EDUCATIONAL STATUS OF TRIBAL POPULATION IN SILIGURI SUB-DIVISION, DARJILING DISTRICT, WEST BENGAL: A GEOGRAPHICAL ANALYSIS

A Thesis submitted to the University of North Bengal

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in

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By

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DECLARATION

This thesis is a presentation of my original research work. I do hereby declare that the thesis entitled **"EDUCATIONAL STATUS OF TRIBAL POPULATION IN SILIGURI SUB-DIVISION, DARJILING DISTRICT, WEST BENGAL: A GEOGRAPHICAL ANALYSIS"** has been carried out as well as prepared by me under the guidance of Prof. (Dr.) Ranjan Roy, Department of Geography and Applied Geography, University of North Bengal. I ensure that, no part of this thesis has been submitted elsewhere for the award of any degree or fellowship previously.

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CERTIFICATE

This is to certify that Punama Sen has prepared thesis entitled **"EDUCATIONAL STATUS OF TRIBAL POPULATION IN SILIGURI SUB-DIVISION, DARJILING DISTRICT, WEST BENGAL: A GEOGRAPHICAL ANALYSIS"** for the award of Doctor of Philosophy (Ph.D) degree in Geography and Applied Geography of University of North Bengal, under my supervision. She has carried out her research work at the Department of Geography and Applied Geography, University of North Bengal and the thesis has been prepared based on the extensive field study for collection of primary data and secondary sources of information. The thesis in full or any part of it has not been submitted previously for any other degree or diploma.

It may further be mentioned that Punama Sen has fulfilled all other requirements as per rules of the University of North Bengal regarding the submission of Ph.D level Dissertation.

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W	URL: https://ir.nbu.ac.in/bitstream/123456789/2784/12/12_chapter%202.pdf Fetched: 2022-04-04T07:39:04.6500000	1
W	URL: https://censusindia.gov.in/2011census/dchb/DCHB_A/19/1901_PART_A_DCHB_DARJILING.pdf Fetched: 2021-05-25T22:38:49.5450000	25
W	URL: https://cdn.s3waas.gov.in/s3227b0cee7e1f3bde58293de743871417/uploads/2021/08/20210813IS.pdf Fetched: 2021-10-01T20:36:36.3400000	1
W	URL: https://en.wikipedia.org/wiki/Phansidewa Fetched: 2022-04-04T07:38:24.5170000	1
W	URL: https://nehu.ac.in/public/downloads/Journals/NEHU-Journal-July-Dec-2016-A5.pdf Fetched: 2019-09-26T08:03:51.6300000	1
W	URL: https://pib.gov.in/PressReleasePage.aspx?PRID=1778541 Fetched: 2022-04-04T07:39:34.9100000	1
W	URL: https://www.culturalsurvival.org/publications/cultural-survival-quarterly/tribal-education-india Fetched: 2020-01-24T04:20:07.0370000	1

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PREFACE

Tribal people are often considered as the marginalized and under developed community of a society. Their backwardness is caused by a number of their very own type of factors. Educational backwardness is one of the most important factors among these. Educational development can help the tribal community to lead their overall development. The thesis entitled as **"Educational Status of Tribal Population in Siliguri Sub-division, Darjiling District, West Bengal: A Geographical Analysis"** is prepared based on my research work and field survey carried out during 2019-2020. The thesis is focused on the educational status of tribal population in the Siliguri Sub-division. It elaborately describes the present educational development status of the tribals in the study area and also finds out the factors those are affecting the educational development of them. Different statistical techniques have been used to establish the relation between the different factors of education. The present work also attempts to find out the solutions of the hindrances to the educational development of the tribal population in the study area. The study also highlighted the socio-economic condition of the tribal people in the sub-division and shows a comparative study on socio-economic conditions of tribal people among the four C.D. blocks in the sub-division.

The study divided into seven chapters; Chapter- I Introduction, Chapter-II gives a brief outline on the physical and cultural background of the study area, Chapter-III highlights the socio-economic profile of the tribal population in the study area, Chapter- IV describes the educational status of the tribal population in the study area, Chapter-V deals with the controlling factors of tribal education, Chapter-VI finds out the relation between education and economic condition of tribals in the study area and finally Chapter-VII highlights the major findings of the research work, gives suggestive measures to overcome the problems and draws a conclusion of the research work.

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ABSTRACT

The Scheduled tribes or Adivasi people in India are considered as the earliest inhabitant of the country. To relate with their distinct way of life often the pharase Jal Jungle and Zameen is used as they prefer to live their life maintaining a strong kin relationship with the mother nature. The Constitution of India in Article 366(25) defines the Scheduled Tribe. Also the Constitution of India gives many a social safeguards to the scheduled tribe people by special provisions in it. The present study region, Siliguri sub-division of Darjiling district, is situated between the latitudinal extension of 26°23´ N to 26°57´ N and longitudinal extension of 88°07´ E to 88°31´ E. Presently the sub-division consists of one municipal corporation i.e. Siliguri Municiapl Corporation (part) and four community development blocks i.e. Matigara C.D. Block, Naxalbari C.D. Block, Phansidewa C.D. Block & Kharibari C.D. Block. And these consist of 22 Gram Panchayats and 14 Census Towns. According to census 2011, in the study area 15.08 percentage of the total population is tribal population and only 51.93 percent of this population is literate. With this trend it is obvious that higher education percentage is also significantly low. So, there is an ample scope to study the present educational development status of the tribal people, to find out the hindrances to their educational development and come up with possible ways to address those problems.

The present research work is an attempt to assess the educational development status of tribal population in the study area. Therefore, to do so the following objectives are set:

- To study the socio-economic conditions of tribal population.
- To study the educational status of the tribal population
- To study the controlling factors of tribal education.
- To examine the relationship between the level of education and economic conditions of tribal population.

In order to fulfill these objectives, database has been the main focus in the present study. Both the primary and secondary data are collected for the entire study. Also various statistical techniques like Mann-Whitney U-test, Z-test, χ^2 test, Kruskal-Wallis H- test, Logistic Regression have been used at different stages.

Over the years, the number of scheduled tribe population in the study area has increased. According to census of India the ST population in 2011 has increased to 9,71,120 from that of 1,30,832 in 1951. Though during this time frame the lowest decadal of ST population growth can be witnessed in 2011 (18.63 percent). According to the secondary data, highest concentration of ST population has been found at Phansidewa C.D. Block (with LQ value of 2.030) in the sub-division (Census 2011). Also, the distribution of population data shows 93.64 percent of tribal population lives in rural areas in the study region. The sex ratio of tribal population in the study area is 1029 which is more than the overall sex ratio of the sub-division (954). The National Youth Policy 2014 has classified the age group of 14 to 29 as Youth Population. In the sub-division the percentage of this Youth Population is 36.18 percent which is highest single age group constitute in the study area. Also age group below 30 years shares 57.33 percent of the total ST population in the study area.

In order to assess the first objective various socio-economic parameters have been analyzed through field survey data. Block and GP wise three Development Indices; Social Development Index, Housing Development Index & Economic Development Index, have been prepared from the primary data. These three Development Indices have been prepared with the help of Dimension Index. From these three Development Indices an overall Composite Index of Socio-Economic Condition has been derived to find out the status of socio-economic condition of tribal people in the study area. To prepare the Social Development Index out of the all discussed social parameters, five social variables have been taken into consideration; Total Literacy Rate, Male Literacy Rate, Female Literacy Rate, Female Married below 18 years of Age & Sex Ratio. The result of the Social Development Index shows that Phansidewa C.D. Block is the least socially developed block and Naxalbari C.D. Block is most socially developed block among the four C.D Blocks in the sub-division. Out of the 12 least developed GP, 5 Gram Panchayats belong to this C.D. block only. GP wise Chathat Bansgao GP in Phansidewa C.D. Block has the lowest Social Development Index value and Matigara-I has the highest Social DI value among all the 22 Gram Panchayats in the sub-division. To find a relationship between Tribal Female's age of Marriage with Literacy Mann-Whitney U-test has been applied with 5 percent significance level (α = 0.05). The result of the statistical test establishes a positive impact of literacy on female's age of marriage. The field data shows, child marriage percentage in the study area for tribal girl child is 48.51 percent for illiterate child and this percentage comes down to as low as 27.12 percent for literate girl child. This proves our first hypothesis too. To prepare the Housing Development Index, out of various housing development variables 06 variables, Household with One Room,

Pakka House, Household Using Latrine Facility, Water Facility near Premises, Household having Electric Facility, Household having LPG Connection; have been taken into consideration. The result of the Housing Development Index value shows Block wise Matigara C.D. Block tops the list and Phansidewa C.D. Block is at the last position. GP wise best Housing DI value has been found in Lower Bagdogra GP and worst has been found in Hetmuri GP. Similar to the first two Development Index, Economic Development Index has been prepared to find out the economic status of the study area. To do so, out of various parameters discussed, 07 variables, Work Participation Rate, Male Work Participation Rate, Female Work Participation Rate, Main Workers, Male Main Workers, Female Main Workers, Household Monthly Income above 10000, have been taken into consideration. The result of the Economic Development Index shows Block wise Matigara C.D. Block and Kharibari C.D. Block are with best and worst Economic DI value respectively. GP wise Lower Bagdogra GP tops the list and Raniganj Panisali GP is at last. Compiling these three Development Index a Composite Index of Socio-Economic Condition has been prepared to assess the overall Socio-Economic status of the study area. This Index value shows that in the study area the overall socio-economic condition is at best condition in Matigara C.D. Block and at worst in Pansidewa C.D Block. And Gram Panchayat wise best Composite Index value is in Lower Bagdogra GP and worst can be found in Raniganj Panisali GP.

In order to assess the second objective Coefficient of Equality has been prepared for Tribal and Non-Tribal literacy rate in the study area by using Census 2011 data. This shows in the sub-division the value of Coefficient of Equality is 76.64, which also shows a higher no-tribal literacy percentage than tribal has. Comparative study of Gender Parity Index of tribal literacy by using Census 2001 and 2011 data has been done. The result shows female literacy has increased from GPI value of 0.56 in 2001 to GPI value of 0.74 in 2011. Gender Disparity Index in tribal literacy by using primary data has been prepared to check the disparity status in literacy in Gram Panchayats and as well as in Rural-Urban areas in the sub-division. The primary data of present age group wise literacy rate shows a huge improvement in literacy percentage from age group of 30-44 years to 15-29 years. The literacy percentage has improved from 40.20 percent for age group of 30-44 years to 80.64 percent for 15-29 years of age group. And in addition to that the literacy percentage for present group of 7-14 years of age group is 91.01 percent. This improved literacy percentage is mainly the results of Sarva Shiksha Abhiyan (launched in 2001-2002). The main boost has come up by the act Right of Children to Free and Compulsory Education Act, 2009; which gives right to free education up to class 8 in neighborhood schools. Though the tribal literacy percentage has improved in the study area but the educational attainment status of

the study area reflects a huge concern. The field survey data shows only 18.50 percent of tribal population has educational attainment certificate above middle level in the study area. Which indicates towards a huge percentage of dropout among tribal students. The awareness about different educational schemes those are helpful for the tribal students to continue their studies, is in grave concern. The primary data shows, in the study area about the dedicated schemes like Pre-Matric Scholarship, Post-Matric Scholarship, Sikshashree, the awareness percentage is below 40 percent.

The two main controlling factors of tribal education in the study area are Illiteracy and Dropout. The primary data shows tribal illiteracy is mainly controlled by five factors in the study area, Transport Barrier, Household Work, Poverty, Lack of Awareness and Health Issues. Among these five factors Poverty (43.12 percent) and Lack of Awareness (35.78 percent) among tribal guardians are the main two contributors. The Dropout is the burning problem of the tribal educational development in the study area. The field survey data shows almost 53 percent students get dropped out in the study area. The Dropout is controlled by mainly eight factors in the sub-division, Transport Barrier, Household Work, Required for Income Generation, Education Cost, Not Interested in Study, Repeated Failure, Marriage and Health Issues. The main factors for male and females of being dropped out are different. For tribal male students the main contributors are Required for Income Generation (42.29 percent) and Not Interested in Study (35.32 percent). But for tribal female students the main two contributors are Required for Household Work (28.57 percent) and Marriage (25 percent). Interestingly it has been found in the study that the male dropout percentage (56.54 percent) is higher than the female dropout percentage (48.19 percent). Here the statistical technique Z-test has been applied to test our hypothesis *Female dropout rate is higher than the male dropout rate* and it has been rejected with rejection area at 5 percent level of significance ($\alpha = 0.05$).

To find out the relation between level of education and economic condition of tribal population two statistical techniques have been used. Firstly, the χ^2 test has been done to analyze the relation between employment opportunities and level of education. The result shows a positive impact of level of education on employment opportunities. Also the field data shows 76.33 percent of illiterate tribal population is associated with Plantation work and only 0.64 percent is associated with Business and Service Sector. But as the level of education increases the percentage of tribal population living upon plantation work decreases and association with Business and Service Sector increases. Only 10.84 percent of tribal people having educational attainment level of secondary level are associated with plantation work and with the same educational level 51.81

percent are associated with business and service sectors. The Kruskal-Wallis H- test has been done to analyze the relation between income and level of education. The result of the statistical test also shows a positive impact of level of education on income of tribal people. The data shows, as the level of education increases the monthly income of tribal people also increases. Only 2.34 percent of tribal illiterate people have monthly income more than 5000/-. But the percentage increases to 24.45 percent for tribal people having educational level of middle level, to 50.60 percent for tribal people having educational level of secondary level and to 95.65 percent for tribal people having educational level of Graduation level.

The major findings of the research work can be summarised as follows:

The tribal population in the study area is very young. 57.33 percent population is age group of below 30 years.

Literacy rate of the tribal people in the study area is improving by government initiatives. Male-Female disparity in literacy is also decreasing.

Almost 53 percent tribal students get dropped out from schools. Even 90.76 percent of dropout occurs within secondary level. This is a burning problem to the tribal educational development.

Over dependency on plantation work is ultimately making the tribal community an economically weaker section. 53.24 percent of tribal working population is associated with plantation work.

In spite of being a community with very high working population (48.74 percent), 71.70 percent of tribal households in the study area are having monthly family income not more than rupees 10000/-.

Based upon the major findings of the research work some suggestive measures have also been suggested by the researcher. The suggestive measures are as follows:

Government should ensure implementation of government approved daily wage rate in tea gardens; as during survey it has been observed that on ground level many of the plantation workers are still not getting the Govt. approved daily wage. Also yearly basis increment of minimum wage has to be ensured by the government.

Over dependency on plantation sector to be reduced by diversifying the working sectors with the convergence of government departments like agriculture, horticulture, fishery, animal husbandry with MGNREGA to create community based income opportunities. Government department like

Anandadhara can play a major role to promote community based household industry with the systematic and efficient collaboration with other Government departments.

