Source- Field survey, 2015-16



**Fig. 5.3: Distance to Educational Institution in Jalpaiguri district**

Source- Computed by researcher, 2016

The larger distance to educational facilities in the rural areas increases the commute time of the students creating an adverse effect on the level of education. During the field survey 2015-16, it has been observed in the rural areas that the girls has the pressure of household activities, therefore larger distance to educational institutions acts as a barrier to the improvement of education for the children in the sampled villages of Jalpaiguri district.

Thus, apart from the availability of the infrastructural facilities in the educational institutions, stipulated distance to educational institutions plays a vital role in attracting children in the rural areas of Jalpaiguri district.

#### 5.2.4 Student-Teacher Ratio

In order to analyze the quality of education received in any educational institution the student-teacher ratio is one of the prime indicators. *The high value of student-teacher ratio indicates a high pressure of students on teacher, whereas, its low value exhibits high level of educational development* (Das, 2018).

At national level according to RTE Act 2009, the student teacher ratio for primary school should be 30:1, for upper primary school the ratio should be 35:1 and for secondary school the student teacher ratio should be 30:1. According to West Bengal school education survey report, 2011, the norm for student-teacher ratio of the state is 40:1, excluding the head teacher. Table 5.4 exhibits the student-teacher ratio for the sampled villages of Jalpaiguri district. The ratio of primary school student and teacher is 21:1, for middle school student and teacher the ratio is 36:1, for secondary school student and teacher the ratio is 60:1 and the ratio for Higher Secondary school student and teacher is 57:1. Following the standard *student-teacher ratio of the state, it has been observed that the ratio is lower for primary school and middle school whereas it is high for the secondary and higher secondary school in the sampled villages of Jalpaiguri district (Das, 2018)*. In other words, *the high value of student-teacher ratio indicates less number of teachers in the institutions (Das, 2018)*.

For primary school, low student-teacher ratio has been observed in every blocks of Jalpaiguri district as per the standard student-teacher ratio of the state. Though, higher number of students studying in different classes is the indicator of educational status of any region yet high student-teacher ratio reveals educational backwardness and low quality education at all levels. It is due to the fact that lower number of students per teacher indicates *lesser pressure of students on teacher where the students get the chance of individual attention from the teachers (Das, 2018)*.

**Table 5.4: Student-Teacher Ratio**

C.D. Blocks	Student-teacher ratio			
	Primary school	Middle School	Secondary School	Higher Secondary School
Rajganj	23:1	-	55:1	-
Jalpaiguri	14:1	27:1	-	-
Maynaguri	18:1	33:1	-	-
Dhupguri	21:1	42:1	-	-
Mal	22:1	29:1	-	57:1
Matiali	22:1	49:1	63:1	-
Nagrakata	21:1	37:1	-	-

*Source- Calculated by Author, 2015-16*

However, in Dhupguri, Matiali and Nagrakata blocks the level of student-teacher ratio for the middle schools is high as per the RTE Act, 2009. Jalpaiguri, Maynaguri, and Mal blocks exhibits low student teacher ratio with lower number of students per teacher in the district.

Similarly, for secondary and higher secondary schools the student-teacher ratio exhibits high ratio. Rajganj and Matiali blocks comprises high student-teacher ratio for

secondary schools and Mal block observes high student-teacher ratio for the higher secondary school in Jalpaiguri district. However, the higher the number of students per teacher the greater is the pressure of students per teacher which hampers the quality of education at all levels.

### 5.2.5 Student-School Ratio

Student-school ratio is the computation of the number of students per school which in turn points to the enrollment of children in educational institutions. As a whole, the ratio of primary school students and primary school is 92:1, the ratio for middle school student and middle school is 100:1, the ratio for secondary school student and secondary school is 815:1 and for the Higher Secondary (HS) student and HS school the ratio is 1078:1. Table 5.5 represents the ratio of the students per primary, middle, secondary and higher secondary school among the seven blocks of Jalpaiguri district.

There exists a sharp variation in the student-school ratio in the seven blocks of Jalpaiguri district. This variation is due to the fact that the children do not get an easy access to adequate educational facilities in terms of distance to educational institutions and institutional infrastructure. Moreover, the family pressure for domestic work and farm operations hampers the level of literacy in the study area.

**Table 5.5: Student-School Ratio**

<b>C.D. Blocks</b>	<b>Primary school</b>	<b>Middle School</b>	<b>Secondary school</b>	<b>Higher Secondary School</b>
Rajganj	128:1	-	818:1	-
Jalpaiguri	65:1	81:1	-	-
Maynaguri	83:1	99:1	-	-
Dhupguri	86:1	119:1	-	-
Mal	98:1	75:1	-	1078:1
Matiali	101:1	115:1	814:1	-
Nagrakata	104:1	112:1	0	-

*Source- Calculated by Author, 2015-16*

The student-school ratio ranges from 65:1 in Jalpaiguri block to 128:1 in Rajganj block for primary school. Similarly for the middle school the ratio ranges from 75:1 in Mal block to 119:1 in Dhupguri block. Again, for the secondary school the ratio varies from 814:1 in Matiali block to 818:1 in Rajganj block. *Whereas for higher secondary school the student school ratio is 1078:1 in Mal block (Das, 2018).*

### 5.2.6 Teacher-School Ratio

The higher number of teachers in any educational institution indicates the quality of education of the institution. However, the ratio of teachers and school varies in different level

of educational institutions. As a whole, the ratio of primary school teacher and primary school is 4:1, the ratio for middle school teacher and institution is 3:1, the ratio for secondary school teacher and institution is 14:1 and the ratio for HS school teacher and institution is 19:1.

**Table 5.6: Teacher-School Ratio**

<b>C.D. Blocks</b>	<b>Primary School</b>	<b>Middle School</b>	<b>Secondary school</b>	<b>Higher Secondary School</b>
Rajganj	6:1	-	15:1	-
Jalpaiguri	5:1	3:1	-	-
Maynaguri	5:1	3:1	-	-
Dhupguri	4:1	3:1	-	-
Mal	4:1	3:1	-	19:1
Matiali	5:1	2:1	13:1	-
Nagrakata	5:1	3:1	-	-

*Source- Calculated by Author, 2015-16*

Table 5.6 reveals the ratio of the teachers per primary school, middle school, secondary school and higher secondary school of the seven blocks of Jalpaiguri district. A variation in the teacher-school ratio has been observed in the blocks of Jalpaiguri district. The ratio ranges from 4:1 in Dhupguri and Mal blocks to 6:1 in Rajganj block for primary school. Similarly for the middle school the ratio varies from 2:1 in Matiali block to 3:1 in Jalpaiguri, Maynaguri, Dhupguri, Mal and Nagrakata blocks. Again, for the secondary school the ratio varies from 13:1 in Matiali block to 15:1 in Rajganj block. Whereas for higher secondary school the teacher school ratio is 19:1 in Mal block.

### **5.3 Literate and Illiterate Population**

*Literacy is an indispensable means to acquire skills for improving socio-economic development of well-beings* (Nayak, 2011). Education is essential for the development in social structure, improvement of quality of life and preparation of skilled man power for the development of society. Besides, it helps to overcome the social barriers and improves earning capability of the people through acquirements of skill and information for various employment opportunities. Therefore, inequality in the literacy rates tends to create a number of socio-economic problems, which may lead to regional imbalances. The data pertaining to the percentage of the literate and the illiterate males and females of the rural areas of Jalpaiguri district are presented in Table 5.7.

According to the field survey 2015-2016, Matiali block has the highest percentage of male literates with 67.74% whereas Nagrakata block has the lowest percentage of male literates with 59.20%. So far the female literacy is concerned, the highest female literacy has

been observed in Jalpaiguri block with 64.71% whereas Mal block has the lowest percentage of female literates with 53.91%.

**Table 5.7: Literate and Illiterate Population**

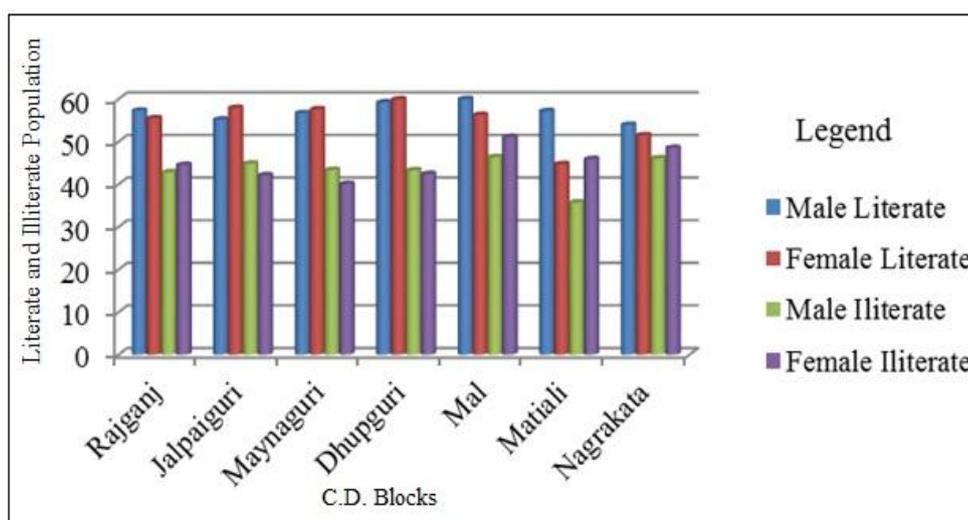
C.D. Blocks	Literate (%)		Illiterate (%)	
	Male	Female	Male	Female
Rajganj	62.42	60.00	37.58	40.00
Jalpaiguri	63.49	64.71	36.51	35.29
Maynaguri	61.89	62.62	38.11	37.38
Dhupguri	63.68	61.35	36.32	38.65
Mal	60.41	53.91	39.59	46.09
Matiali	67.74	56.72	32.26	43.28
Nagrakata	59.20	55.77	40.80	44.23
Total	62.13	59.42	37.87	40.58

*Source- Field survey, 2015-16*

*The reason behind the lower literacy rates of the females as compared to the males in the study area is the traditional outlook of the parents (Das, 2018) in which less emphasis has been placed on education. Besides, lack of interest in study, inability to meet the educational expenses, unequal access to educational facilities, need for assistance in domestic and farm work and trends of early marriage restricts them from pursuing higher studies.*

Illiteracy is one of the major problems of the society as it hinders the socio-economic status of the whole country. According to UNESCO, there exists a correlation between illiteracy, poverty and low life expectancy. The higher the level of illiteracy among the people the greater is the incidence of poverty and low life expectancy. Among the sampled households the total percentage of illiterates accounts 37.87% male illiterates and 40.58% female illiterates (Fig. 5.4). Further, the highest percentage of male illiterates has been found in Nagrakata block with 40.80% whereas the highest percentage of female illiterates has been accounted in Mal block with 46.09%. *The reasons behind the illiteracy in the northern part of the district covering Mal and Nagrakata blocks are the inadequate educational institutions in the sampled villages, lack of accessibility to school (Das, 2018), engagement in unskilled farm operations and working as tea garden labourers due to the incidence of poverty has forced the rural masses to quit study and seek jobs (Das, 2018) in order to maintain the livelihood.*

However educational development and economic planning should be considered as an integral part of the process of rural development. Besides, educational facilities should be increased and the rural people should be encouraged for the utilization of these facilities in order to decline the level of illiteracy from the rural areas of the district.



**Fig. 5.4: Literate and Illiterate Population of Jalpaiguri district**

Source- Computed by researcher, 2016

#### 5.4 Level of Literate population

The level of literacy is an essential means for human development and poverty reduction. Analysis of the level of literacy is highly significant in the process of rural development, as it is very useful for manpower planning in the rural areas. However, there exists variation in the level of literacy from one block to another, depending upon the educational facilities and the socio-economic factors of the rural people in the sampled villages of Jalpaiguri district.

According to the field survey 2015-2016, it has been observed that 27.23% rural population of the sampled villages are educated up to primary school while 35.81% rural population of the sampled villages have their level of literacy up to the middle school. Table 5.8 reveals that 21.97% rural population of the sampled villages are educated up to secondary school (Das, 2018), whereas the level of literacy of the rural population for higher secondary school is 8.38%, likewise 5.91% rural population are graduates and 0.7% population have availed higher studies and has been categorized as other literates in the sampled villages of Jalpaiguri district. Education from primary institution is the most basic and the fundamental criterion of the educational structure. The percentage of population who are educated up to primary school varies from 35.78% in Matiali block to 24.46% in Rajganj block followed by Jalpaiguri and Dhupguri blocks (Fig. 5.5).

Since the primary schools are distributed widely in the sampled villages of the district therefore the study area comprises 27.23% of rural population, educated up to the level of primary institutions in Jalpaiguri district. Moreover, it has been observed during the field

survey 2015-16, that the pressure of joining the farm operations as agricultural labourers and working for long hours per day for wages due to poor socio-economic conditions compels the rural population to discontinue their higher studies.

**Table 5.8: Level of Literate population**

<b>C.D. Blocks</b>	<b>Primary</b>	<b>Middle</b>	<b>Secondary</b>	<b>Higher Secondary</b>	<b>Graduate</b>	<b>Others</b>
Rajganj	24.46	25.54	26.09	11.96	9.78	2.17
Jalpaiguri	24.84	35.03	21.66	10.83	7.64	0.00
Maynaguri	26.57	36.81	21.26	9.25	4.72	1.38
Dhupguri	24.57	37.24	22.87	7.94	6.81	0.57
Mal	29.30	39.70	22.08	4.25	4.46	0.21
Matiali	35.78	34.86	15.60	6.42	7.34	0.00
Nagrakata	31.05	30.53	21.05	13.16	4.21	0.00
Total	27.23	35.30	21.97	8.37	5.91	0.69

*Source- Field survey, 2015-16*

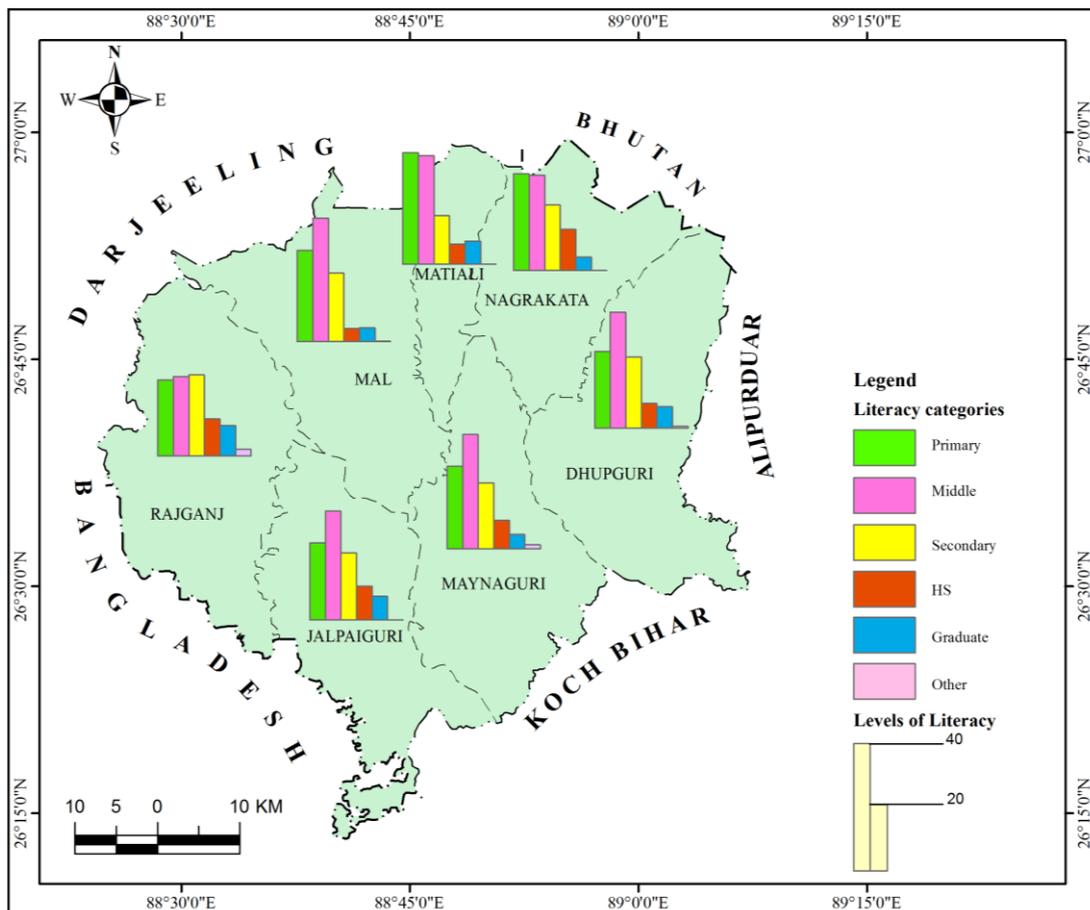
There has been a considerable variation in the number of educational institutions in the rural areas of Jalpaiguri district. However, it has been observed that Mal block accounts the highest percentage of rural population educated up to middle school with 39.70% followed by Dhupguri and Maynaguri blocks.

Whereas, Rajganj and Nagrakata blocks observed the least percentage of rural population educated up to middle school. It is due to the fact that the sampled villages of Rajganj block lack the middle or upper primary schools while there is only 1 middle school in the sampled villages of Nagrakata block of Jalpaiguri district.

The highest percentage of population with the level of literacy up to secondary school has been obtained in Rajganj block with 26.09% and the lowest in Matiali block with 15.60% (Das, 2018). However, the percentage of the rural population with the level of literacy up to the higher secondary school is considerably low with 8.37% as compared to the percentage of rural population educated up to primary and middle school. It is due to the fact that there is a complete absence of secondary schools in the sampled villages of Jalpaiguri, Maynaguri, Dhupguri, Mal and Nagrakata blocks. Further, except a single higher secondary school in the sampled village of Mal block there is a complete absence of higher secondary school in the sampled villages of the seven blocks of Jalpaiguri district. Besides, lack of awareness and negative attitude of parents in sending children to school, adversely affect the level of literacy in the sampled villages of Jalpaiguri district.

Therefore provision of adequate educational institutions in every village is necessary in order to improve the level of literacy of the rural population in the study area. The

percentage of graduates from the colleges is low with 5.91% as compared to the percentage of rural population with the level of literacy up to primary and middle school.