Each school must take responsibility to ensure cent percent coverage of each Government educational schemes to each eligible student. Whole procedure of each scheme must be initiated and completed by the school authority itself.

Anganwadi centers to be upgraded to develop interest of tribal students in studies at very early ages.

Other curriculum activities to be in focus in schools to provide the tribal students a more joyful and attached school life.

A suggestive monitoring framework namely *Systematic Monitoring and Sensitization Program for Tribal Educational Development* has also been recommended by the researcher to restrict the dropout percentage and to monitor the enrollment of students in educational institutions at different stages from Anganwadi to atleast up to high school level.

The research work finally concludes with the necessity to understand that to achieve a sustainable overall development of tribal community in the study area, Siliguru sub-division, educational development will be the foundation stone and this can be only achieved through collective compasionate efforts by the government institutions, society and the tribal community itself.

CONTENTS

LIST OF TABLES

Tables No. **Page No.**

LIST OF FIGURES

Figures No. **Page No.**

LIST OF PLATES

Plate No. **Page No.**

LIST OF APPENDICES

LIST OF ABBREVIATIONS

APL	Above Poverty Level
BDO	Block Development Officer
BPL	Below Poverty Line
CC	Cash Credit
CD	Community Development
CI	Composite Index
CoE	Coefficient of Equality
CT	Census Town
DBT	Direct Benefit Transfer
DI	Dimension Index
EDI	Economic Development Index
GOI	Government of India
GP	Gram Panchayat
GPI	Gender Parity Index
HDI	Housing Development Index
HH	Household
HRA	House Rent Allowance
HS	Higher Secondary
LPG	Liquefied petroleum gas
LQ	Location Quotient
MC	Municipal Corpotation
MGNREGA	Mahatma Gandhi National Rural Employment Guarantee Act
MWCD	Ministry for Women and Child Development
NCC	National Cadet Corps
NEP	National Education Policy
NGOs	Non-Government Organisations
NSO	National Statistical Office
NYP	National Youth Policy
ODF	Open Defecation Free
PVTG	Particularly Vulnerable Tribal Groups
SC	Scheduled Caste
SDI	Social Development Index
SSA	Sarva Siksha Abhiyan
SSK	Shishu Shiksha Kendras
ST	Scheduled Tribe
TGs	Tea Gardens
TW	Tube Well
WPR	Work Participation Rate

CHAPTER I
INTRODUCTION

1.1 Introduction

The tribals are considered as the earliest inhabitant of a country. In India they are often called as *Adivasi.* Here *Adi* means the earliest and *vasi* means inhabitants or residents. In India certain communities are suffering from extreme educational, economic and social backwardness in addition with the geographical isolation and lack of infrastructure facilities. Tribal communities are the most marginalized of them. To understand the essence of their very way of life the phrase "Jal, Jungle and Zameen" can be understood as they prefer to maintain a close proximity with the nature (Das, Kapoor & Hall, 2014). The Article 366(25) of The Constitution of India defines the Scheduled Tribe and it says "Scheduled Tribes means such tribes or tribal communities or parts of or groups within such tribes or tribal communities as are deemed under Article 342 to be Scheduled Tribes for the purposes of this Constitution". The Article 342 of Indian Constitution says "(1) The President may with respect to any State or. Union Territory and where it is a State, after consultation with the Governor thereof by public notification, specify the tribes or tribal communities or parts of or groups within tribes or tribal communities which shall for the purpose of this Constitution be deemed to be Scheduled Tribes in relation to that State or Union Territory, as the case may be. (2) Parliament may by law include in or exclude from the list of Scheduled Tribes specified in a notification issued under clause (1) any tribe or tribal community or part of or group within any tribe or tribal community, but save as aforesaid a notification issued under 'the said clause shall not be varied by any subsequent notification." (Chapter XI: Special Representation in Services for SC/ST; The Indian Constitution). Although the Constitution of India is silent about the specific criteria for a community to be scheduled tribe, the historical background of backwardness of a community is key to declare a community as scheduled tribe. So the history of educational, social and economic backwardness, geographical isolation, social shyness, primitiveness plays a key role to distinguish scheduled tribes from the other communities. As per Census 2011 there are 705 different scheduled tribes and they constitute 8.6 percent of the total population in India. 89.97 percent of them live in rural areas and only 10.03 percent reside in urban areas. Most of them face the cultural isolation, economic and social deprivation. The Government of India had has started many initiatives but the differences with the mainstream society still prominent.

Education is an extensive term which has been defined in different manners by different scholars, philosophers and educationalists as per their point of circumstances. The word education originates from a latin word "Educare" which means 'to bring up' or 'to raise' (Education meaning, 2021). The great Aristotle clarified the education as "the formation of spiritual mind in a sound body". Pestalozzi defined education as "normal reformist and agreeable advancement of man's inborn forces". According to the great Greek philosopher Socrates "Education implies the freeing once again from the thoughts of all-inclusive legitimacy which are idle in the brain of each man" ("Definition of education by different authors", 2020).

The famous Indian philosopher Swami Vivekananda described Education as the "manifestation of perfection already in men" ("Education is the manifestation of the perfection already in man", 2020).

In a nutshell educational development is one of the fundamental requirements for social and economic development of a community. This becomes more significant for a community like scheduled tribes which is the most marginalized and backward in the country (Jones, 1978).

The framers of Indian Constitution realized the need of constitutional safeguard for the weaker and marginalized section of the society. So, they considered some special sections in the Constitution of India to protect the rights and interests of these marginalized groups. Specific articles had been formed to protect the educational rights of the tribal population.

As just like any other backward communities untouchability is the biggest challenge for the tribal community. Article 17 of Indian Constitution has abolished the untouchability and makes its practice in any form is a punishable offence.

Article 275(1) provides grants in-aids to states having scheduled tribe population as assistance for their developments.

Article 46 of Indian Constitution lays down that the state shall promote the educational and economic interest of the weaker section of the society especially the Scheduled caste and Scheduled tribes with special care and always protect them from social injustice and exploitations.

Article 29 (1) has a significant role to provide protection distinct languages and scripts of scheduled tribes.

Article 350-A states that "It shall be the endeavor of every State and of every local authority within the State to provide adequate facilities for instruction in the mother-tongue at the primary stage of education to children belonging to linguistic minority groups" (Constitutional Provision: Facilities for instruction in mother-tongue at primary stage).

Article 243-D, 330 and 332 of the Indian Constitution provides reservation of seats for scheduled tribes in Gram Panchayats, house of people and state assembly respectively.

Article 335 and 338 also framed to protect the rights of scheduled tribes (The Constitution of India).

So, the dominant thinking of current date is the assimilation of the tribal people with the mainstream society that too by not demolishing the uniqueness and root of them**.**

1.2 Literature Review

Many authors, research scholars, educators, geographers, historians, social scientists and social workers have done their works on the tribal people, their socio-economic condition, particularly on their educational development. In recent era a lots of work have been done on the tribal educational development and problems faced on the way of their development. In view of the objectives of the study, exploration and understanding of the thought process of these literatures is very much needed. To do so, an attempt to review many of these literatures has been done here by the researcher in the context of not only the district or state but of national level too.

K. Sujatha (1994) in the paper "Education among Scheduled Tribes" discusses about different policies which are made for tribals in India. The paper also discuss about the progress in tribal literacy from 1971. It also focuses on the problems that are major constraints of tribal education, internal constraints like internal problems which refer to the relevance of curriculum in schools, quality of school education and some socio-economic and cultural constraints.

Nina Singh (1998) in the paper "Female Literacy in India: The Emerging Trends" made an attempt to answer the different factors that affecting the girls education, causes for which girls suffer educational deprivation, with a brief review of progress of female literacy in India since beginning of 20^{th} century. The story of female education in India marked by gender gaps, regional inequalities, with the problems compounding over the years. The paper also observed that to get the basic educational need of the illiterate female, it does not only require the financial capability but also a strong political commitment to correct the situation. It states that the social

benefits of education are enormous. Education particularly of females greatly improves the ability of a household to manages basic childcare, improve health care and there is also correlation between parental education and infant mortality.

Md. Shafiquz Zaman (2001) in the book entitled "Problems of Minorities' Education" stated that the educational backwardness of Muslim is continuing in spite of constitutional protection provided to the minorities to open and administer the educational institution of their choice. The book try to answer weather the constitutional protection has failed to work or the mere constitutional protection is not enough to improve the educational conditions of Muslims and also rise and fall of Muslim education in India. The Islamic system of education strikes a complete balance between need of individual excellence and the requirements of the society. The book attempt to analyze the system of education in medieval Muslim, society, problems of minority in English education from historical evolution to present status, reason for continued educational backwardness, female education among Muslims and madrassa education.

Dr. Digumarti Bhaskara Rao (2004) in the book "Education for Dalits" discusses the different problems facing by the dalits in India. In India, the scheduled castes are a stigmatized lot an on this account they suffer from a number of disabilities that are buttressed by religion. The book made an attempt has been made to study educational development among dalits and the role of various agencies/organization which led the dalits and formed their ideologies in their effort to challenge an exploitative tradition of the society. The book study how educational development resulted in the rise and growth of dalit movement to build their own identity in the Indian socio-political fabric. It also shows the government role in development of education, different reasons of dropouts among dalit, college education, center's and state's role for different educational programme.

G.G. Kingdon (2007) attempts to examine the Indian school education process in a paper titled "The Progress of School Education in India". The paper tries to show the picture of Indian schooling quality in terms of attendance rate, literacy rate, school resources, teacher inputs etc. The paper also discusses about the position of India's achievement to the international perspective mainly China.

Binu Sangwan and Anju bala (2008) in the paper "Literacy in India: Some Exploration" attempt to answer the different factors affecting the low literacy rates, and different literacy campaign taken by the government since independence. It tries to explore the literacy situation in the country particularly since independence. After so many years India gained freedom, but the goal

of universal basic education is no fulfilled. The literacy situation in the country is poor and also the regional contrasts are high. Literacy rate shows a positive relationship with the growth in social aspects of human living, female education, income and improved infrastructure. This paper also shows the literacy rates of scheduled castes and scheduled tribes since 1961 and also interstate disparity. Literacy rate correlates with different variables such as mean age at marriage, woman in higher education, poverty, dropout rate, levels of urbanization etc.

Dr. Ranjan Singh (2009) in the book "Rural Education in India" discusses the overall structure of education in rural India. The Indian government has expressed a strong commitment towards education for all; however, India still has one of the lowest female literacy rates in Asia. The book discusses also the different literacy levels improving over time, large differences in literacy among the state. It also analyzes the gender gap in university education, inadequate school facilities, shortage of female teacher. In the chapter three the book discusses about public and private schools in rural India, and it shows the frame for implementation of Sarva Shiksha Abhiyan in rural India.

The book "Education of the Tribal Girl Child: Problems and Prospects" written by A.B. Ota & R.P. Mohanty (2009) elaborately discusses the journey of tribal educational process. It focuses on the evolution of tribal women education. It also discusses how different initiatives of government have helped the tribal community to interact with the modern society time to time.

The researcher, to understand the lingual barriers of tribal students does review the International Journal of Bilingual Education and Bilingualism (July, 2009). In this journal a paper titled "Mother tongue first multilingual education among the tribal communities in India" by P.J.MacKenzie examines how language barrier holds a key role of dropout among tribal students in India. The research demonstrated how the initial education of tribal children in their mother tongue is beneficial to increase the interest on education and curb the early age dropout rates. J.Leeson (2015) in his paper "Education of tribal Children in India A case Study" also mentions the factors that are affecting the tribal education in India. One of the main factors that he indicates is the loss of interest in formal education mainly due to language barriers at very initial stages. R. Rupavath (2016) writes on the context to what extent the living conditions of a tribal community influences against the effective schooling of tribal children. The study also indicates towards the factors that have to be tackled to make the tribal children feel happy of being schooled.

S.N. Tripathi (2010) in the book "Literacy for Tribal Woman" has made an attempt to outline the impact of literacy on socio-economic condition on tribal household. Education among the tribal communities should be given highest priority for the simplest reason that it holds the key to socio economic development. The book shows some important constraints in the process of educational development of scheduled tribe communities. It also discusses the different reasons of dropout among the tribal girl, reasons for non attendance and dropping out from primary schools, reasons for never enrolment in schools, lack of essential infrastructural facilities in schools. Major problems of tribal education is the management problem, non-tribal culture based education, problems in learning language, lack of proper training for teachers of tribal learners, poor management of tribal schools etc. it also discuss different strategies adopted by the government for improving female literacy.

Dr. G. Sandhya Rani & et.al (2011) in their paper "An Analysis of Tribal Women's Education in India" discussed about the importance of tribal women education in India. They discussed how the women of tribal community were being often deprived from their educational right. They also highlighted to the fact that without education tribal women were missing opportunities in order to empower themselves to their full potential and also in order to contribute to the society in its transformation the way they are capable of.

Dr. Neera Gautam (2013) in the paper "Education of Scheduled Tribe in India: Schemes and Programmes" highlighted about the different educational schemes and programmes for the promotion of education among the scheduled tribe in India.

Dr. Manoranjan Panda (2013) in the book "Educational achievement And Socio-Economic Background" try to identify various factors determining the social and economic background of students, to assess interrelationship between socio-economic status, academic achievement and intervention in different categories of schools. The book also tries to find out the effect of socio-economic status, school intervention on academic achievement in different categories of schools. Education is regarded as a potential instrument of individual development as well as social uplifment. It is intimately related with the national development and positively correlated with productivity and quality of life.

M. C. Upmanyu (2016) in his paper "The Tribal Education in India, Status, Challenges and issues" shows the present pattern of society and its different sides of caste system in India which are projected through analysis. It discusses some internal factors which are responsible for

backwardness of tribal education and also some suggestion are given to uplift the tribal education in India.

Mrs. Vinu (2021) in the paper "Tribal education and quality of life: issues & challenges" discussed about the educational problems that are faced by the different tribal community in India and the measure to solve those problems. The paper also focuses on the different educational safeguards that are made by the government of India for the development of tribal in educational sector. The conditions of tribal community in India are not very good. They do not have the proper source of income and have to face lots of challenges to fulfill their basic needs. They are economically deprived and unable to afford good schools for their children. Though to solve these educational challenges government have made schemes and focuses to promote education in different tribal areas.

Biloris Lydem and Utpal Kumar De (2001) in their edited book "Education in North East India" have discussed the total educational scenario in the book. In the chapter two the paper "Status of Education in North East India by Utpal kumar de stated that north eastern states are presently performed better than the national average. It discusses the per capita budged expenditure used for education in the states of North East India. It shows the educational situation at different level, no. on educational institution in the north east and sex-wise enrolment by stages of classes.

Sarla Sharma and Anima Banerjee (2006) in the paper "Regional Variation of Educational Development in Chhattisgarh" has made an attempt to analyze the spatial pattern of regional variation of educational development along with the changes in the literacy rate in the state Chhattisgarh. Different variables have been taken into consideration such as literacy rate, male literacy, female literacy, rural literacy rate to find out the index of educational development in the sixteen districts of the state. Male female discrimination, types of settlement, thinking of people and socio-economic conditions of people affect the literacy rate. Educational development and economic planning are part of regional development. In the tribal areas, people should be encouraged for the utilization of the educational facilities.

B. R. Thakur and M. S. Jaglan (2008) in their paper "Educational Development among Gaddis of Bharmaur Region, Himachal Pradesh" aimed at realizing the spatio-temopral variation in the level of literacy and attainment of education in the region. To evaluate the spatial variation in gender disparity at various levels of education in the region is another concern of the present study. It shows the changing pattern of literacy scenario from last 30 years. The paper analyzes the distribution of villages by level of literacy and gender disparity by age and distribution of

persons by educational attainment. Literacy situation of different area shows that the inaccessible areas are lagging behind. The impact of the process of social transformation has not been equal for male and female.

Subhi Yadav (2009) in her paper "Regional Inequalities in the Levels of Literacy and Its Determinants in Uttar Pradesh" analyzes the district level variations in literacy rate. This paper discusses the different educational amenities and facilities provided to the different schools of Uttar Pradesh and also, how the literacy rate is correlated with various educational development factors. This paper also shows the regional inequalities in literacy rate and educational facilities in the study area on the basis on male literacy rate, female literacy rate, no. of junior basic schools, no. of senior basic schools, teacher student ration, no. of industrial training institution, no. of Junior basic schools per lakh population, no. of senior schools, no. of senior secondary schools, no. of management, and technical institution, etc.

Madhushree Das and Harendra Nath Sharma (2011) analyze in their paper "Literacy Pattern among Tribal Woman in Assam" that the progress of education, inters tribe variation in literacy, rural urban differential, gender disparity, spatial variation in literacy among tribal woman in Assam. In India education is necessary and basic needs for economic and social development. Female literacy is an important part which can contribute to socio economic progress in any society. This is also true for the tribal society, especially tribal woman. Because educated tribal woman can plays a significant role towards socio economic progress in their tribal society. The progress of tribal woman was very low, but it is gradually improving over the recent years.

Dash Anjali (2013) in her paper titled "Relates on Tribal Education and Health: Evidence from Rural Odisha, India" analyzed the correlation among tribal education, health and their economic development in rural Odisha, India. In this paper she highlighted that how education had a great influence on tribal health and overall economic development. She also pointed towards the importance of tribal female education to up bring a healthy as well as an economically productive generation.

Akram Hannan (2013) in the paper "Dimensions of Literacy and Occupational Structure in Eastern Uttar Pradesh, India" described educational development by literacy rate by sex and occupational structure by major groups i.e. primary, secondary, and tertiary. Education and employment play a dominant role in influencing the quality of human resources. Different studies on development of human capital through the basic education have contributed significantly to economic progress. The socio-cultural factors that affect education, work

participation and occupational structure of population are highly related to the productivity and economic growth of the country.

Jabir Hasan Khan, Menka and Shamshad (2014) in their paper "Spatial Perspective of Literacy, Employment and Levels of Development among the Urban Beggars in Aligarh District" aims to analyze the spatial patterns of literacy, employment, levels of socio-economic status of urban beggars, and the relationship between their rate of literacy and employment with selected variables of socio economic development in urban parts of the study area. The development of a region can be identified with an increase in the literacy rate, employment opportunities, availability of infrastructural opportunities etc. the paper discuss the regional variation of literacy rate and employment in the district. It also looks into the spatial disparities in the levels of development in the study area.

Arup Majumder (2018) in his paper titled "Problems of Tribal Education in India, A Study from a Village of Jharkhand" discussed about the problems of Bhumij tribal community of Jharkhand. He also discussed about the educational development status of the Bhumij tribals. In his article he pointed towards the government schemes that were designed for the tribal community by the government institutions. He also highlighted the possible reasons for which the benefits of different government schemes were not reaching to the tribals. He emphasized on the focused political will for tribal educational development which included innovative and context specific traditional intervention.

Angshumitra Chakraborty and L.N. Satpati (2013) stated in their paper "Development of Elementary Education in Namkhana C.D. Block of South 24 Parganas District, West Bengal", that elementary education plays most significant role in nation's prosperity and development. To achieve universal elementary education in rural areas, it needs a successful formation of infrastructure. Universal elementary education implies educating all children up to the age of fourteen years which is equivalent to completion of upper primary level of education. This study shows the spatio-temporal variation of development of elementary education under different institutional arrangements as well as infrastructural facilities in various Gram Panchayats of Namkhana Block in South 24 Parganas. Different parameter has been taken to show the infrastructural development such as total enrolment, number of teachers, classrooms, school with drinking water facilities, boundary wall, playground etc.

Tarun Saha (2016) in his paper "Problems and Prospects of Tribal Education: A Case Study of Birbhum District in West Bengal" deals with the educational status of the tribal people in

Birbhum district, West Bengal. He emphasis on the attitude of the tribal parents towards their children's education, problem faced by the tribal children in schools at their early ages due to their distinct mother tongue. He discusses the importance to establish more residential schools and appointment of tribal teachers in schools to improve the tribal educational status of the district

Mahua Dutta (2012) in her paper "Status of Literacy in Purba Medinipur District, West Bengal-An Overview" states that there are different ways to measure the educational achievement such as adult literacy rate, mean years of schooling, gross enrollment rate at the primary, secondary and tertiary levels. This paper analyzes the literacy rate of Purba Medinipur District and gaining a particular focus on inter regional comparison and male female disparity of different blocks of the study area. It shows that the simplest indicator to measure woman education is female literacy rate. Higher the value of female literacy better development for the district.

Kathakali Bandopadhyay and Sudhir Malakar (2013) in their paper "Educational Status of Muslim Woman in West Bengal: Problems and Prospects" shows that majority of Muslim woman in west Bengal are uneducated, least literate and economically backward section of Indian society. From the historical perspective it shows that Muslim woman education was confined within the religious scriptures. There is huge difference in literacy rate of Muslims woman which shows that they are getting little benefit from the available opportunities of education. The paper stated the number of enrollments in different educational levels of Muslims woman, disparity in literacy between the male and female Muslim population. This paper also identified and analyze the factors affection the educational attainments of Muslim woman.

Smt Marsha Lama (2011) in her doctoral thesis titled "Tribal Development and The Role of Panchayats: The Study of Darjeeling District" has thoroughly discussed about the constitutional provision for scheduled tribe population in India and elaborately discussed about the development schemes that are designed to benefit the tribal community in Darjeeling district. The thesis also intends to show the role of panchayats during the past years on the overall socio-economic development journey of tribal community in the district.

Asst. Prof. Amlan Mujumder (2014) in his book "Capability and Well-being in The Forest Villages and Tea Gardens in Dooars Region of North Bengal" tries to portray the quality of life the forest villagers and the tea plantation workers are living the Dooars area of North Bengal. The books gives a glimpse of the living condition, diseases they trend to affected as well as their overall health conditions.

A study on the tea garden parents of Nagarkata block, Jalpaiguri to analysis the roles, responsibilities and functions of parents to their children's education has been conducted by Dr. P. Deb & Mr. G.S. Ghosh (2015) and has been documented as a paper titled "Socio-cultural and Geo-spatial Predictors and Distribution of Retention Problems in Scheduled Caste and Scheduled Tribe of Nagarkata Block of Jalpaiguri District of West Bengal". The study also discusses about the parent's attitude and perception towards the dropout and completion of degree of their children.

Dr. R. Sarkar (2016) in her paper "A Study on the Health and Nutritional Status of Tribal Women in Godam Line Village of Phansidewa Block in Darjeeling District" explores the health and nutritional status of tribal women in the Phansidewa block of Darjeeling district. It also intends to focus on the health services those are available to these women of the most primitive community.

Dr. B.C. Sarkar (2017) in his doctorial thesis "Socio-Economic Status of Tribal People in Mal Subdivision of Jalpaiguri District, West Bengal: A Geographical Analysis" gives important note on the socio-economic condition of tribal population in Mal sub-division. It also discusses the hardship the tribal community faces in their daily life and the possible wayout to overcome the hardships are also suggested.

The study on scheduled tribes of Jalpaiguri district by P.Deb (2018) deals with concentration pattern of Oraon, Munda and Santal tribes in the district. The study results are documented in a paper titled "Tribal Habitat and the Characteristics of Their Houses: A Case Study of Oraon, Munda and Santal Tribes in Jalpaiguri District, West Bengal". The study shows the Oraon and Munda community are mostly concentrated in tea gardens and forest areas but that of the Santal community are found predominantly in non-forest areas, living on agriculture.

An empirical study on the socio-economic conditions of the tea plantation workers of the Darjeeling district by P.C. Rai (2019) has given the indication of arrival of stagnation period of tea garden industry in Darjeeling district. Resulting to this poor socio-economic condition of the tea garden workers is being witnessed. The study helps to understand the problems and seeks better lookout for the tea garden workers while protecting their rights and interests.

M. Lama (2019) has given a proper note on post-matric scholarships available for scheduled tribe students to assist them financially to carry out their further education. The objective of the

study is to explore up to what extent the post-matric schemes are successful in bringing the educational development of tribal students of Darjeeling municipality area.

The paper titled "Gender, Identity Politics, and Emerging Underclass amongst Labour Force: A Study of Tea Gardens in North Bengal, India" by S. Sarkar (2020) discusses about the emerging problems of sustainability in the context of gender and labour relations in tea gardens, especially after closure. The paper also focuses on women workforce of tea gardens, their hardships, the disparities they face and gender exploitation.

1.3 Research Gap

A research gap emerges when there is a new idea that has not been explored at all or a question that has not been yet answered by any of the existing studies or research within a field of study. A research gap also considered to be a missing part of research literatures that has been under explored or not explored. This can be a population, sample, data collection analysis, research method or any other research variables. The above review of literatures shows that the geographic study on the tribal educational status in general is still in its formative stage and few a research works have been done on this. Though the researches those have been done on tribal education are mainly on national context upto a regional level. Thus, micro level work on tribal educational status of Siliguri Sub-division is a newly explored study that has been not yet done by any researcher.

1.4 The Study Area

The study area Siliguri Sub-division comes under the Darjiling district in the state of West Bengal, India. It is bounded by Jalpaiguri district in the east, in the west by Nepal. The southern part of the Sub-division is bounded by the state of Bihar and Uttar Dinajpur district of West Bengal. Kurseong and Mirik are in the northern part. The latitudinal and longitudinal extension of Siliguri Sub-division are 26° 23' N to 26° 57' N and 88° 07' E to 88° 31' E respectively. It consists of one Municipal Corporation (Siliguri MC, Part) and four Community Development Blocks; Matigara, Naxalbari, Phanshidewa and Kharibari. These four blocks contain 22 Gram Panchayats and 14 Census Towns. In total there are 353 villages under these 22 Gram Panchayats and 33 wards in Siliguri MC (Part) in the study area. Phansidewa C.D. Block is the largest block in the Sub-division. Total area of this block is 312.1 sq km. The total area of the Sub-division is 797.81 sq km. (Census 2011).

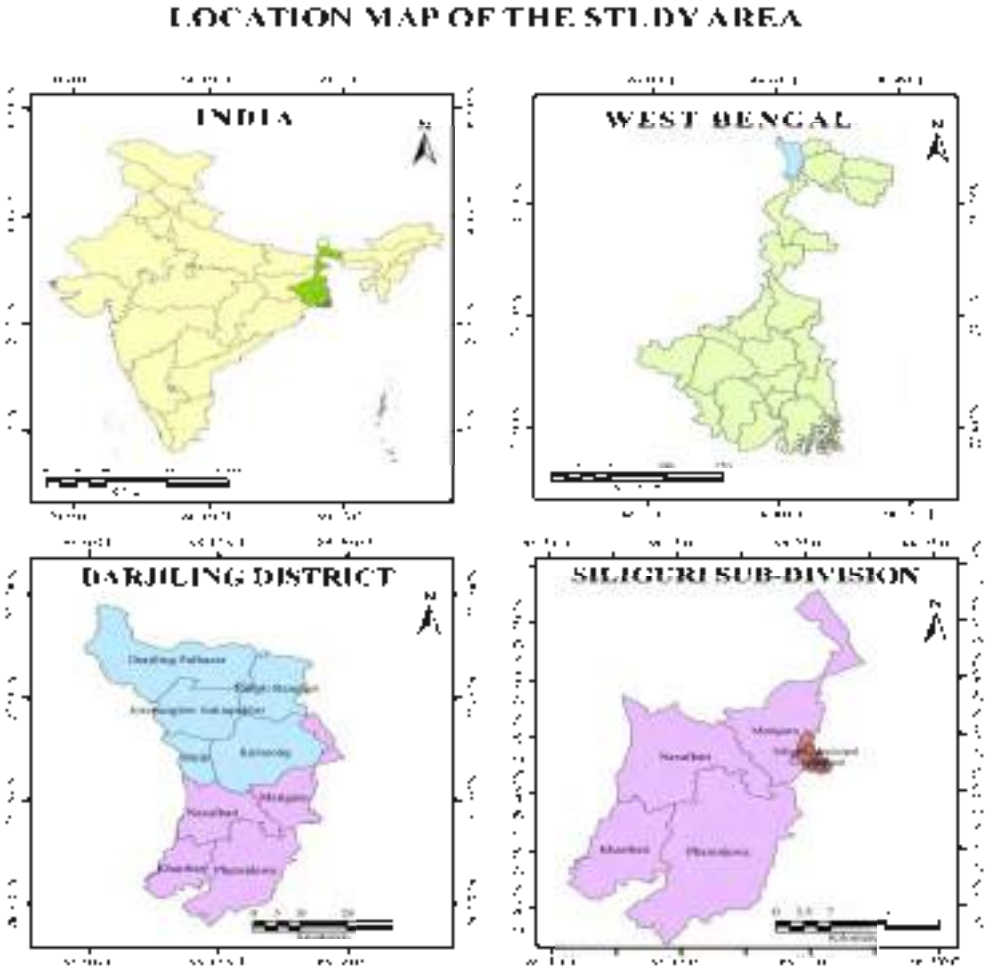

Fig. 1.1

Source: DIVA-GIS data,
Darjeeling District Census Handbook, 2011 (Darjeeling),
Siliguri Municipal Corporation 2012.