**Fig. 5.5: Level of Literate population of Jalpaiguri district**

*Source- Computed by researcher, 2016*

The reason behind the fact is that none of the sampled village has general degree college in Jalpaiguri district. Therefore, development of the higher educational institutions is necessary as higher education always provides a way to better employment in a region. Moreover, owing to the dependency in farm activities and due to abject poverty, the rural population face difficulties in getting affordable access to higher studies.

### 5.5 Level of Female Literacy

*Level of female literacy in any geographical unit is one of the most important indicators to measure the index of development in general and female development in particular (Pant, 2013). Education is an important component of social system and it is essential for the empowerment of an individual and particularly for women. The higher the female literacy, the greater will be the effective participation of women in various developmental and decision making activities in any region. Hence it is always imperative to*

make the females literate in order to promote and maintain the education, health, nutrition and socio-economic well-being of the entire family.

Regarding the female literacy in the sampled villages of Jalpaiguri district, Table 5.9 depicts that 26.95% females are educated up to the primary institutions. Matiali block has the highest percentage with 34.78% of females with the level of literacy up to primary school followed by Nagrakata block with 32.18%. As observed during the field visit 2015-2016, a female is meant for domestic chores and therefore least priority has been given in female education. Further, the family compulsion for unskilled household activities restricts the females from continuing higher studies.

However, the percentage of females with the level of literacy up to middle school is remarkably higher with 34.76% than that of the females educated up to primary school with 26.95% (Fig. 5.6).

**Table 5.9: Percentage of Female Literates**

<b>C.D. Blocks</b>	<b>Primary</b>	<b>Middle</b>	<b>Secondary</b>	<b>Higher Secondary</b>	<b>Graduate</b>	<b>Others</b>
Rajganj	24.69	24.69	29.63	11.11	9.88	0.00
Jalpaiguri	19.48	33.77	23.38	14.29	9.09	0.00
Maynaguri	25.69	33.60	27.27	7.11	4.35	1.98
Dhupguri	28.57	37.00	23.81	6.96	3.30	0.37
Mal	26.09	41.06	24.15	5.31	2.90	0.48
Matiali	34.78	36.96	10.87	8.70	8.70	0.00
Nagrakata	32.18	25.29	24.14	16.09	2.30	0.00
<b>Total</b>	<b>26.95</b>	<b>34.76</b>	<b>24.60</b>	<b>8.39</b>	<b>4.58</b>	<b>0.68</b>

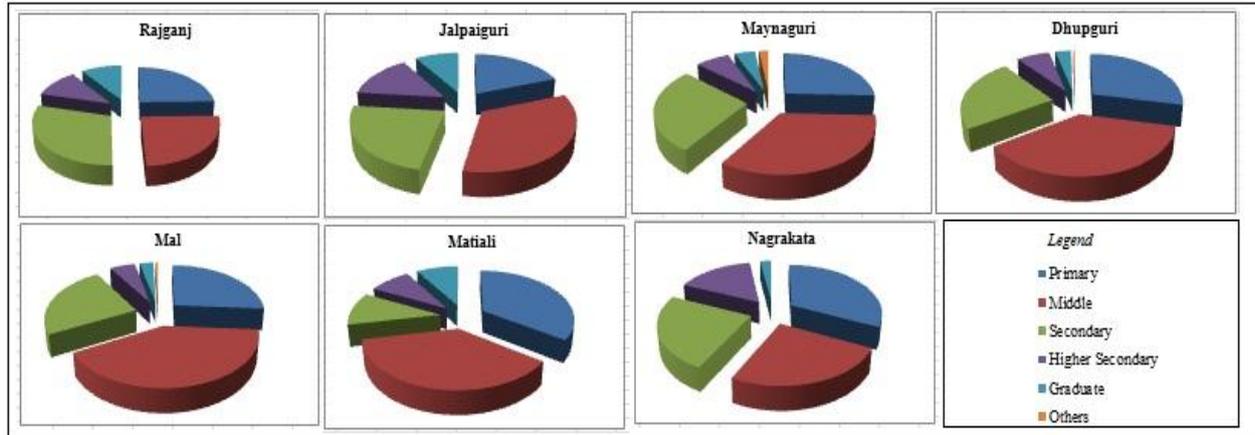
*Source- Field survey, 2015-16*

The highest percentage has been obtained in Mal block with 41.06% followed by Dhupguri block with 37.00%. This is due to the increasing level of awareness for female education along with the positive impact of the educational programmes implemented in the study area. However, 24.60% females are educated up to secondary schools where, the highest percentage of females has been observed in Rajganj block with 29.63% followed by Maynaguri and Mal blocks. Further, 8.39% females are educated up to the higher secondary schools where 16.09% females has been observed in Nagrakata block followed by Jalpaiguri and Rajganj block in the sampled villages of Jalpaiguri district.

But apart from the level of school education, the level of literacy among the females is not satisfactory regarding college education and higher studies. 4.58% females are graduates and 0.68% females availed higher studies in the sampled villages of the district. Since, there

has been a traditional outlook of the households regarding the female education, therefore either the females get married at an early age or they look after their siblings.

Hence, disparities in the male and female literacy persist in the study area. Though the Government of India as well as the government of West Bengal has implemented a number of educational schemes for the upliftment of quality education yet on the basis of the field survey 2015-16, 37.87% males and 40.58% females are illiterate in the sampled villages of Jalpaiguri district.



**Fig. 5.6: Level of Female Literacy in Jalpaiguri district**

*Source- Field survey, 2015-16*

Therefore, the awareness of the parents regarding sending their children to school has to be increased as it bears a significant impact upon the status of education. However, the government should take more initiatives regarding the allocation of more educational institutions especially higher educational institutions in the study area and emphasis should be given on reduction of gender disparity in literacy rate which in turn will raise the total literacy. The hypothesis as mentioned in the introduction chapter ‘*The higher the level of literacy rate among the females the better is the economic growth in the rural households*’ has been tested here.

Considering the categorical data of the form , ‘A’ corresponds to the *maximum literacy of a female in the given household*, with alternatives as  $A_1, A_2, A_3, A_4, A_5, A_6$  which correspond to different levels of literacy as follows:

**Table 5.10: Level of Literacy**

Notation	Level of Literacy
$A_1$	Illiterate
$A_2$	Primary School
$A_3$	Middle School
$A_4$	Secondary
$A_5$	Higher Secondary
$A_6$	Graduate

*Source-Computed by author*

‘B’ corresponds to the *monthly household income* with alternatives as B<sub>1</sub>, B<sub>2</sub>, B<sub>3</sub>, B<sub>4</sub>, B<sub>5</sub>, B<sub>6</sub> which correspond to different levels of monthly family income as depicted in Table 5.11.

**Table 5.11: Monthly Household Income**

Notation	Monthly Household Income
B <sub>1</sub>	<1000
B <sub>2</sub>	1001-5000
B <sub>3</sub>	5001-10,000
B <sub>4</sub>	10,001-15,000
B <sub>5</sub>	15,001-20,000
B <sub>6</sub>	>20,000

*Source-Computed by author*

**1. Formulation of the statistical hypothesis:** The statistical hypothesis can be statistically re-formulated as:-

H<sub>0</sub>: There is no association between A (level of literacy) and B (monthly household income)

H<sub>1</sub>: There is an association between A (level of literacy) and B (monthly household income)

An appropriate test is the Chi-squared test for independence of attributes taking attribute A as forms of literacy and attribute B as monthly household income ( in Rs.)

**2. Assumptions for statistically testing the Hypothesis:-**

- i) The data is categorical in nature.
- ii) Levels/ Categories are mutually exclusive.
- iii) Each subject contributes to the data in one and only one cell.
- iv) All observations are random and independent.

**3. The inference from the Chi-Squared test:-**

The respective values for Chi-squared statistic along with their degrees of freedom and p-value have been shown below.

**Table 5.12: Observations for each Block**

C.D. Blocks	Chi-squared	Degree of freedom	p-value
Rajganj	86.133	20	$3.489*10^{-10}$
Jalpaiguri	121.66	20	$2.2*10^{-16}$
Maynaguri	221.54	20	$2.2*10^{-16}$
Dhupguri	334.49	20	$2.2*10^{-16}$
Mal	202.97	20	$2.2*10^{-16}$
Matiali	106.75	20	$8.697*10^{-14}$
Nagrakata	121.66	20	$2.2*10^{-16}$

*Source: Calculated by author*

According to Table 5.12 it has been observed that the p-value for all the C.D. blocks are less than the level of significance ( $\alpha= 0.05$ ), hence we reject the null hypotheses and believe that there is an association between the female literate and the monthly household income of the households.

It is the level of education which creates awareness among the women workers about their rights and prepares them to shift their occupational structure from farm operations to non-farm operations. The higher the level of literacy among the rural women the higher they are engaged in the supplementary sources of income. Women who are employed in different economic activities are confined to both permanent and non-permanent or casual works. 35.80% women workers are engaged in different service sectors. It has been observed that the rural women are engaged as casual workers in gram panchayat office, primary health centres and in mini banks. Further they are also engaged as contractual workers or para-teachers in formal and non-formal educational institutions. Besides, the women are found to be employed in essential public services like Anganwadi workers, Anganwadi helpers and ASHA workers.

## **5.6 Healthcare Facilities**

Health is the most important factor for the well-being of humanity. The status of health care facilities is an important indicator of the process of rural development in its social aspects and therefore the variation in the distribution of health services is an indicator towards the disparities in the social development of a region. Since availability of health care facilities plays a crucial role in maintaining the quality of human resources therefore it is regarded as an important indicator of economic and social well-being. *Equitable distribution of healthcare facilities matter a lot for serving the needy population and it is critical in the context of time and space* (Lalmalsawmzauva, 2013).

It has been observed that there is a complete absence of primary health centres in the sampled villages of Jalpaiguri district. However, in terms of Primary Health Sub-Centres (PHSC), Dhupguri block have 7 Primary Health Sub-Centres, followed by Jalpaiguri, Maynaguri and Mal block (Fig. 5.7). Various kinds of vaccination, elementary medicines for ailments are provided by these centres through ANM (Auxiliary Nurse Midwife) workers and male health workers. Besides, ASHA (Accredited Social Health Activist) worker has also been observed in the primary health sub-centres during the course of field survey 2015-16, for the creation of health awareness and provision of curative care facilities for the rural population. However, the supervision of the LHV (Lady Health Visitor) is very irregular in

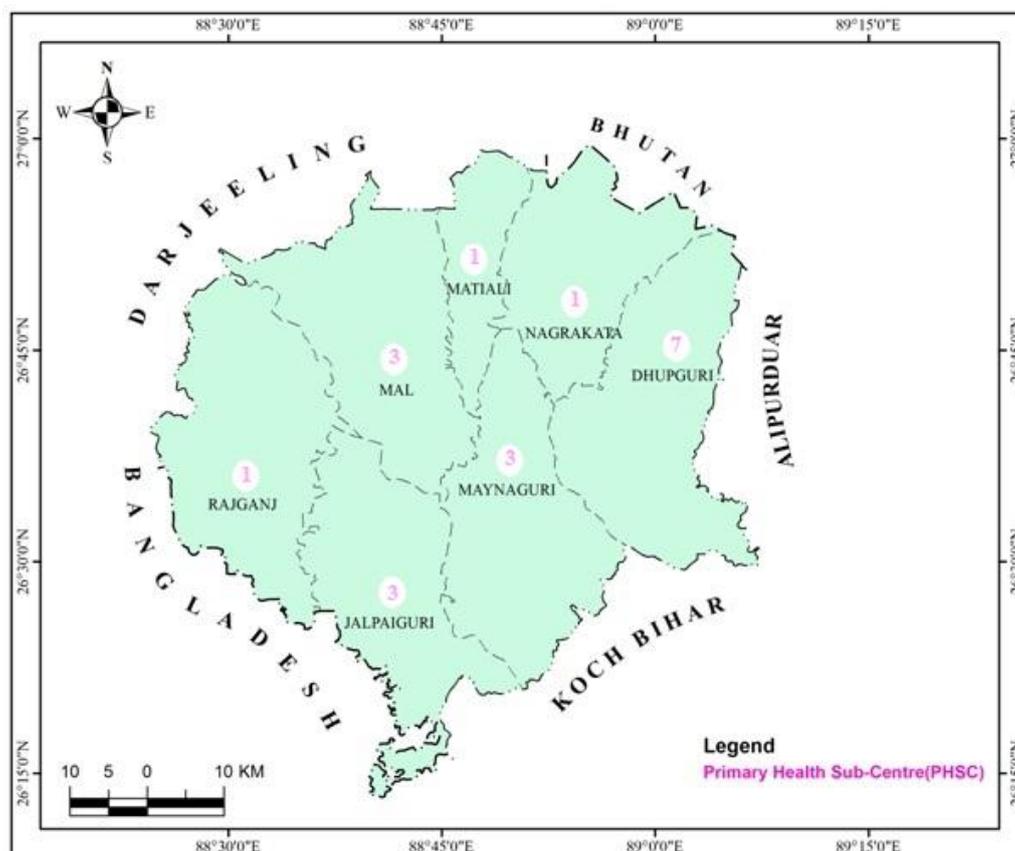
the study area. The PHSC provides services related to the antenatal and postnatal care along with the prevention of malnutrition in the sampled villages of the district.

According to the field survey 2015-2016, it has been observed that the healthcare services rendered across the sampled villages of the district is inadequate. Table 5.13 represents the healthcare facilities and the inter-block variations in Jalpaiguri district. In order to identify the number of population served by each primary health sub-centre, the ratio of primary health sub-centre and the total population of the sampled villages for each block have been calculated. The ratio reveals a wide range of variation in the study area.

**Table 5.13: Healthcare Facilities**

C.D Blocks	Total population of sampled villages	Primary Health Sub-Centre	Medicine Shop
Rajganj	5876	1	0
Jalpaiguri	4270	3	0
Maynaguri	12135	3	2
Dhupguri	17705	7	4
Mal	15435	3	0
Matiali	1954	1	0
Nagrakata	5587	1	1

*Source: Village and Town Directory, Census, 2011*



**Fig. 5.7: Healthcare Facilities of Jalpaiguri district**

*Source: Village and Town Directory, Census, 2011*

As per norms of the RADPFI, there should be 1 primary health sub-centre for 5000 rural population in the plain areas. In Rajganj block the ratio for health centre and the rural population of the sampled villages is 1:5876 which is higher than the guidelines of RADPFI; similarly, the ratio is again higher for Mal block with 1:5145 and Nagrakata block with 1:5587. Hence, establishment of adequate health centres and health care facilities is necessary for the provision of basic health care services in the sampled villages of Rajganj, Mal and Nagrakata blocks of Jalpaiguri district.

However, the ratio observed for primary health sub-centre and rural population in Maynaguri block is 1:4045, likewise for Dhupguri block the ratio is 1:2529, for Jalpaiguri block the ratio is 1:1423 and for Matiali block the ratio is 1:1954, which is less as per the RADPFI guidelines. In terms of the numbers of medicine shops in the sampled villages of Jalpaiguri district, there is an availability of 7 medicine shops catering to the needs of the rural people. Thus the numbers of medicine shop is inadequate for the large scale rural population in the sampled villages of the district.

### 5.6.1 Medical Facilities

*Disparities in the availability of health facilities should be brought down by providing proper accessibility to the health services because health development directly benefits the individuals* (Rao, 1984). In the context of socio-economic development and the status of health care facilities of an area, staffs, beds and wards are the basic medical facilities which should be adequate in numbers in order to provide easy access to health care facilities in the rural areas. It has been observed that there are disparities on the availability of institutional beds as it ranges from a single bed facility in Rajganj and Maynaguri blocks to 25 bed facilities in Dhupguri block (Fig 5.8).

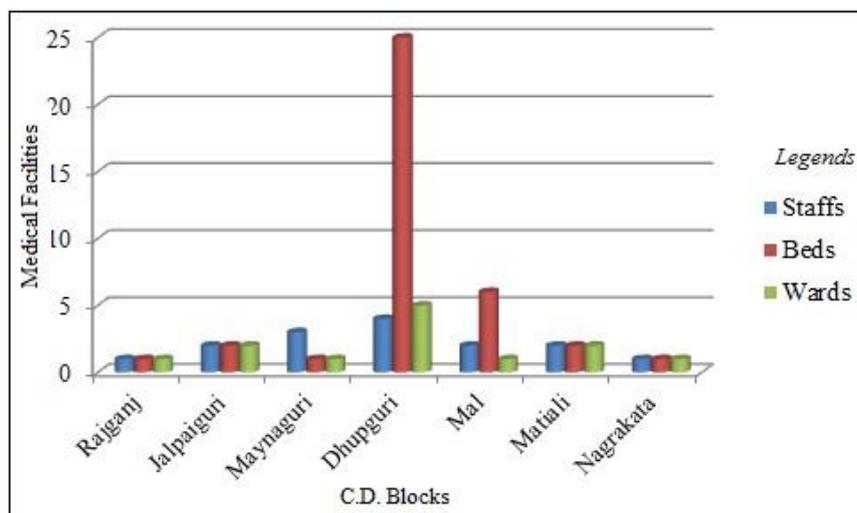
**Table 5.14: Medical Facilities**

<b>C.D. Blocks</b>	<b>Staffs</b>	<b>Beds</b>	<b>Wards</b>
Rajganj	1	1	1
Jalpaiguri	2	2	2
Maynaguri	3	1	1
Dhupguri	4	25	5
Mal	2	6	1
Matiali	2	2	2
Nagrakata	1	1	1
Total	15	38	13

*Source- Field survey, 2015-16*

During the field survey 2015-2016, the households revealed that, there is no easy access to well-equipped health centres and the availability of trained doctors in the rural sub-

centres. The medical staffs intend to provide their service in private sectors rather than government primary health sub-centres in the rural areas.



**Fig. 5.8: Medical Facilities in Jalpaiguri district**

*Source- Computed by researcher, 2016*

From Table 5.14 it has been noted that are 15 medical staffs, 38 numbers of beds and 13 wards available in the study area (Fig. 5.8). However, inadequate number of wards, beds, medicine supply, unavailability of medical staffs, poor care of patients and poor sanitary facility within the primary health sub-centre has been the major problem in the study area. Moreover, the sub-centres are functioning in a single room therefore lack of specialized services due to lack of infrastructure is further aggravating the problem in the sampled villages of Jalpaiguri district.