Table 1.1 Administrative Division of Siliguri Sub-division, 2011

Name of the Blocks	Total area in Sq. km	No of Gram Panchayat	No of villages	Census Town
Matigara	132.61	5	72	6
Naxalbari	188.12	6	94	6
Phansidewa	312.1	7	113	0
Kharibari	144.88	4	74	2
Siliguri Municipal Corporation (part)	20.1	Ward		
		33		

Source: Census of India 2011

1.5 Scope of the Study

Tribal people are the most under privileged section of the society (Kumar, 2018). In terms of socio-economy, they are far behind from the other communities of our society and their cultural essence is also different from others. Under the study area Siliguri Sub-division, 15.08 percent of the total population is tribal population (Census, 2011). In majority, colonization of this particular community is tea garden centric. Sadly, where education is one of the main factors of Human Resource Development, only 59.99 percent tribal population is literate in this Sub-division which is even lower than the district average (74.26 percent) for tribal population (Census, 2011). Out of this percentage male and female literacy percentages are 69.31 percent and 50.99 percent respectively. Higher education percentage is also significantly low. So, it is obvious that dropout is a great concern in the study area. Gender gap in literacy rate is very prominent in this particular community. Now, in terms of the working population percentage, only 42.99 percent population is working population. Out of this percentage 50.49 percent and 35.70 percent is male and female working population respectively. Out of the total working population 73.52 percent is main worker and 26.48 percent is marginal worker. However, gender disparity is also present in the category of main worker which are 84.95 percent for male and 76.37 percent for female (Census, 2011). So, there are ample scope to find out the present status of the tribal population in the study area in terms of their literacy as well as the growth of overall education, relation of education with employment categories and income. The research does also have the scope to find out the possible reasons of their educational backwardness, hindrances towards their educational development and to come up with possible way to address the problem.

1.6 Limitation

Limitation of a study is the problem that has to be considered by the researcher during the research work. The current research work has limitations too which are beyond the control of the study.The Covid-19 pandemic has hampered the research work a lot. The overall research work has been delayed due to Covid-19 pandemic.As the research is dealing with one of the the most primitive community of the society, that is why during field survey often the researcher has witnessed the lack of clear and to the point answers from the household respondents. Sometimes, absence of respondents with adequate and justified answers made the household survey more difficult. So, at times the researcher has to assume the answers of the questionnaire by following the vague answers of the respondents. The tribal community mainly uses their own local languages to communicate among themselves and many of them are not so fluent in Bengali or

Hindi. This language barrier has created hindrances many a times and made the field survey time consuming. The tribal population of some Gram Panchayats is concentrated at the remotest location of the study area and that has made the survey of those Gram Panchayats very difficult. Like accessibility of Bansh Gaon Mangachh Gram in Chathat Bansgao Gram Panchayat under Phansidewa C.D. Block, Barajharu Gram in Hatighisa Gram Panchayat under Naxalbari C.D. Block has faced a lots of transportation problems.

1.7 Objectives

The following objectives have been taken into the consideration for this study:

1. To study the socio-economic conditions of tribal population.
2. To study the educational status of tribal population.
3. To study the controlling factors of tribal education.
4. To examine the relationship between level of education and economic conditions of tribal population.

1.8 Hypothesis

On the basis of the above objectives, the following hypotheses are taken in to consideration:

1. Age of marriage is related to the literacy of tribal woman.
2. Female dropout rate is higher than the male dropout rate.
3. Employment and income opportunities of tribal people are related to the level of education.

1.9 Methodology

To justify the mentioned objectives database has been the main focused in this study. Both primary and secondary data have been collected. To justify the hypotheses different statistical tools have been applied. For first hypothesis Mann-Whitney U test has been applied, which gives significant output to understand the relation between the age of marriage of tribal woman with their literacy. For second hypothesis Z-test has been applied and it has given a significant output to find out the comparison between male and female dropout. And for the last hypothesis two statistical tools namely χ^2test and Kruskal- Wallis test have been used to get a significant output regarding the relationship of employment with education and relationship of income with education respectively. The methodology thus adopted is as follows:

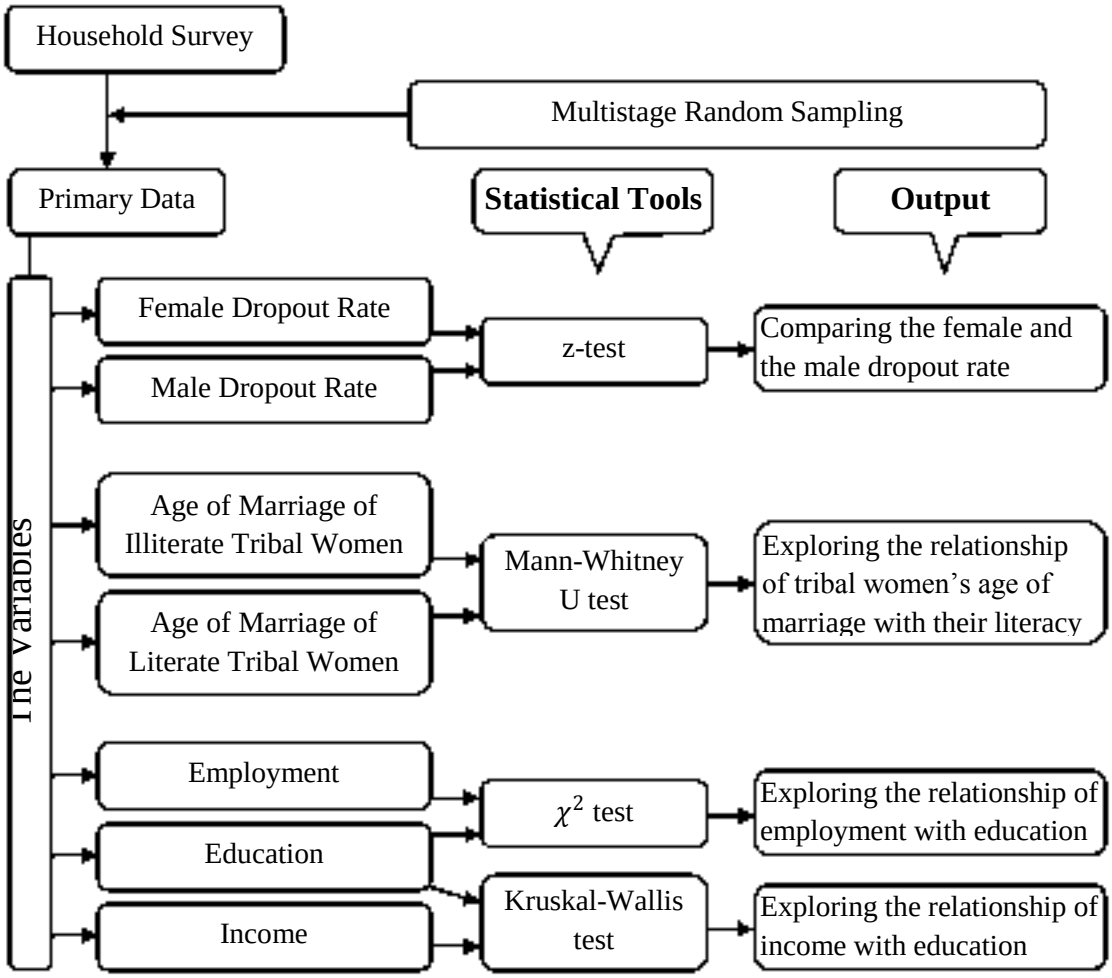

Fig. 1.2: Flow Diagram Showing the Methodology Adopted for Carrying Out the Present Research Work

1.9.1 Database

The present study will be based on both primary and secondary data. Different types of data for a particular community at micro level is lacking that's why an intensive field survey is needed for primary data collection. Primary data have been collected from the sample villages through personal interview and schedules. Secondary data have been be collected from Block Development Office, different published reports, District Statistical Abstracts, District Census Handbook, District Gazetteer and other officials have also been taken into consideration for different purposes.

1.9.2 Sample Design

A sample design is a definite plan for obtaining a sample from a given population. For sample survey, Multistage Random Sampling has been used. In Multistage Random Sampling technique

researcher has to choose samples randomely at different stages. Through this technique samples are being narrowed down by applying random sampling. The main advantages of this sampling method is that it can be used for collecting field data from a geographically dispersed population and to do so it does not require to collect the list of all the members of the target population. As for this research the target population is only the scheduled tribe people in the Siliguri Sub-division and this target population is randomly dispersed in the whole Sub-division, it becomes very beneficial to fulfill the objectives of the so Multistage Random Sampling has been used.

In the study area, there are four Community Development Blocks which include 22 Gram Panchayats, consisting of 353 Villages and 14 census towns. One Municipal Corporation, namely Siliguri Municipal Corporation also comes under the study area. Out of the 22 Gram Panchayats, 5 Gram Panchayats are under Matigara Community Development Block, 6 in Naxalbari, 4 in Kharibari and 7 in Phanshidewa block. Siliguri Municipal Corporation is spread over in Siliguri Sub-division as well as in Rajganj block of Jalpaiguri district. Siliguri Municipal Corporation presently has been constituted with a total number of 47 wards out of which 33 wards fall in Siliguri Sub-division and rest 14 wards are in Jalpaiguri district.

In order to draw the samples from different Community Development Blocks, at first, out of 353 villages 40 villages are excluded as these villages have no habitation. For sample survey, 10 percent villages have taken from each Gram Panchayat. Total 35 villages have been taken. 12 percent tribal household has been surveyed from each selected village. A total of 472 households have been surveyed from the villages. In Siliguri MC (Part) out of 33 wards 10 percent wards have been selected and 12 percent tribal households from each ward have been considered for survey. So, a total of 3 wards and 40 households have been surveyed in Siliguri MC (Part). From 14 census towns 10 percent i.e. 1 census town has been selected and 12 percent households i.e. 18 households have been surveyed.

Table 1.2 Sample Size of the Study Area

Rural Unit Block	Total no of GP	Name Of The Gram Panchayat	Total no. of villages	10 percent sample Villages	Total ST HH of sample villages	12 percent of Sample St HH	Total Sample St HH
Matigara	5	Champasari	21	2	538	65	129
		Matigara I	5	1	96	12	
		Matigara II	3	1	48	6	
		Atharakhai	5	1	56	7	
		Patharghata	25	3	327	39	

Rural Unit Block	Total no of GP	Name Of The Gram Panchayat	Total no. of villages	10 percent sample Villages	Total ST HH of sample villages	12 percent of Sample St HH	Total Sample St HH
Nakshalbari	6	Nakshalbari	10	1	128	15	105
		Upper Bagdogra	8	1	241	29	
		Hatighisa	23	2	178	21	
		Gossaipur	7	1	120	14	
		Lower Bagdogra	6	1	59	7	
		Maniram	24	2	162	19	
Phansidewa	7	Hetmuri	37	4	376	45	148
		Bidhan Nagar I	5	1	211	25	
		Bidhan Nagar II	3	1	238	29	
		Chathat Bansgaon	8	1	126	15	
		Ghoshpukur	24	2	182	22	
		Jalash Nijam tara	16	2	38	5	
		Phanshidewa	10	1	57	7	
Kharibari	4	Binnabari	13	1	141	17	90
		Buraganj	33	3	221	27	
		Kharibari Panishali	5	1	126	15	
		Raniganj Panishali	22	2	261	31	
Urban Unit	Name		Total	10 percent of Total	Total HH	12 percent Sample HH	Total Sample HH
SMC (Part)[a]	No. of Wards		33	3	336	40	58
CT[b]	Census Towns		14	1	150	18	

Source: Compiled by the Researcher

[a] Siliguri Municipal Corporation (Part)

[b] Census Town

Table 1.3 Population Details of Sample Household

Name of the Block/GP	HH	Total Population	Male	Female
Matigara	129	493	251	242
Champasari	65	248	122	126
Matigara I	12	40	22	18
Matigara II	6	18	9	9
Atharokhai	7	28	17	11
Patharghata	39	159	81	78

Name of the Block/GP	HH	Total Population	Male	Female
Naxalbari	105	496	251	245
Naxalbari	15	84	41	43
Upper Bagdogra	29	140	66	74
Hatighisa	21	89	45	44
Gossaipur	14	55	29	26
Lower Bagdogra	7	38	23	15
Maniram	19	90	47	43
Phansidewa	148	714	356	358
Hetmuri	45	220	111	109
Bidhan Nagar I	25	113	53	60
Bidhan Nagar II	29	150	76	74
Chathat Bansgao	15	68	36	32
Ghoshpukur	22	114	54	60
Jalash Nijamtara	5	21	12	9
Phasidewa	7	28	14	14
Kharibari	90	424	211	213
Binnabari	17	94	43	51
Buraganj	27	128	65	63
Kharibari Panisali	15	67	29	38
Raniganj Panisali	31	135	74	61
Rural	472	2127	1069	1058
Bhimram	18	88	44	44
Siliguri MC (Part)	40	159	85	74
Urban	58	247	129	118
Total	530	2374	1198	1176

Source: Compiled by the Researcher

1.9.3 Data analysis

The data collected through field survey is processed after necessary cross checking and tabulated for analysis. All the data has presented by table, diagrams and maps. For all these tabulation and analysis purpose, MS Excel & SPSS (v.23) has been used. The GIS software (Arc Map. 10.5) has been used for the representation of different maps. Various statistical techniques are used for the analysis and to prove the hypotheses.

Technique Used

a. Effective Literacy Rate

A person in India aged seven years and above who can both read and write any language with understanding is called a Literate (State of Literacy, Census 2011). Percentage of

literate person to total population aged seven years and above at a particular time is called Effective Literacy Rate.

$$Effective\ literacy\ rate = \frac{number\ \ of\ literate\ \ person\ \ aged\ 7\ and\ above}{total\ \ population\ \ \ aged\ 7\ and\ above} \times 100$$

b. Location Quotient

When the proportion of any characteristic in an area is studied in relation to its proportion in the region, the ration used is known as the Location Quotient (Mahmoo, 2013).

$$LQI = \frac{Pij\ /Pi}{Pj\ /P}$$

Where, *Pij* is total population in all the categories of area *i*

Pi is total population in all the categories of area *i*

Pj is sum of persons of category *j* in all the *n* areas i.e population of region under category *j*

P is sum of pi in all the areas i.e, total population of the region in each category.

c. Dimension index

Values of different variable are first normalized to an index value which ranges from 0 to 1. Dimension index (OPHI, Research in progress series, 2011) value calculated for each variable is calculated as

$$Dimension\ Index = \frac{Actual\ \ Value - MinimumValue}{Maximum\ \ \ Value - Minimum\ \ \ Value}$$

Actual value means original value of the variable and Maximum and Minimum values indicate the highest and lowest values of the same variable.

d. Composite index

Composite index (OPHI, Research in progress series, 2011) is the mean of dimension index value of each variable.