Health care facilities of a rural area are dependent on the availability of health care facilities because the issue of accessibility is dependent upon the availability of the health care services. It has been observed that the healthcare services rendered across the sampled villages of the district is not satisfactory and therefore there is an urgent need of the quantitative expansion of the healthcare services in terms of wards, beds and medical staffs with adequate infrastructural facilities in every village. Furthermore, there should be adequate provision of PHC in order to meet the health care needs of the rural masses of the district.

### **5.6.2 Type of Medicine**

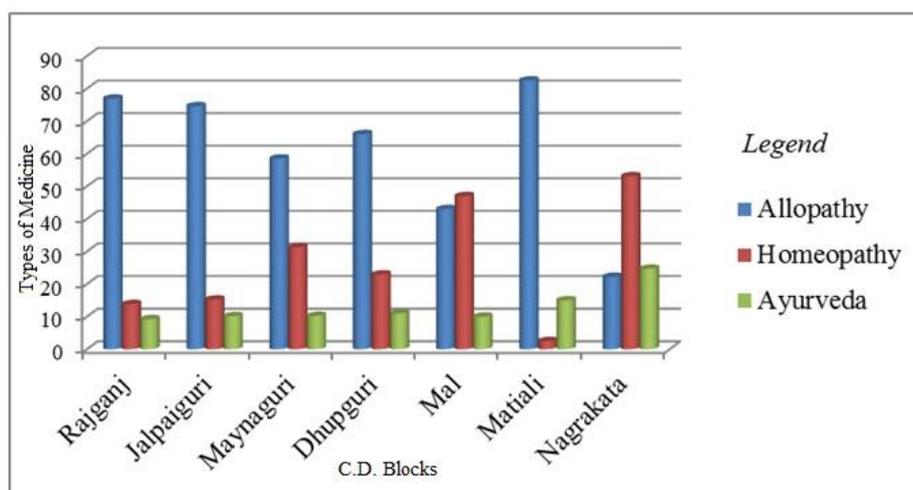
Though allopathic medicines are very popular yet a number of households have been observed in the sampled villages of Jalpaiguri district preferring homeopathic medicines with 31.20% and ayurvedic medicines with 11.92% for their health care needs. During the field survey 2015-16, it has been observed that, Matiali block has the highest percentage of households with 82.50% preferring allopathic medical provision for the health

care needs followed by Rajganj and Jalpaiguri block. However, from Table 5.15 it has been noted that in terms of homeopathy and ayurvedic medicines Nagrakata block has the highest percentage of households with 53.09% preferring homeopathy medicine and 24.69%

**Table 5.15: Percentage of Households Adopting the Type of Medicine**

C.D. Blocks	Allopathy	Homeopathy	Ayurveda
Rajganj	76.92	13.85	9.23
Jalpaiguri	74.58	15.25	10.17
Maynaguri	58.52	31.25	10.23
Dhupguri	66.03	22.97	11.00
Mal	43.00	47.00	10.00
Matiali	82.50	2.50	15.00
Nagrakata	22.22	53.09	24.69
Total	56.86	31.20	11.92

*Source- Field survey, 2015-16*



**Fig. 5.9: Type of Medicine in Jalpaiguri district**

*Source- Computed by researcher, 2016*

households preferring Ayurveda medicines followed by Mal block with 47.00% households preferring homeopathy medicine (Fig. 5.9). The households revealed during the field survey 2015-16, that the preference of the rural population for the homeopathic medicines is high with respect to allopathic medicines for the long term diseases in order to avoid adverse effects of allopathic medicines. Further, apart from homeopathic and allopathic medical provision it has been observed that the rural population depends upon Ayurveda medicines as these medicines are prepared from the herbal material or the natural systems and are also available at lower prices in the rural areas. However, this reflects the traditional outlook of the rural masses in the sampled villages of Jalpaiguri district.

## 5.7 Housing Structure

Housing is an indispensable need of people. Food, clothing and shelter are the three basic requirements for the survival of human beings and the function of a house is to provide shelter to the people. It is usually felt that every person would like to have a well-equipped house of his own. The quality and nature of houses is a reflection of the socio-economic condition of the households. Government of India has implemented a number of rural housing schemes which aims at providing dwelling houses to the poor families who are below poverty line in the rural areas of the country.

However, Census of India (1961) classified houses based on the type of predominant wall and roof materials. A house will be called as *pucca* when the roof and walls will be constructed with brick, GI or other metal sheets and cement. A wall and the roof of a house will be treated as *kutcha* if the material used includes mud, unburnt brick, bamboos or leaves. Further a house will be considered as *semi-pucca* when either the wall or the roof is built by the combination of both *kutcha* and *pucca* materials.

### 5.7.1 Roof Type

Table 5.16 depicts the block wise roof type condition of the households in the sampled villages of Jalpaiguri district. The material used for the construction of houses reflects the social and the economic condition of the rural households in the study area. According to the field survey 2015-2016, it has been observed that 78.67% households have the roof build with GCI sheets in the sampled villages of Jalpaiguri district. The highest percentage of households has been observed in Matiali block with 90.00% followed by Nagrakata block with 87.65%.

**Table 5.16: Roof Type of the Percentage of Households**

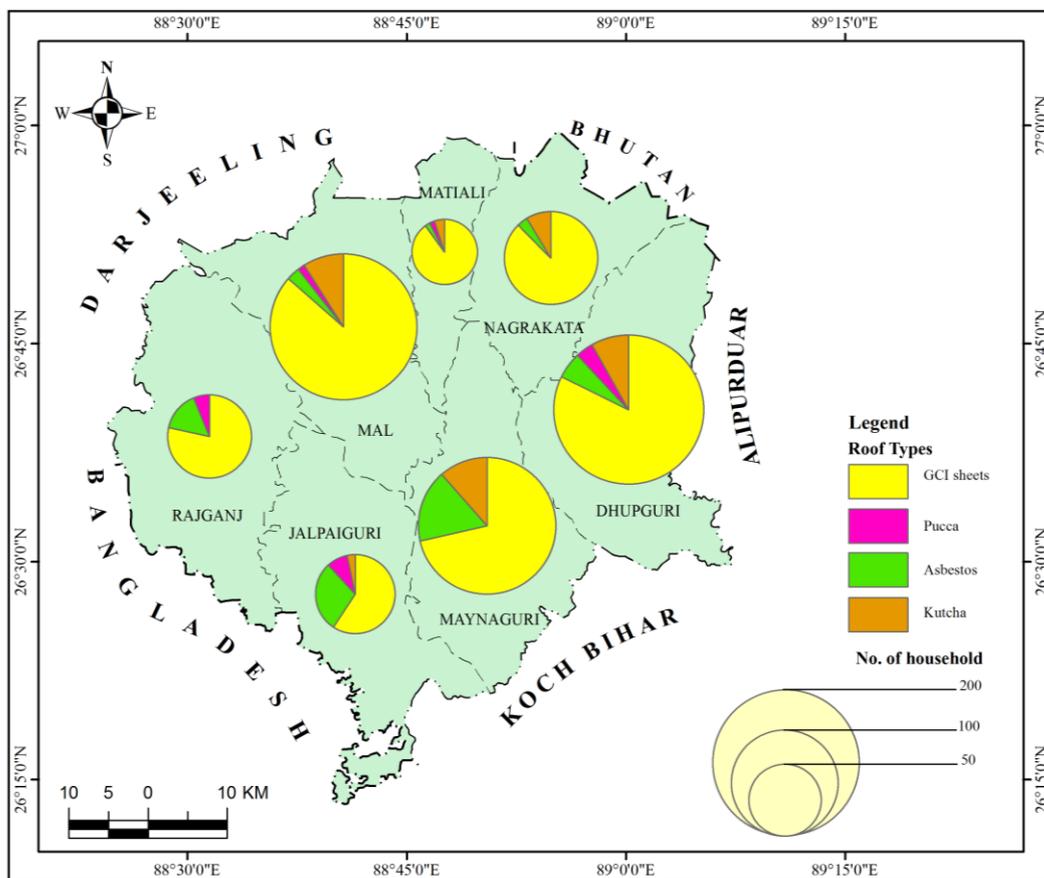
<b>C.D. Blocks</b>	<b>GCI sheets</b>	<b>Asbestos</b>	<b>Pucca</b>	<b>Kutcha</b>
Rajganj	78.46	15.39	6.15	0.00
Jalpaiguri	59.32	28.82	8.47	3.39
Maynaguri	71.02	17.05	0.57	11.36
Dhupguri	82.30	5.74	3.83	8.13
Mal	86.5	3.00	1.50	9.00
Matiali	90.00	2.50	2.50	5.00
Nagrakata	87.65	3.70	0.00	8.65
Total	78.67	9.75	3.01	8.55

*Source- Field survey, 2015-16*

Again, it has been observed that 9.75% households have asbestos roof in the study area where the highest share of households has been obtained in Jalpaiguri block with 28.82% and the lowest percentage of households has been found in Matiali block with 2.50%. However, it has been found during the field survey, that only 3.01% households have pucca

roof in the study area where 8.47% households have been found in Jalpaiguri block and 0.57% has been found in Maynaguri block. Hence there exists variability in the roof type of the rural households in the study area. This is due to the fact that building pucca houses, the roof type in particular is beyond the affordability of the rural masses in the study area.

Due to high incidence of poverty and low income the rural population is unable to construct pucca houses. Hence, 8.55% of the households have been found with kutcha roof in the sampled villages of Jalpaiguri district. Poor housing structure affect the level of social development in the rural area. Moreover during monsoon or during the heavy downpour the leaking kutcha roofs have been a major problem for the rural masses.