Formula used to prepare Composite Index is as follows:

$$\boldsymbol{CI = \frac{\Sigma\ DI}{N}}$$

Where, ***CI*** stands for Composite Index

ΣDI is summation of all the dimension indices

N indicates the total number of dimension indices.

e. Coefficient of Equality

Co-efficient of Equality (Mahmood, 2013) is a measure of statistical dispersion intends to represent the inequality within a social Group. Here in the study coefficient of Equality is used to study the comparative literacy status between tribal and non tribal.

$$\textit{Coefficient of Equality (CoE)} = \frac{Tribal\ \ Literacy\ \ Rate}{Non\ Tribal\ \ Literacy\ \ Rate} \times 100$$

The value of Coefficient of Equality nearer to 100 indicates less inequality in terms of literacy rate between tribal and non tribal population. And a distant value to 100 shows higher inequality.

f. Gender Parity Index

To find the gender gap in literacy rate, Gender Parity Index (UNESCO, 2006) has been derived

$$\textit{Gender Parity Index (GPI)} = \frac{FemaleLiteracyRate}{MaleLiteracyRate}$$

The value of GPI nearer to 1 indicates lesser gender gap and GPI nearer to 0 shows higher gender gap in literacy rate.

g. Disparity Index

To measure the male female disparity in literacy, Sopher's Disparity Index (1974) modified by Kundu and Rao in 1983 (Manjunatha & Hurakadli, 2017) has been used.

$$\textit{Disparity Index (DI)} = log\frac{x1}{x2} + log\frac{200-x2}{200-x1}$$

Where, *X1* = Male Literacy Rate

X2 = Female Literacy Rate.

The value of DI nearer to 1 indicates higher disparity between male and female literacy rate and the value nearer to 0 shows lower disparity of the same.

h. z-test (Kothari, 2005)

The test statistic has been calculated as follows:

$$z = \frac{p_1 - p_2}{\sqrt{\frac{p_1 q_1}{n_1} + \frac{p_2 q_2}{n_2}}}$$, for heterogeneous population

$$z = \frac{p_1 - p_2}{\sqrt{\frac{p_0 q_0}{n_1} + \frac{p_0 2 q_0}{n_2}}}$$, for homogeneous population.

Where, p_1= proportion of success for female dropout and

p_2= proportion of success for male dropout.

i. Mann-Whitney U test (Kothari, 2005)

The test statistic is calculated using following formula:

$$U = n_1 . n_2 + \frac{n_1(n_1+1)}{2} - R_1,$$

Where $n_1$and n_2 are the sample size and $R_1$is the sum of rank assigned to the values of the sample.

j. X^2 test (Kothari, 2005)

The test statistic has been calculated as follows:

$$\chi^2 = \sum \frac{(O_{ij} - E_{ij})^2}{E_{ij}}$$

Where, O_{ij} = observed frequency of the cell in the i^{th} row and j^{th} column

E_{ij} = expected frequency of the cell in i^{th} row and j^{th} column.

The critical value is determined by using the chi-square distribution for a given significance level with degree of freedom = $(c - 1)(r - 1)$, where c is the number of columns and r is the number of rows and the inference is drawn accordingly.

k. Kruskal-Wallis test (Kothari, 2005)

The test statistic H is calculated as follows:

$$H = \frac{12}{n(n+1)} \sum_{i=1}^{k} \frac{R_i^2}{n_i} - 3(n+1)$$

Where, $n = n_1 + n_2 + \cdots + n_k$ (in present context, $k = 1, 2, \ldots 7$) and R_i^2 is the sum of the ranks assigned to n_i observations in the i^{th} group. When the sample size is five or more for each group and the null hypothesis is true, the test statistic H approximately follows the chi-square distribution with $(k - 1)$ degree of freedom and the limit of acceptance or rejection region is determined accordingly at a given significance level.

1.10 Conclusion

A rich heritage and essence of distinct cultural identity is prevalent among the tribals in India. The tribals of the study area are no exception to that. Religious beliefs, pattern of habitant, food habits, languages, dependence upon forest and tea gardens are the main features of their lives and it also make them distinct from the non-tribal groups. Their main problems are lack of educational development, an undiversified working population, poverty and social isolation. The present research has elaborately covered all of these aspects.

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CHAPTER II

PHYSICAL AND CULTURAL BACKGROUND OF THE STUDY AREA

2.1 Introduction

The Darjiling district, having the shape of an irregular triangle, is the northern most district of the state of West Bengal. Geographically, the district is at the height of 300 to 12000 feet from the mean sea level and the northern portion of the district is a part of the Greater Himalaya. The study area Siliguri Sub-division consists of a portion of the outlying hills of the lower Himalayas and stretching along the base of the hills known as Terai (District Gazetteers, 2001). The Sub-division is bounded by Jalpaiguri district and some part of Bangladesh in the east, the state of Bihar and Uttar Dinajpur district of West Bengal in the south, Kurseong and Mirik, two C.D. Blocks of Darjiling district in the north and Nepal in the west (Census Handbook, 2011).

2.2 Physical Profile

2.2.1 Physiography

The Terai region from which the Sikkim Himalayas take their rise is only three hundred feet above sea level, the mountains rising abruptly from the plains in spurs of from six thousand to ten thousand feet densely clothed with forest to their summit. The Terai stretches along the base of the hills, a low lying strip shut in on the north by the giant outliers of the Himalayas. Geographically, this tract belongs to the plains of India, but geologically it is a sort of neutral, being composed in places neither of the alluvium of the plains nor the rocks of the hills, but for a great part, of alternating beds of sand, gravel and boulders brought down from the mountains.

Darjiling Himalaya which comprises Dooars, is included in the sub region of North Eastern Himalaya. The district is subdivided into five micro regions, which are, (i) Darjiling Himalayas, (ii) Kurseong Range, (iii) Kalimpong Range, (iv) Western Dooars, (v) Mahananda Tract. Among these five two micro regions come under Siliguri Sub-division; Western Dooars & Mahananda Tract (Census Handbook, 2011).

a. Western Dooars

This region is mainly spaced over the foothills of the Himalayas; mainly it is a plain land gently sloping from north to south. Some parts of Siliguri Sub-division namely, Kharibari C. D. Block, Naxalbari C. D. Block, Phansidewa C. D. Block and Kurseong C. D. Block, are included under this area. Geological formations of this plain is alluvium, older alluvium and laterite siwalik system. General elevation of this land is 80 meters to 300 meters (Census Handbook, 2011).

b. Mahananda Tract

This is primarily a plain land having elevation of 100 to 150 meters. Towards north of this region river Balason meets Mahananda and being fed with heavy rainfall. This area is agriculturally very productive. In terms of the area this is the smallest regional division in the district. The main soil type is recently formed alluvial, swallow black and brown, brown soil. River beds are consisting of layers of sand, slit and clay with occasional gravel beds (Census Handbook, 2011).

2.2.2 Drainage

The Terai portion of the district is low-lying belt of country, traversed by numerous rivers and streams rushing down from the hills by the upland ridges which mark their sources. The main drainage systems of Terai region are by three rivers Mechi, Mahananda and Balasan (Hunter, 2012).

2.2.2.a The Mechi

The Mechi takes its rise under the Rangbang spur in the Singalila range on the Nepal Frontier, and flowing from north to south marks the western boundary of the district from its source. After it entering the Terai, divides into two branches near the lower Mechi forest and eventually join the Mahananda in Purnia district, Bihar. The banks of the river are sloping, and well cultivated in the Terai, as well as in certain places in the hills. The bed is sandy in the plains and stony in the hills. The river is fordable throughout the year, except when flooded immediately after heavy rainfall (Hunter, 2012).

2.2.2.b The Mahananda

The Mahananda has its source near Mahaldiram to the east of Kurseong. After leaving the hills it flows in a southerly direction as far as Siliguri, where it changes its course a little to the west forms the boundary line between the Terai and Jalpaiguri as far as Phansidewa in the extreme south-east of the district. After leaving Darjiling, the Mahananda passes through Purnia district

in Bihar and Malda in West Bengal, and finally falls into the Ganges in the Rajshahi district of Bangladesh. The river receives no tributaries of any importance within the limit of Darjiling, and attains its full volume only after leaving the district (Hunter, 2012).

2.2.2.c The Balasan

The Balasan River takes its rises at Lepcha Jagat a few miles to the southwest of the station of Darjiling. It flows a southerly course till soon after it enters the Terai, where it divides into two streams. One called the new Balasan which joins the Mahananda on its right bank just below Siliguri, on the other hand the old Balsan continues its southward course till passing out of the Terai and joins the Mahananda in Purnia district, Bihar. The banks of the Balasan in the hills are mainly covered with jungle but in the Terai, they are fairly cultivated. The bed is stony in the hills and sandy in the plains. The major tributaries of Balasan in the hills are Bing, Rammuk, on the left and in the plains Rakti, Sukhna, Rohini and Panchanai. All the tributaries are on the left Bank (Hunter, 2012).

2.2.3 Vegetation

Vegetation of Darjiling district can be divided into two groups 1.Plain forest and 2.Hillforest. The main forests in Terai region are the Mechi forest, Balasan forest, Champasari jhar, Dhalkajhar etc. The Sal is the most important tree in the Plain region. The Mechi forest covers an area of 1183 acres and contains very little timber of value or size. It has only about five hundred full grown trees of Sisu and Khayer. Balasan, a Sisu and Khayer forest, on the banks of Balasan river, is same as Mechi Forest. It contains a very little or no full grown timber. This is caused by the flood, carrying down stones and rocks which hurt the bark of the trees at very early stages (District Gazetteers, 2001).

2.3 Social Profile

2.3.1 Population Growth in Siliguri Sub-division

The first regular census of the district was carried out in the year of 1871-72 and the result gave a total population of 94,712 persons, the average density of the population being 81 per square mile. When the next census was carried out in 1881, the population increased to 155,179 or more than 63 percent. Whereas the Terai tract is infected by malaria, and the mortality is exceptionally high. In the first census in 1872, the total population in Terai region is 47,985 which is increased to 63241 in 1881 census, growth rate by 31.79 percent. In the next census in 1891 decadal growth was only 15.43 percent. There can be no doubt that the decrease in growth percentage is

solely due to the incompleteness and inaccuracy of the first census. Table 2.1 is showing the decadal growth of Siliguri Sub-division from 1951 to 2011. The highest decadal growth by 68.04 percent was recorded in 1961 census and the lowest decadal growth by 18.63 percent was recorded in 2011 census.

Table 2.1 Population Growth of Siliguri Sub-division, 1951-2011

Year	Population	Decadal Growth in percent
1951	130832	25.15
1961	219,848	68.04
1971	301,799	37.28
1981	472,895	56.69
1991	615,101	30.07
2001	818581	33.08
2011	971,120	18.63

Source: Census of India

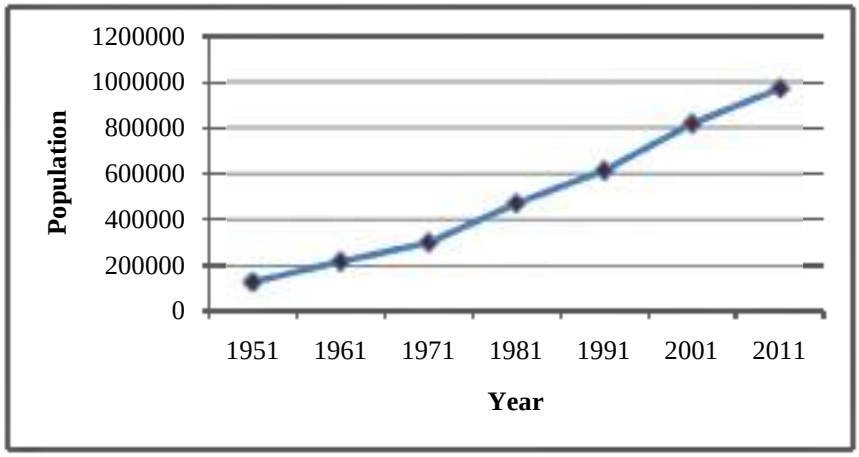

Fig. 2.1: Trends of Population Growth in Siliguri Sub-division, 1951-2011

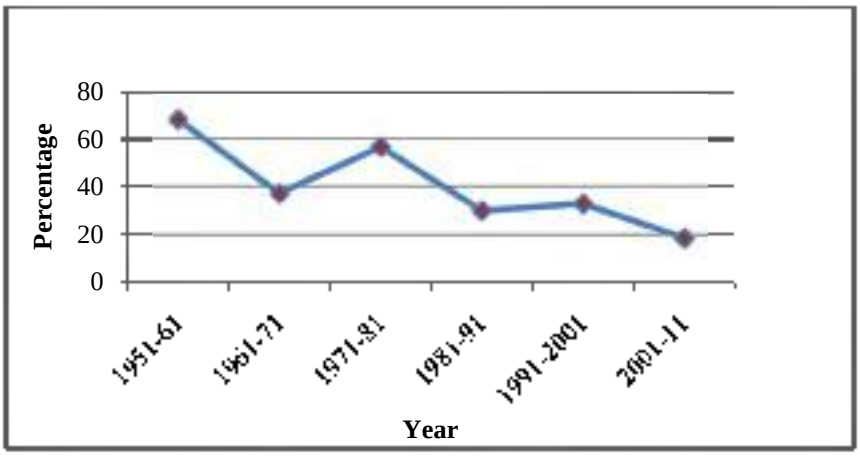

Fig. 2.2: Decadal Growth of Population in Siliguri Sub-division, 1951-2011

2.3.2 Distribution of Population, Population Density and Sex Ratio

As per Census 2011, the total population of Darjiling district is 18, 46,823 and out of which total population of Siliguri Sub-division is 9,71,120 which is almost 52.58 percent of the total population of the district, consisting 2,09,970 households and it makes this Sub-division the most populated Sub-division of the district. The male population of Siliguri Sub-division stands 4,97,002 which is 51.18 percent of the total population and the female population stands 4,74,118 which is 48.82 percent of the total population. Population density of four blocks and one municipal corporation under the Sub-division shows an uneven pattern. Where Siliguri MC (Part) has the highest population density with 14654/sq km, the Phansidewa C.D. Block has the lowest with 655/sq km. The overall population density of the Sub-division is 1217/sq. km which is more than the district figure (760/ sq. km). The sex ratio of the Sub-division is 954 which is lower than the sex ratio of Darjiling district (1005). Among four C.D. Blocks and one Municipal Corporation only two C.D. Blocks namely Phansidewa C. D. Block (972) and Kharibari C. D. Block (962) have higher sex ratio than that of the Siliguri Sub-division. Two Gram Panchayats namely Hatighisa (1011) under Naxalbari C.D. Block and Hetmuri (1019) under Phansidewa C.D. Block have higher sex ratio than that of the Darjiling district (Census 2011).

Table 2.2 Gram Panchayat-wise Distribution of Population, Population Density and Sex Ratio, 2011

Name	Area in Sq.km	No. of HH	Total Population	Male	Female	Density/km^2	Sex Ratio
Siliguri Sub-division	797.81	209970	971120	497002 (51.18)	474118 (48.82)	1217.23	954
Matigara C.D. Block	132.61	42666	197278	101023 (51.21)	96255 (48.79)	1487.66	953
Champasari	65.07	9400	44408	22476 (50.61)	21932 (49.39)	682.42	976
Matigara I	7.02	4962	22361	12068 (53.97)	10293 (46.03)	3186.55	853
Matigara II	5.66	7250	34186	17664 (51.67)	16522 (48.33)	6042.6	935
Atharakhai	14.21	11375	49885	24973 (50.06)	24912 (49.94)	3510.65	998
Patharghata	40.65	9679	46438	23842 (51.34)	22596 (48.66)	1142.48	948
Naxalbari C.D. Block	188.12	35752	165523	85054 (51.39)	80469 (48.61)	879.88	946
Nakshalbari	24.94	7282	33637	17122 (50.90)	16515 (49.10)	1348.92	965

Name	Area in Sq.km	No. of HH	Total Population	Male	Female	Density/km^2	Sex Ratio
Upper Bagdogra	51.6	8685	39290	20786 (52.90)	18504 (47.10)	761.48	890
Hatighisa	32.99	4388	20725	10305 (49.72)	10420 (50.28)	628.29	1011
Gossaipur	15.58	5190	23774	12294 (51.71)	11480 (48.29)	1525.88	934
Lower Bagdogra	9.24	4463	20292	10545 (51.97)	9747 (48.03)	2196.86	924
Maniram	53.78	5744	27805	14002 (50.36)	13803 (49.64)	516.98	986
Phansidewa C.D. Block	312.1	42138	204522	103719 (50.71)	100803 (49.29)	655.31	972
Hetmuri	54.98	7257	34510	17091 (49.52)	17419 (50.48)	627.69	1019
Bidhan Nagar I	44.31	6030	30060	15221 (50.64)	14839 (49.36)	678.41	975
Bidhan Nagar II	38.75	5510	27064	13564 (50.12)	13500 (49.88)	698.44	995
Chathat Bansgaon	49.9	5751	29098	14921 (51.28)	14177 (48.72)	583.1	950
Ghoshpukur	51.95	6421	31448	15804 (50.25)	15644 (49.75)	605.36	990
Jalash Nijamtara	37.14	6446	30723	16021 (52.15)	14702 (47.85)	827.26	918
Phanshidewa	35.07	4723	21619	11097 (51.33)	10522 (48.67)	616.38	948
Kharibari C.D. Block	144.88	23352	109251	55671 (50.96)	53580 (49.04)	754.08	962
Binnabari	26.12	3754	18000	9138 (50.77)	8862 (49.23)	689.17	970
Buraganj	60	6727	32168	16262 (50.55)	15906 (49.45)	536.11	978
Kharibari Panishali	15.06	4852	21370	10939 (51.19)	10431 (48.81)	1419.15	954
Raniganj Panishali	43.7	8019	37713	19332 (51.26)	18381 (48.74)	862.95	951
Siliguri MC(Part)	20.1	66062	294546	151535 (51.45)	143011 (48.55)	14654	944

Source: Census of India, 2011

2.3.3 Rural Urban Population Distribution

Table 2.3 shows the rural urban population distribution of Darjiling district and Siliguri Sub-division. The urban population of this Sub-division is 44.89 percent and rural population is 55.11 percent. In Darjiling district, rural population is 60.58 percent and urban population is 39.42 percent. So, in the study area rural population percentage is lower than that of the district percentage but urban population percentage is higher of the district's urban population percentage**.** This is as because 30.33 percent of the total population in the Sub-division lives in Siliguri MC (Part).

Table 2.3 Rural Urban Distribution of Population, 2011

Name	Rural			Urban		
	Total	Male	Female	Total	Male	Female
Darjiling District	1118860 (60.58%)	566965 (50.67%)	551895 (49.33%)	727963 (39.42%)	370294 (50.87%)	357669 (49.13 %)
Siliguri Sub-division	535221 (55.11 %)	272511 (50.92%)	262710 (49.08 %)	435899 (44.89 %)	224491 (51.50 %)	211408 (48.50 %)

Source: Census of India 2011

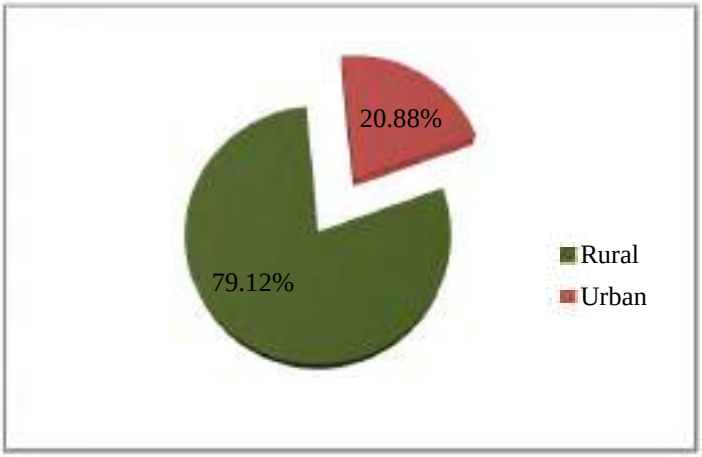

Fig: 2.3: Rural Urban Population Distribution in Siliguri Sub-division, 2011

2.3.4 Social Groups

Table 2.4 is showing the caste-wise distribution in different blocks of Siliguri Sub-division. According to 2011 census, concentration of SC population is highest in Kharibari C.D. Block which is 53.61 percent followed by Matigara C.D. Block 35.75 percent. It is lowest in Siliguri MC (Part) (8.84 percent). In Naxalbari and Phansidewa C.D. Blocks Scheduled Caste population are 26.78 percent and 29.68 percent respectively. Total percentage of SC Population in Siliguri

Sub-division is 26.79 percent. In case of Scheduled Tribe population, the highest concentration is found in Phansidewa C.D. Block i.e. 30.61 percent followed by Naxalbari and Kharibari C. D. Blocks with 19.57 percent and 19.46 percent respectively. In Siliguri MC (Part) the percentage is lowest (1.26 percent). 89.90 percent of population in Siliguri MC (Part) belongs to others population category which consists of population of general and other backward class category. As the scheduled tribe population has been mainly concentrated in the tea garden areas and all the tea gardens in the Sub-division are in rural areas, that is why the tribal population percentage is very low in Siliguri MC (Part) and higher in other blocks under the Sub-division. Though a large number of SC & ST population come in Siliguri MC (Part) in search of work but usually due to constrained income resources they don't reside there permanently.

Table 2.4 Block-wise Distribution of Different Social Groups in Siliguri Sub-division, 2011

Name	Total Population	SC Population	Percentage of SC Population	ST Population	Percentage of ST Population	Others Population	Percentage of Others
Matigara C.D. Block	197278	70527	35.75	26484	13.42	100267	50.83
Naxalbari C.D. Block	165523	44328	26.78	32388	19.57	8807	53.65
Phansidewa C.D. Block	204522	60704	29.68	62595	30.61	81223	39.71
Kharibari C.D. Block	109251	58570	53.61	21262	19.46	29419	26.93
Siliguri Municipal corp. (part)	294546	26042	8.84	3703	1.26	264801	89.90
Siliguri Sub-division	**971120**	**260171**	**26.79**	**146432**	**15.08**	**564517**	**58.13**

Source: Census of India, 2011

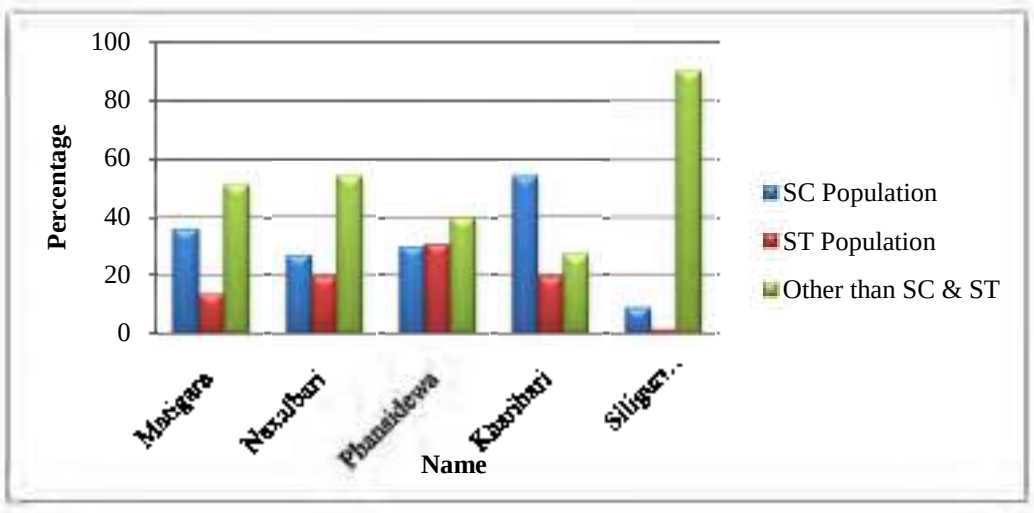

Fig. 2.4: Distribution of Different Social Groups in Siliguri Sub-division, 2011

Table 2.5 Tribal Groups in Siliguri Sub-division

Tribal Groups	No. of HH	Percentage
Oraon	182	34.34
Santal	127	23.96
Munda	97	18.30
Mal Pahariya	34	6.42
Mech	27	5.09
Tamang	25	4.72
Chik Baraik	22	4.15
Kheria	16	3.02

Source: Field Survey 2019-20

According to the census 2011, there are 41 distinct tribal groups in the Darjiling district. The table 2.5 shows the percentage share of different tribal groups in the study area. There are primarily eight tribal groups can be found in the study area. The dominant three tribal groups are Oraon, Santal and Munda. The percentage shares of these three tribal groups are 34.34 percent, 23.96 percent and 18.30 percent respectively. So, Oraon are the main dominant tribal group of the study area. The Oraon tribals are mainly the inhabitant of Chhotonagpur, Jharkhand. In the sub-division they are the main source of tea garden labourers. According to their belief they relish to work as labourers (Dutta, 1984). During field survey it has been observed that there is a trend of adopting Christianity among the Oraon people in the study area. The Santals are the second largest tribal groups in the study area. They prefer to stay at a close proximity with the jungle. Jungles hold a great important to their life. In the sub-division majority of them work as plantation labourer or as agricultural labourer. They are very good at agriculture. Their house includes a great influence of mud. The Munda group is an ethnic tribal group mainly inhabitant of Chhotonagpur Plateau. They also can be found in Assam, Odisha and West Bengal. Due to their contribution to the Indian freedom struggle, they are one of the respected tribal groups in history. They are considered as the totally tea garden tribe in the sub-division. Almost all of them are concentrated and associated with tea gardens in the study area. The other tribal groups except these three are Mal Pahariya (6.12 percent), Mech (5.09 percent), Tamang (4.72 percent), Chik Baraik (4.15 percent) and Kheria (3.02 percent).

2.3.5 Religious Groups

The Table 2.6 is showing the major religious groups in four C.D. Blocks and in Siliguri MC (Part) under Siliguri Sub-division in Darjiling district. The percentage of Hindu population is very high in most of the blocks. The highest Hindu population is found in kharibari C.D. Block with 91.01 percent followed by Siliguri Municipal Corporation 90.86 percent. In Matigara and

Naxalbari C.D. Blocks the percentage of Hindu population is 87.51 percent and 86.03 percent respectively. The lowest Hindu population is found in Phansidewa C.D. Block that is 59.68 percent whereas the Muslim and Christian population is quite high that is 23.57 percent and 16.18 percent respectively. The reason behind the high percentage of Christian population in this area is religious conversion among Hindu STs.. In Siliguri MC (Part) the Christian population percentage is lowest (1.06 percent) among the five. Other religious groups are very less in Siliguri Sub-division. Percentage of Sikh population is only 0.14 percent, Buddhist and Jain population is 0.78 percent and 0.11 percent respectively.

Table 2.6 Block-wise Distribution of Different Religious Groups in Siliguri Sub-division, 2011

Name	Percentage to total Population							
	Hindu	Muslim	Christian	Sikh	Buddhist	Jain	Others Religion	Religion not stated
Matigara	87.51	5.22	5.37	0.10	1.45	0.02	0.26	0.07
Naxalbari	86.03	5.69	6.57	0.20	1.31	0.02	0.02	0.16
Phansidewa	59.68	23.57	16.18	0.07	0.23	0.01	0.18	0.08
Kharibari	91.01	4.59	3.70	0.02	0.36	0.01	0.13	0.17
Siliguri MC (part)	90.86	6.29	1.06	0.24	0.56	0.32	0.02	0.64
Siliguri Sub-Div.	82.81	9.42	6.36	0.14	0.78	0.11	0.11	0.27

Source: Census of India, 2011

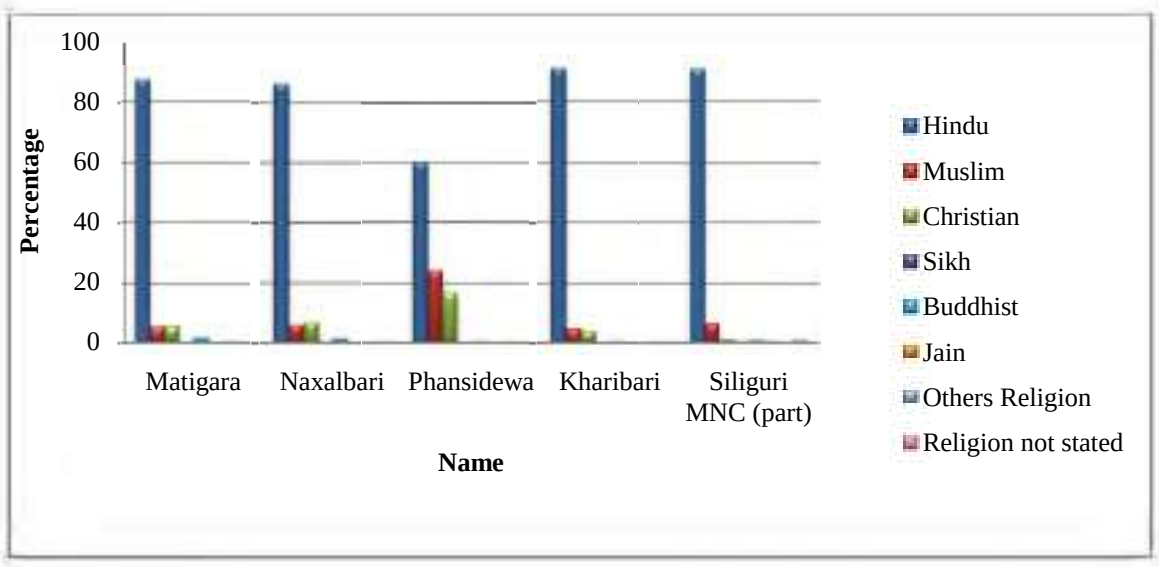

Fig. 2.5: Distribution of Different Religious Groups in Siliguri Sub-division, 2011

2.3.6 Literacy Rate

Literacy rate in Siliguri Sub-division according to 2011 census is 75.56 percent which is higher than the national average (74.04 percent) but lower than the state average (76.26 percent).C.D. Block-wise all the four blocks have lower literacy percentage than the literacy percentage of the Siliguri Sub division. In case of Siliguri MC (Part) (86.43 percent) literacy percentage is higher than both the national and state average as well as the average of the Sub-division. Though the male literacy percentage of the Sub-division (81.93 percent) is lower than the national average (82.14 percent), it is higher than state average (81.69 percent). The female literacy percentage of the Sub-division is 68.88 percent which is higher than the national average (65.46 percent) and lower than the state average (70.54 percent).