**Fig. 5.10: Roof Type in Jalpaiguri district**

*Source- Computed by researcher, 2016*

The percentage share of the kutcha roof is high in Maynaguri block with 11.36% households while none of the household in Rajganj block has kutcha roof due to the higher proportion of asbestos and GCI sheets roof houses (Fig. 5.10). However during the field survey 2015-16, it has been observed, that the percentage of kutcha roof type is considerably low as compared to the roof build with asbestos or GCI sheets. The reason behind the lower percentage of kutcha roof type is attributed to the implementation of the Rural Housing

Programmes which provided financial assistance to the weaker sections of the rural areas for the construction of new pucca houses in the sampled villages of Jalpaiguri district.

### 5.7.2 Wall Type

Table 5.17 depicts the wall type of the rural houses in the sampled villages of Jalpaiguri district. 17.22% households has been observed with pucca wall in the study area where the highest percentage of households has been observed in Rajganj block with 46.15% and the least has been observed in Mal block with 5.50%. It is due to the fact that 82.00% households have kutcha houses in Mal block (Fig. 5.11).

It has been observed during the field survey 2015-16, that the poor economic condition and the occurrence of poverty has been reflected by the type of houses in the rural areas of the study area. Despite the implementation of the rural housing schemes for the families below poverty line, there are 66.38% households observed with kutcha wall houses in the study area. The percentage share of houses having kutcha wall is higher in all the blocks as compared to the pucca wall. In terms of kutcha wall, the highest percentage has been observed in Mal block with 82.00% whereas the least percentage has been observed in Matiali block with 42.50%. The tea garden labourers, daily wage earners, agricultural land less laboureres in particular have kutcha houses in the study area. Further, 7.46% households have been found with GCI sheets wall where the highest percentage has been found in Dhupguri block with 14.35% followed by Maynaguri block.

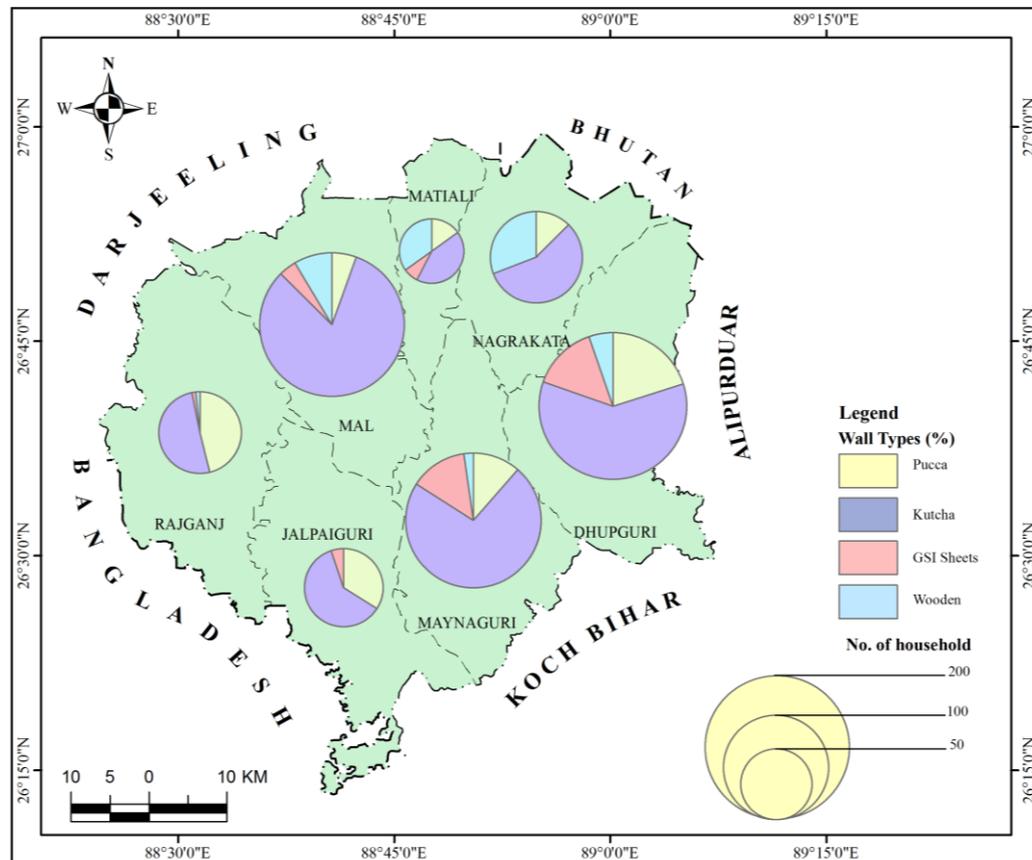
**Table 5.17: Wall Type of the Percentage of Households**

C.D. Blocks	Pucca	Kutcha	GCI sheets	Wooden
Rajganj	46.15	50.77	1.54	1.54
Jalpaiguri	33.90	61.02	5.08	0.00
Maynaguri	11.36	72.72	13.64	2.27
Dhupguri	20.09	60.29	14.35	5.26
Mal	5.50	82.00	4.00	8.50
Matiali	15.00	42.50	7.50	35.00
Nagrakata	12.35	56.79	0.00	30.86
Total	17.22	66.38	7.46	8.91

*Source- Field survey, 2015-16*

Whereas in Nagrakata block none of the houses have been found with GCI sheets wall as 56.79% households have kutcha houses. Likewise, 8.91% has been observed with wooden wall type houses in the sampled villages of the district. The highest proportion of households has been observed in Matiali block with 35.00% followed by Nagrakata block. Hence, the percentage of rural population living in kutcha houses reflects their poverty and economic

backwardness. Moreover the poor quality of the housing material creates an unhygienic condition particularly during rainy season.



**Fig. 5.11: Wall Type in Jalpaiguri district**

*Source- Computed by researcher, 2016*

### 5.7.3 Floor Type

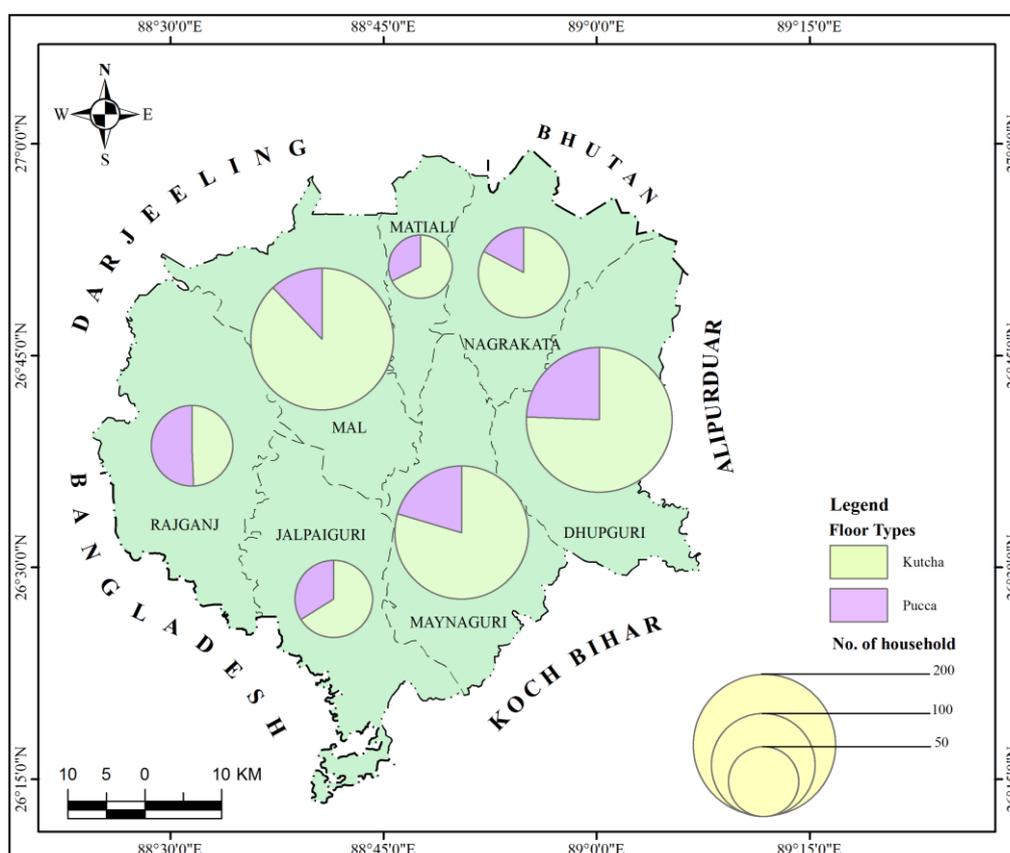
Table 5.18 depicts the floor type of the rural households in the sampled villages of Jalpaiguri district. During the field survey 2015-16, 25.30% households has been observed with pucca floor where the highest share of households has been obtained in Rajganj block with 50.77% whereas the least has been observed in Mal block with 12.00%, as 88.00% households has been found with kutcha floor in the sampled villages of the Mal block (Fig. 5.12). However, despite the implementation of the rural housing schemes by the government the households with kutcha floors are significantly high with 74.69% in every block in comparison to pucca floors in the sampled villages of Jalpaiguri district.