Table 2.7 Gram Panchayat-wise Literacy Rate and Gender Gap, 2011

Name	Literacy rate			Gender Gap
	Total	Male	Female	
Siliguri Sub Division	75.56	81.93	68.88	13.05
Matigara C. D. Block	74.78	81.75	67.43	14.32
Champasari	71.19	78.88	63.30	15.58
Matigara I	83.05	88.90	76.08	12.82
Matigara II	72.47	79.00	65.48	13.51
Atharakhai	79.90	85.55	74.24	11.31
Patharghata	70.21	78.71	61.18	17.54
Naxalbari C. D. Block	75.47	82.70	67.84	14.86
Nakshalbari	73.14	79.90	66.16	13.74
Upper Bagdogra	83.85	90.11	76.80	13.31
Hatighisa	62.57	71.89	53.31	18.58
Gossaipur	77.17	84.19	69.67	14.52
Lower Bagdogra	83.27	88.76	77.35	11.41
Maniram	68.53	76.87	60.14	16.73
Phansidewa C. D. Block	64.46	72.63	56.06	16.57
Hetmuri	60.90	70.26	51.82	18.45
Bidhan Nagar I	66.69	74.11	59.04	15.07
Bidhan Nagar II	59.54	68.02	51.07	16.94
Chathat Bansgaon	57.08	64.46	49.30	15.16
Ghoshpukur	66.52	75.42	57.56	17.86
Jalash Nijamtara	70.13	77.80	61.70	16.10
Phanshidewa	71.49	78.61	63.90	14.71
Kharibari C. D. Block	67.37	76.00	58.37	17.63

Name	Literacy rate			Gender Gap
	Total	Male	Female	
Binnabari	61.82	71.96	51.26	20.71
Buraganj	62.48	72.04	52.74	19.30
Kharibari Panishali	71.31	78.21	64.08	14.13
Raniganj Panishali	71.81	79.89	63.27	16.62
Siliguri MC (Part)	86.43	89.82	82.84	6.98

Source: Census of India, 2011

Likewise the total literacy percentage, none of the four blocks have higher literacy percentage than the Sub-division. The male (89.82 percent) and the female (82.84 percent) literacy percentage of Siliguri MC (Part) under Darjiling Sub-division are higher than the literacy percentage of Siliguri Sub-division. The male-female gap of literacy percentage is prominent in Siliguri Sub-division. The male-female gap of literacy percentage in Siliguri Sub-division is 13.05 percentage points which is lower than the national figure (16.68 percentage points) and higher than the state figure (11.15 percentage points). All the four blocks under Siliguri Sub-division have higher male-female gap of literacy percentage than the Siliguri Sub-division. Siliguri MC (part) (6.98 percentage points) has the lower male-female gap of literacy percentage than that of the Siliguri Sub-division. The Highest and the lowest literacy percentage among 22 Gram Panchayats under Siliguri Sub-division are seen at Upper Bagdogra (83.85 percent) and at Chathat Bansgaon (57.08 percent) respectively. The Highest male and female literacy percentage among 22 Gram Panchayats under Siliguri Sub-division can be seen at Upper Bagdogra (90.11 percent & 76.80 percent respectively) and the lowest male and female literacy percentage can be seen at Chathat Bansgaon (64.46 percent & 49.30 percent respectively). The highest male-female gap of literacy percentage can be seen at Binnabari (20.71 percentage points). Among the four blocks, the most literacy percentage-wise backward is Phansidewa C.D. Block. The literacy percentage is only 64.46 percent. For both male and female the literacy percentage of this block is the lowest among the four blocks. For male it is 72.63 percent and female it is 56.06 percent. This is mainly due to the highest ST population concentration in this block in the Sub-division. The low literacy percentage among tribals is drowning down the overall literacy percentage of the block. The literacy percentage in Matigara and Naxalbari C.D.Blocks are comparatively higher. In Naxalbari block it is 75.47 percent and in Matigara it is 74.78 percent. The geographical position and concentration of urban centers in these two blocks compare to the other two blocks in the Sub-division are the main reasons behind this.

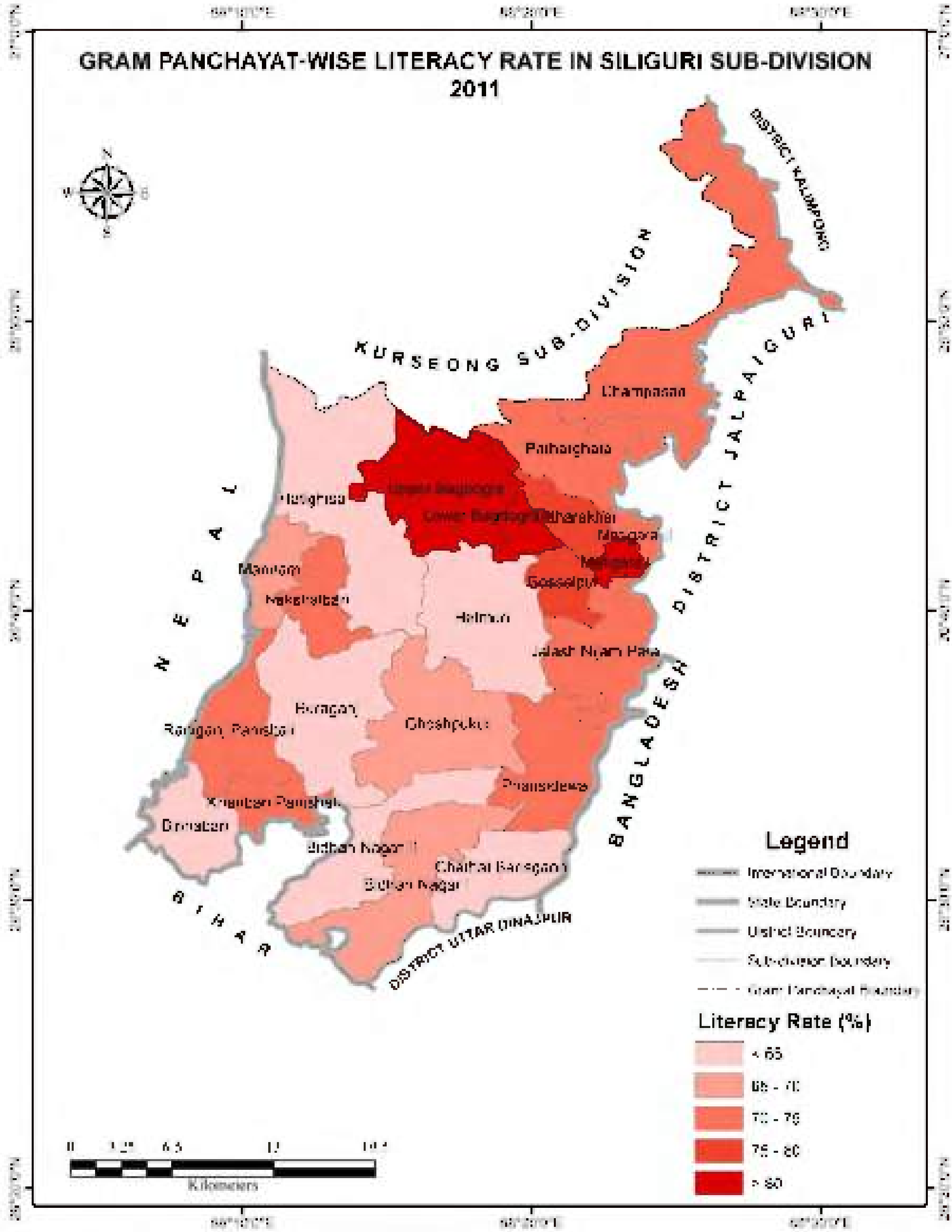
GRAM PANCHAYAT-WISE LITERACY RATE IN SILIGURI SUB-DIVISION
2011
KURSEONG SUB-DIVISION
DISTRICT KALIMPONG
DISTRICT JALPAIGURI
NEPAL
BANGLADESH
BIHAR
DISTRICT UTTAR DINAJPUR
Champasari
Patharghata
Upper Bagdogra
Lower Bagdogra
Atharakhai
Matigara
Gossaipur
Hatighisa
Manjam
Naxalbari
Bidhan Nagar
Chathat Bansgaon
Jalash Nizam Tara
Ghoshpukur
Phansidewa
Legend
International Boundary
State Boundary
District Boundary
Literacy Rate (%)
Kilometers

Fig. 2.6

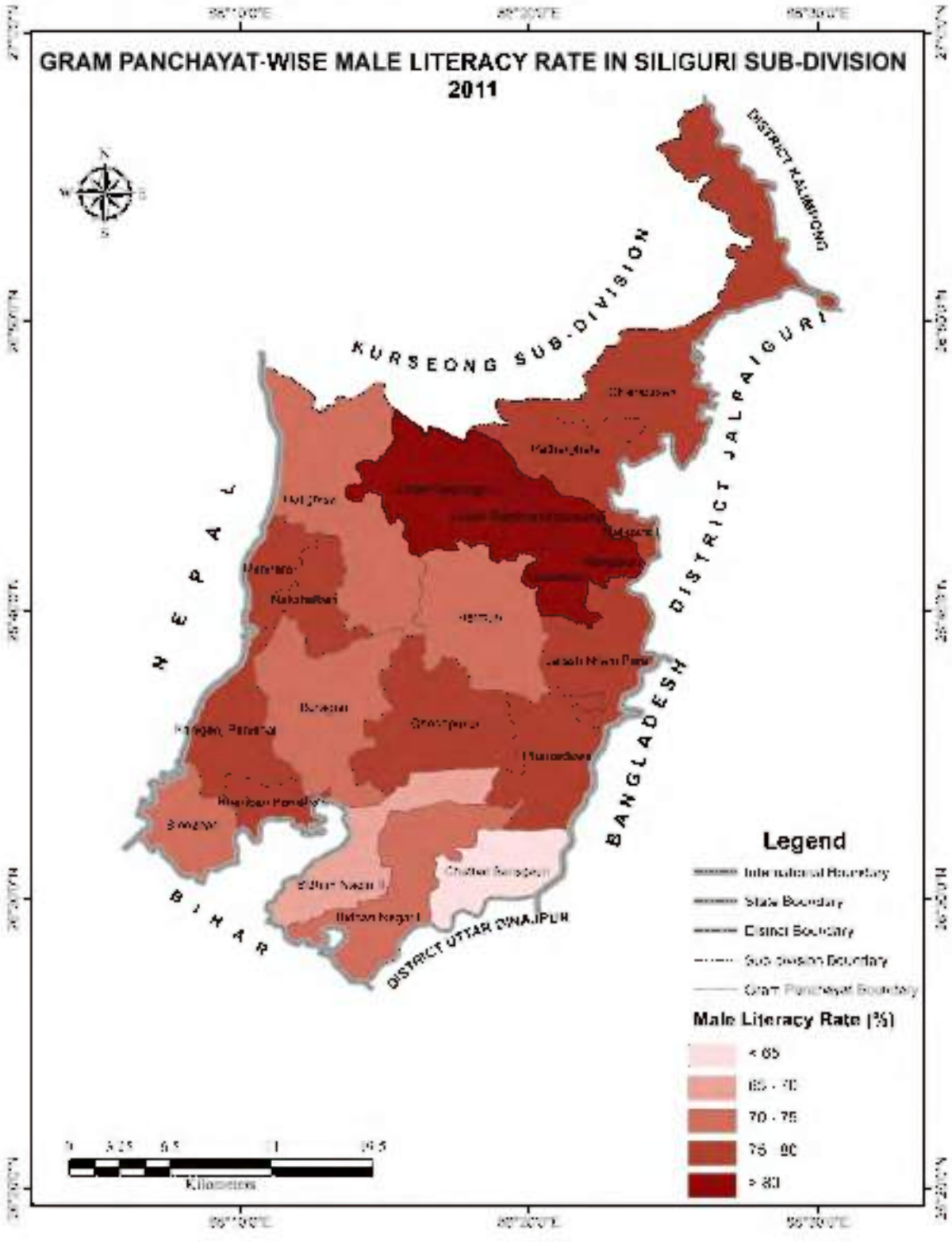
GRAM PANCHAYAT-WISE MALE LITERACY RATE IN SILIGURI SUB-DIVISION
2011
DISTRICT KALIMPONG
KURSEONG SUB-DIVISION
DISTRICT JALPAIGURI
NEPAL
BANGLADESH
BIHAR
DISTRICT UTTAR DINAJPUR
Legend
Male Literacy Rate (%)
< 65
65 - 70
70 - 75
75 - 80
> 80