The major reason behind this fact is the poor socio-economic condition of the rural households. Therefore adequate housing facility for the weaker sections of the people in the rural areas of Jalpaiguri district is essential as leaking roofs, large cracks in walls and damaged floors have an adverse effect upon the health and hygiene of the rural masses in the study area.

**Table 5.18: Floor Type of the Percentage of Households**

C.D. Blocks	Kutcha	Pucca
Rajganj	49.23	50.77
Jalpaiguri	66.10	33.90
Maynaguri	79.55	20.45
Dhupguri	75.60	24.40
Mal	88.00	12.00
Matiali	67.50	32.50
Nagrakata	82.72	17.28
Total	74.69	25.30

Source- Field survey, 2015-16



**Fig. 5.12: Floor Type in Jalpaiguri district**

Source- Computed by researcher, 2016

#### 5.7.4 Kitchen Type

The type of kitchen is one of the indicators of the quality of housing. Place of cooking or domestic kitchen is not only important for a family but also significant factor in establishing healthy environment in the households.

Table 5.19 reveals that majority of the households have a separate built kitchen where Rajganj block has the highest percentage of households with 81.53% and Matiali block has the least percentage of households with 62.5%. The separate kitchen however symbolizes the

bigger size of landholding of the household. As far as combined kitchen is concerned, 14.09% households has combined kitchen in the study area where 23.73% households in Jalpaiguri block have their kitchen attached with their rooms whereas the lowest percentage of households with combined kitchen type has been observed in Nagrakata block with 11.11%.

**Table 5.19: Kitchen Type of the Percentage of Households**

C.D. Blocks	Separate	Combined	None
Rajganj	81.53	13.85	4.62
Jalpaiguri	74.58	23.73	1.69
Maynaguri	72.73	11.93	15.34
Dhupguri	64.59	13.40	22.01
Mal	67.00	14.50	18.50
Matiali	62.5	20.00	17.5
Nagrakata	67.90	11.11	20.99
Total	69.39	14.09	16.50

*Source- Field survey, 2015-16*

However, it is a matter of concern that 16.50% households observed in the study area with a complete absence of a built kitchen within their premises. The highest share of household with the absence of a built kitchen has been observed in Dhupguri block with 22.01% and the least has been obtained in Jalpaiguri block with 1.69%. Cooking in an open ground is not suitable for health as it reflects the unhygienic condition of the rural household in the sampled villages of the district.

### 5.7.5 Room density

Room density is a useful index reflecting the housing conditions of an area. It is an indicator of the availability of space within a dwelling unit. Room density refers to the number of persons per room.

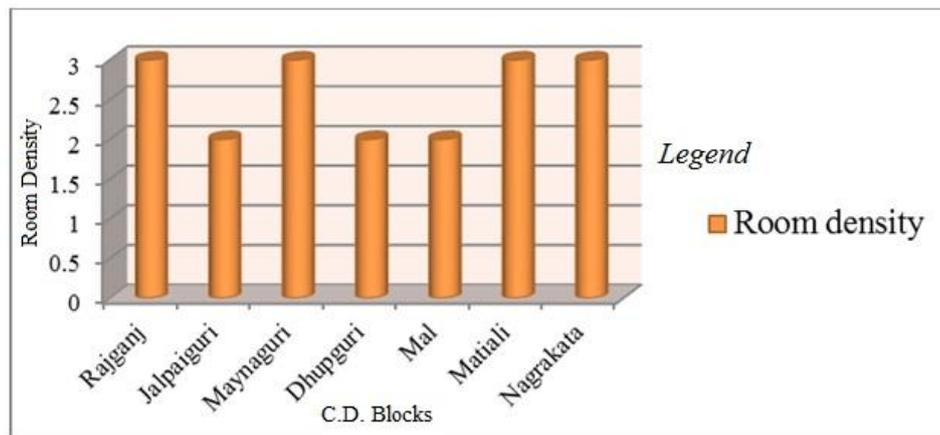
**Table 5.20: Room density in Jalpaiguri district**

C.D. Blocks	Population of the sampled households*	Number of rooms*	Room density**
Rajganj	326	130	3
Jalpaiguri	278	113	2
Maynaguri	872	343	3
Dhupguri	925	404	2
Mal	915	370	2
Matiali	183	73	3
Nagrakata	360	140	3

*Source- \*Field survey, 2015-16*

*\*\*calculated by author*

Since the number of rooms indicates the level of congestion in the house therefore it is a crucial factor in judging the quality of housing. Further availability of adequate space is also a reflection of the socio-economic status of the households. *In general, 1 person or fewer per room is regarded as desirable and 1.51 or more persons per room may be defined as crowded housing* (Bogue, 1969). Table 5.20 discloses that the room density ranges between 2 to 3 persons per room in the sampled villages of the district.



**Fig. 5.13: Room density in Jalpaiguri district**

*Source- Computed by researcher, 2016*

Except in Jalpaiguri, Dhupguri and Mal blocks the density is 3 persons per room in Rajganj, Maynaguri, Mal, Matiali and Nagrakata blocks (Fig. 5.13). However it has been observed that none of households have adequate space because in every blocks of the study area, there is more than one person per room which reflects the problem of residential crowding in the households.

### 5.8 Sanitation

Access to sanitation is not only an important measure of the socio-economic status of the household but also it is a fundamental element to the hygienic health of the people. Absence of sanitary facilities within the household premises of the rural areas of the district forces the rural masses to resort to open defecation which leads to many public health hazards. Table 5.21 reveals the percentage of households with sanitary facilities within their premises, the percentage of beneficiary households and the percentage of households without any sanitary facility within their premises. The highest share of households having the sanitary facilities within their dwelling house has been obtained in Jalpaiguri block which is 62.71 % whereas the lowest has been found in Matiali block at 2.50% (Fig. 5.14).

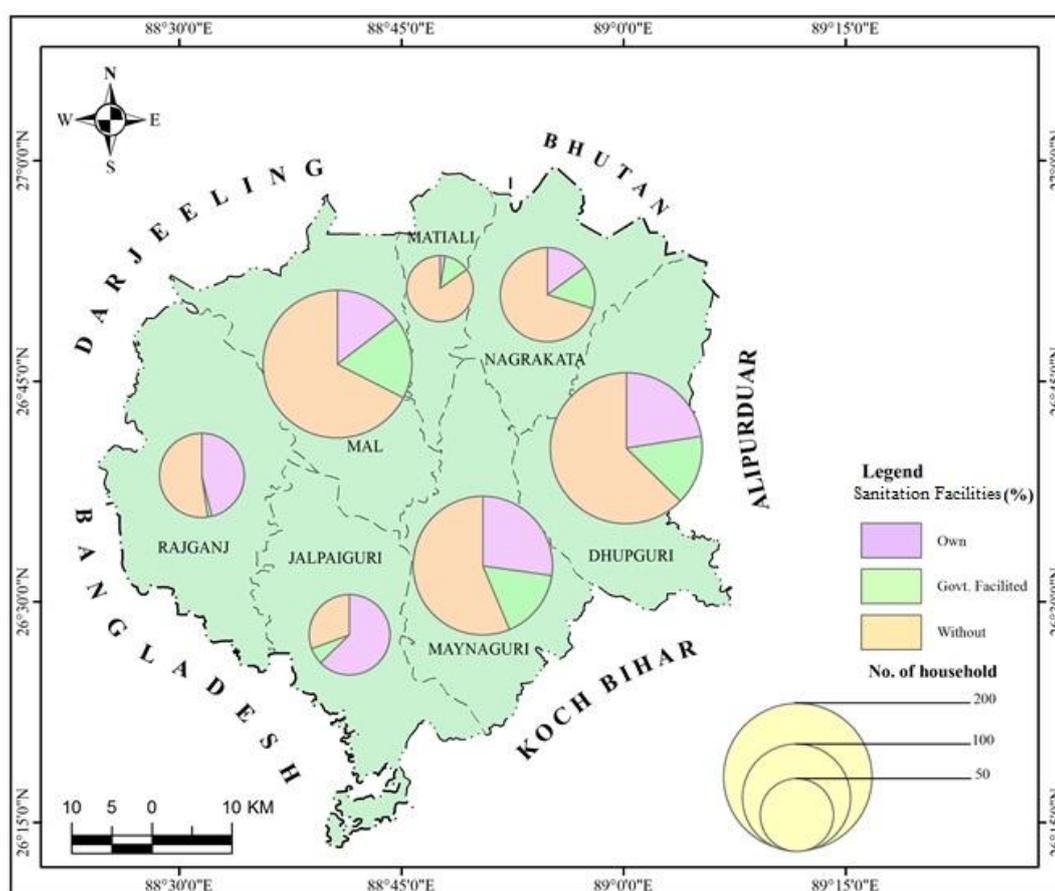
It is evident from the Table 5.21 that, the highest proportion of households having access to government facilitated rural sanitation has been obtained in Mal block with 18.00% under the target of Swachh Bharat Mission (SBM), Ministry of Drinking Water and

Sanitation, whereas the least percentage of household has been found in Rajganj block with 1.54%.

**Table 5.21: Sanitation Facilities of the Percentage of Households**

C.D. Blocks	Within premises	Within premises (Government Facilitated)	Without sanitation facility
Rajganj	46.15	1.54	52.31
Jalpaiguri	62.71	6.78	30.51
Maynaguri	27.27	16.48	56.25
Dhupguri	22.49	14.83	62.68
Mal	14.5	18.00	67.5
Matiali	2.50	12.50	85.00
Nagrakata	14.82	14.81	70.37
Total	25.18	14.21	60.60

Source- Field survey, 2015-16



**Fig. 5.14: Sanitation Facilities in Jalpaiguri district**

Source- Computed by researcher, 2016

However, it has been observed during the field survey period 2015-2016, that the state of sanitation facilities is in the worst condition as 85.00% sampled households of Matiali block are deprived of sanitation facility and basic hygiene within their premises, followed by Nagrakata block with 70.37%. The failure to achieve 100 percent sanitation coverage by the

Swachh Bharat Mission as a whole in the study area is due to the fact that the investments that are made in rural sanitation do not yield proportionate results because of poor planning and implementation.

Hence, though funds are available, the skills of the concerned officials are lacking regarding the proper implementation of the schemes in the study area. Moreover, it has been observed that there is an urgent need to increase the level of awareness and knowledge of the rural population regarding the hygienic practices in the study area.

### 5.9 Women's Awareness

For the economic and the social development in the rural areas it is important to assess women's awareness in terms of literacy, family planning, employment and decision making. Literally, *educational opportunities and the empowerment of women go hand-in-hand* (Jha, and Dutta, 2014). Table 5.22 represents that 46.02% women are aware about the importance of literacy in Maynaguri block followed by Dhupguri block. However, it has been observed that the rural women have the awareness regarding the quality education. Hence, the effect of education has lead the women to understand the value of small family size adopting family planning methods as has been observed during the field survey 2015-16.

**Table 5.22: Awareness of Women (in percentage)**

C.D. Blocks	Literacy	Family planning	Employment	Decision making
Rajganj	43.08	21.54	29.23	6.15
Jalpaiguri	38.98	15.26	32.20	13.56
Maynaguri	46.02	13.64	27.84	12.50
Dhupguri	44.98	14.83	26.79	13.40
Mal	41.50	15.00	29.00	14.50
Matiali	42.50	17.50	27.50	12.50
Nagrakata	29.63	22.22	40.74	7.41

*Source- Field survey, 2015-16*

The economic condition of the household is of prime concern in determining the structure of employment for the rural women. However, 40.74% women in Nagrakata block followed by Jalpaiguri block are aware of the scenario that proper employment is necessary for a better socio-economic status.

The highest percentage of women regarding their participation in decision making has been obtained in Mal block followed by Jalpaiguri block reflecting women's empowerment in the study area. During the field survey 2015-16 it has been observed, that the women age group between 25-35 years participates the highest in their household decision making activities.

## 5.10 Level of social development

Social development holds the key role in the process of rural development. An attempt has been made to find the disparities in the level of social development in the sampled villages of the 7 community development blocks of Jalpaiguri district. Based on the indices that support the level of social development the blocks has been classified into high, moderate and low level of social development which clearly depicts the disparities in the level of social development in Jalpaiguri district. Z-score and composite score technique has been applied for identifying the level of development based on the scores of social development.

For the analysis of the data the following thirteen components have been taken into account affecting the level of social development: number of primary school per 5000 of population ( $X_1$ ), Number of middle school per 5000 of population ( $X_2$ ), Number of SSK per 5000 of population ( $X_3$ ), Number of MSK per 5000 of population ( $X_4$ ), Percentage of male literate ( $X_5$ ), Percentage of female literate ( $X_6$ ), Number of primary health sub centres per 5000 of population ( $X_7$ ), Number of medical staffs per 5000 of population ( $X_8$ ), Number of beds per 5000 of population ( $X_9$ ), Number of wards per 5000 of population ( $X_{10}$ ), Percentage of household with pucca roof ( $X_{11}$ ), Percentage of household with pucca wall ( $X_{12}$ ), Number of household with sanitation ( $X_{13}$ ).

**Table 5.23: z-score of Social Development in the blocks of Jalpaiguri district**

C.D. Blocks	$X_1$	$X_2$	$X_3$	$X_4$	$X_5$	$X_6$	$X_7$	$X_8$	$X_9$	$X_{10}$	$X_{11}$	$X_{12}$	$X_{13}$	Composite scores
Rajganj	-0.73	-0.92	0.65	-0.92	0.08	0.14	-0.84	-0.56	-0.72	-0.07	0.92	1.77	0.91	-0.02
Jalpaiguri	0.03	0.79	-0.15	-0.92	-0.89	0.60	1.76	0.37	-0.12	0.06	1.67	0.92	1.71	0.45
Maynaguri	-0.51	-0.62	-0.68	0.41	-0.17	0.54	-0.47	-0.32	-0.89	-0.11	-0.87	-0.64	0.003	-0.34
Dhupguri	-0.29	-0.20	-0.21	0.70	1.02	1.00	0.26	-0.38	1.76	-0.01	0.17	-0.03	-0.22	0.27
Mal	-0.28	-0.33	-0.95	0.00	1.38	0.29	-0.72	-0.68	-0.28	-0.12	-0.57	-1.05	-0.61	-0.30
Matiali	2.20	1.90	1.94	-0.92	0.04	-1.95	0.83	2.12	0.98	0.33	-0.25	-0.39	-1.19	0.43
Nagrakata	-0.40	-0.60	-0.57	1.66	-1.48	-0.63	-0.80	-0.53	-0.70	-0.06	-1.06	-0.57	-0.59	-0.49

*Source- Calculated by Author*

Besides, for analyzing the development scenario in the study area as a whole, the z-scores of all the variables have been aggregated block wise. The summed up z-scores are divided by the number of variables in order to derive the composite score and compare the degree of social development in CD Blocks. Jalpaiguri district displays wide disparities in the level of social development. Table 5.23 depicts the z-score values for social development in the blocks of Jalpaiguri district.

**Table 5.24: Level of Social Development**

Category	Z score range	Name of the Blocks
Low	<-0.2	Maynaguri, Mal, Nagrakata
Moderate	-0.2 – 0.1	Rajganj
High	>0.1	Jalpaiguri, Dhupguri, Matiali

*Source- Calculated by Author*

Table 5.24 depicts high level of social development based on composite standard scores has been observed in Jalpaiguri (0.45), Dhupguri (0.27) and Matiali (0.43) blocks of Jalpaiguri district. The main variables which appear to have influenced the high level of social development include the educational institutions, health care facilities, housing structure, and medical facilities which are adequate in these blocks. The formal, non-formal educational institutions and the primary health sub centres are uniformly distributed in these blocks. Further, owing to the provision of assistance from the rural housing schemes the pucca houses are constructed in these blocks contributing to better level of social development.

However, Rajganj (-0.02) block displays moderate level of social development. Availability of educational institutions, numbers of primary health sub-centres along with the number of medical facilities are inadequate in the sampled villages of the block. Moreover, in Rajganj block the ratio for health sub-centres and the rural population of the sampled villages is higher than the RADPFI guidelines; therefore there is an immediate need for the improvement of healthcare facilities in the sampled villages of the block. Maynaguri (-0.34), Mal (-0.30) and Nagrakata (-0.49) block falls in the lowest category in terms of social development. Except for the number of MSK, negative scores have been obtained in all the variables of the blocks. The blocks lack the adequate number of formal and non-formal educational institutions. The blocks do not have adequate primary health centres. Thus, they have inadequate medical staffs, beds and wards, leading to backwardness in terms of social development. Besides, the proper housing structure and the sanitation facilities which are the basic component of social development in rural areas are inadequate in these blocks of Jalpaiguri district.

Hence, there is a need to conduct strategies, and the government should adopt holistic approaches that could cater to underdeveloped blocks of the district for the balanced regional development.

### **5.11 Conclusion**

From the above discussion it can be concluded that the social infrastructure in terms of health, education and sanitation facilities are inadequate in the rural areas of Jalpaiguri

district. Educational institutions form the backbone of the whole educational system but it has been noticed that there is only one higher secondary school in the sampled villages of Jalpaiguri district. Therefore, construction of higher educational institutions is necessary as higher education always provides a way to better employment and educational development. Considering the student-teacher ratio of the state 40:1, it has been observed that the ratio is lower for primary school and middle school whereas it is high for the higher secondary school in the rural areas of Jalpaiguri district. In terms of literacy Jalpaiguri district has witnessed, 62.13% males and 59.42% females are literate, whereas, 37.87% males and 40.58% females are illiterate. In this context, access to quality education for the rural population should be increased with proper infrastructural facilities in order to lower the level of illiteracy from the sampled villages of the district.

It has been observed that the healthcare services rendered across the sampled villages of the district is inadequate. Out of the total seven blocks, there is a complete absence of Primary Health Centre (PHC) in the sampled villages of the district. In terms of Primary Health Sub-Centres (PHSC), Dhupguri block has 7 Primary Health Sub-Centres catering to the needs of the rural people. Apart from education and health, housing is an indispensable need for healthy living. Interestingly, the proportion of kutcha roof is considerably low as compared to the roof build with asbestos or GCI sheets and the reason behind this is attributed to the Rural Housing Programmes which have provided assistance in the construction of houses. But regarding sanitation facilities, there has been a failure in achieving 100 percent sanitation coverage by the Swachh Bharat Mission in the study area. The reason behind this fact is the poor planning, implementation and execution of the programmes for rural sanitation in the sampled villages. Hence for the process of social development extension of facilities in areas like education, health, medical care, housing and sanitation is of immense significance.

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