Fig. 2.7

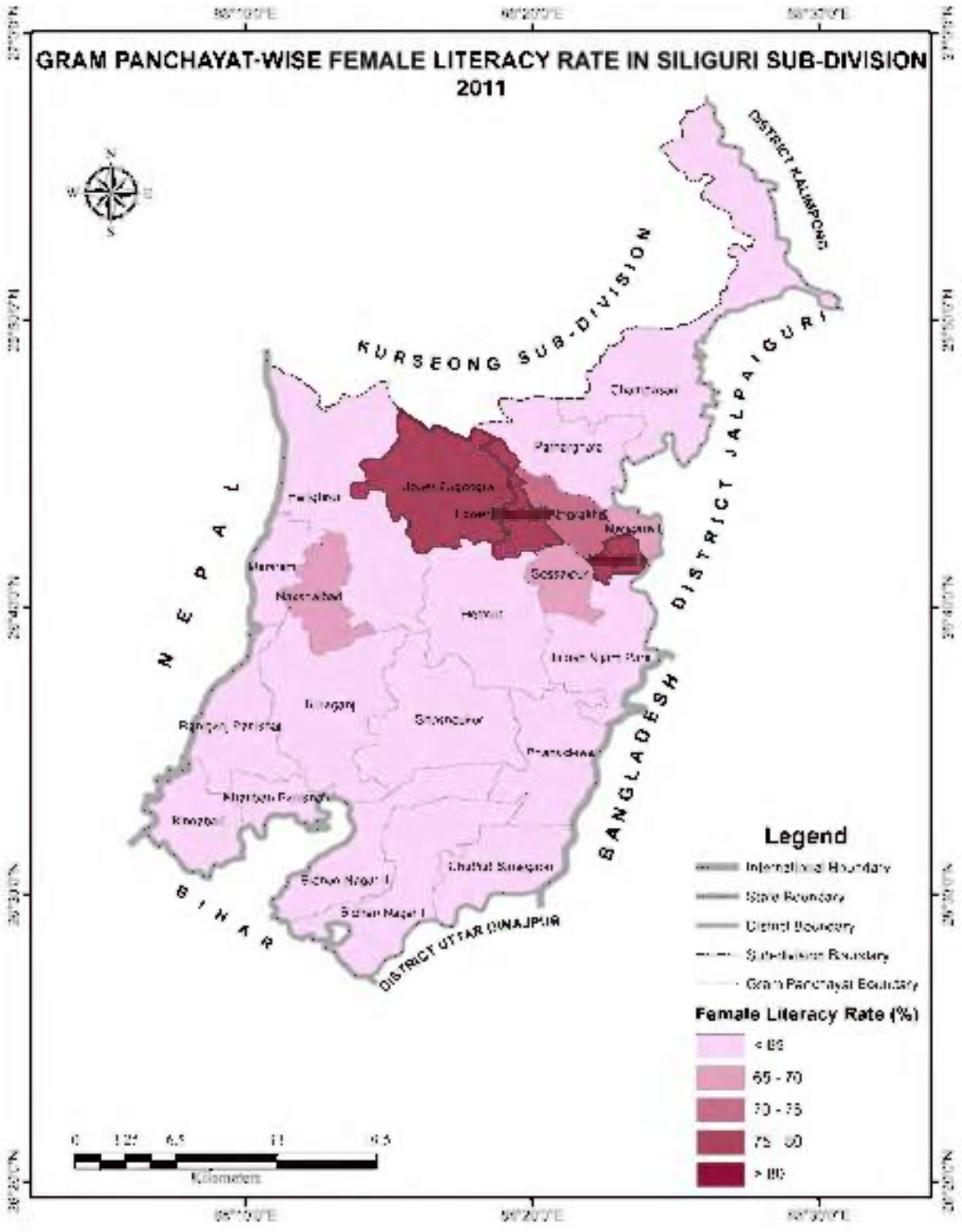
GRAM PANCHAYAT-WISE FEMALE LITERACY RATE IN SILIGURI SUB-DIVISION
2011
KURSEONG SUB-DIVISION
DISTRICT KALIMPONG
DISTRICT JALPAIGURI
NEPAL
BANGLADESH
BIHAR
DISTRICT UTTAR DINAJPUR
Legend
International Boundary
State Boundary
District Boundary
Subdivision Boundary
Gram Panchayat Boundary
Female Literacy Rate (%)
< 65
65 - 70
70 - 75
75 - 80
> 80
Kilometers

Fig. 2.8

2.3.7 Educational Institutions

The table 2.8 is showing the number of government educational institutions present in the study area, Siliguri Sub-division (Village and Town Directory, 2011). The data shows, there are a total number of 1523 government educational institutions present in the study area. Out of these the number of Pre-Primary educational institutions are 492, number of Primary educational institutions are 651, number of middle level educational institutions are 178, number of secondary & H.S level govt. educational institutions are 112 and 73 respectively. In addition to that there are 11 govt. general degree collages are there in the sub-division. There are a total no of 3 Engineering colleges and one Medical college are there in the sub-division and all of them comes under Matigara C.D. Block.

Table 2.8 Educational Institutions in Siliguri Sub-division, 2011

Block	Pre-Primary school	Primary school	Middle school	Secondary School	Senior Secondary school	Degree college of arts science commerce	Engineering college	Medical college	Polytechnics
Matigara	103	95	32	24	14	2	3	1	1
Naxalbari	96	87	22	11	6	4	0	0	0
Kharibari	102	88	16	8	3	0	0	0	0
Phansidewa	191	173	41	20	11	0	0	0	0
Siliguri Mc (Part)		208	67	49	39	5	0	0	1
Siliguri Sub-Division	492	651	178	112	73	11	3	1	2

Source: Village and Town Directory, 2011

2.4 Economic Profile

2.4.1 Work Participation Rate

The table 2.9 is showing the work participation rate in different Gram Panchayats and Siliguri MC (Part) under Siliguri Sub-division. WPR of Siliguri Sub-division is 37.48 percent; out of which male WPR is 54.58 percent and female WPR is 19.56 percent. So, gender gap in WPR is very much prominent. Only in Matigara (38.20 percent) and Kharibari (39.20 percent) C.D. Blocks among the four C.D Blocks and one MC (Part), WPR are higher than that of the Siliguri Sub-division. Lowest WPR can be seen in Naxalbari C.D. Block (36.77 percent). Only Matigara C.D. Block (54.68 percent) and Siliguri MC (Part) (57.71 percent) have higher male WPR than Siliguri Sub-division. Highest female WPR can be seen in Phansidewa C.D. Block (23.77 percent). Only Naxalbari C.D.Block (18.82 percent) and Siliguri MC (Part) (14.65 percent) have lower female WPR than Siliguri Sub-division. Among the 22 Gram Panchayats highest and lowest WPR can be seen in Buraganj (42.92 percent) and Chathat Bansgaon (30.78 percent)

respectively. The highest male and female WPR can be seen in Matigara I (57.86 percent) and Hetmuri (34.17 percent) Gram Panchayats respectively. And both the lowest male and female WPR can be seen in Chathat Bansgaon (48.41 percent & 12.22 percent respectively). The reason behind the lowest male and female WPR in this GP is its remote location and accessibility. It is one of the remotest and under developed area of the study area. So, resource of income is very limited in this area. The Fig 2.9 shows the WPR above 39 percent can be seen in Hatighisa (40.76 percent), Binnabari (40.80 percent), Ghoshpukur (41.01 percent), Bidhan Nagar II (41.44 percent), Hetmuri (42.26 percent) and Buraganj (42.92 percent). The main reason behind this is the highly concentrated tribal population (Table 3.1) in these areas. And among tribals WPR is very high (Table 3.48). So, these tribal WPR is playing a major role in these areas for having the high percentage of WPR.

Table 2.9 Gram Panchayat-wise Work Participation Rate, 2011

Name	WPR			Non Worker		
	Total	Male	Female	Total	Male	Female
Siliguri Sub-division	37.48	54.58	19.56	62.52	45.42	80.44
Matigara C. D. Block	38.20	54.68	20.91	61.80	45.32	79.09
Champasari	37.48	52.38	22.21	62.52	47.62	77.79
Matigara I	37.78	57.86	14.24	62.22	42.14	85.76
Matigara II	38.61	56.03	19.98	61.39	43.97	80.02
Atharakhai	38.26	54.87	21.62	61.74	45.13	78.38
Patharghata	38.73	54.06	22.56	61.27	45.94	77.44
Naxalbari C. D. Block	36.77	53.75	18.82	63.23	46.25	81.18
Nakshalbari	35.58	53.71	16.77	64.42	46.29	83.23
Upper Bagdogra	37.56	55.11	17.84	62.44	44.89	82.16
Hatighisa	40.76	52.52	29.13	59.24	47.48	70.87
Gossaipur	34.53	54.68	12.96	65.47	45.32	87.04
Lower Bagdogra	34.09	53.39	13.20	65.91	46.61	86.80
Maniram	37.99	52.15	23.63	62.01	47.85	76.37
Phansidewa C. D. Block	37.43	50.71	23.77	62.57	49.29	76.23
Hetmuri	42.26	50.51	34.17	57.74	49.49	65.83
Bidhan Nagar I	34.95	50.47	19.03	65.05	49.53	80.97
Bidhan Nagar II	41.44	50.94	31.90	58.56	49.06	68.10
Chathat Bansgaon	30.78	48.41	12.22	69.22	51.59	87.78
Ghoshpukur	41.01	49.61	32.33	58.99	50.39	67.67
Jalash Nijamtara	36.22	53.70	17.17	63.78	46.30	82.83
Phanshidewa	33.66	51.45	14.89	66.34	48.55	85.11
Kharibari C. D. Block	39.20	54.38	23.43	60.80	45.62	76.57
Binnabari	40.80	54.45	26.72	59.20	45.55	73.28
Buraganj	42.92	53.62	31.98	57.08	46.38	68.02
Kharibari Panishali	37.89	53.75	21.26	62.11	46.25	78.74
Raniganj Panishali	36.00	55.33	15.66	64.00	44.67	84.34
Siliguri MC (Part)	36.81	57.71	14.65	63.19	42.29	85.35

Source: Census of India 2011

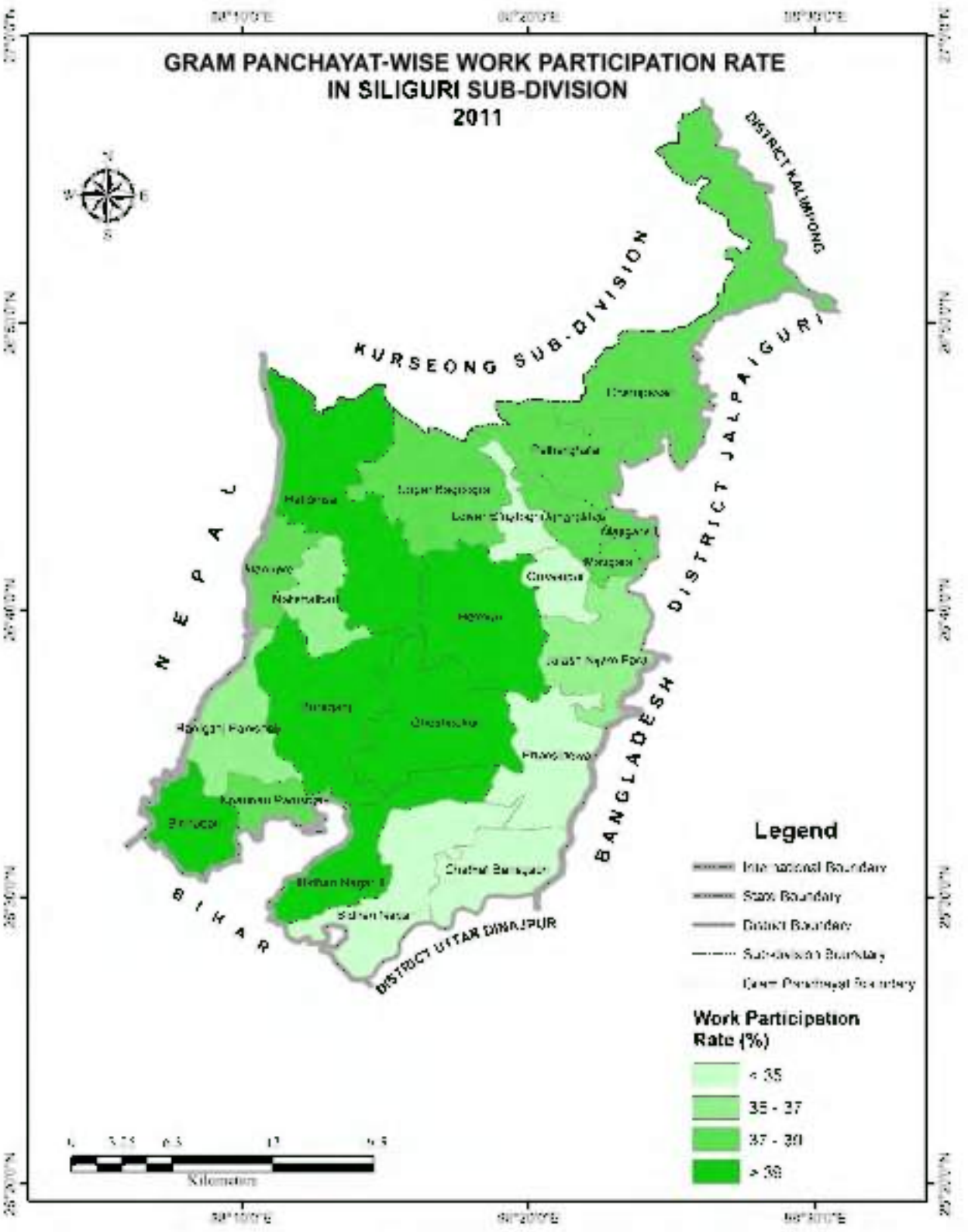
GRAM PANCHAYAT-WISE WORK PARTICIPATION RATE
IN SILIGURI SUB-DIVISION
2011
KURSEONG SUB-DIVISION
DISTRICT KALIMPONG
DISTRICT JALPAIGURI
NEPAL
BANGLADESH
BIHAR
DISTRICT UTTAR DINAJPUR
Legend
Work Participation Rate (%)
< 35
35 - 37
37 - 39
> 39
Kilometers

Fig. 2.9

Table 2.10 Gram Panchayat-wise Distribution of Main Worker and Marginal Worker, 2011

Name	Main Worker			Marginal Worker		
	Total	Male	Female	Total	Male	Female
Siliguri Sub Division	83.42	89.06	66.91	16.58	10.94	33.09
Matigara C. D. Block	88.65	92.08	79.24	11.35	7.92	20.76
Champasari	85.97	88.38	80.15	14.03	11.62	19.85
Matigara I	94.87	96.32	87.99	5.13	3.68	12.01
Matigara II	90.27	94.64	77.16	9.73	5.36	22.84
Atharakhai	88.85	93.77	76.33	11.15	6.23	23.67
Patharghata	86.82	89.40	80.29	13.18	10.60	19.71
Naxalbari C. D. Block	81.92	87.58	64.84	18.08	12.42	35.16
Nakshalbari	87.78	91.55	75.27	12.22	8.45	24.73
Upper Bagdogra	85.27	90.25	67.98	14.73	9.75	32.02
Hatighisa	75.70	82.95	62.77	24.30	17.05	37.23
Gossaipur	83.95	89.45	59.07	16.05	10.55	40.93
Lower Bagdogra	81.08	85.52	61.62	18.92	14.48	38.38
Maniram	74.56	81.68	58.61	25.44	18.32	41.39
Phansidewa C. D. Block	77.67	84.62	62.42	22.33	15.38	37.58
Hetmuri	66.41	72.20	58.01	33.59	27.80	41.99
Bidhan Nagar I	82.55	88.10	67.46	17.45	11.90	32.54
Bidhan Nagar Ii	77.96	83.24	69.48	22.04	16.76	30.52
Chathat Bansgaon	83.56	86.31	72.11	16.44	13.69	27.89
Ghoshpukur	73.34	80.61	62.07	26.66	19.39	37.93
Jalash Nijamtara	84.17	92.48	55.86	15.83	7.52	44.14
Phanshidewa	83.26	91.93	51.69	16.74	8.07	48.31
Kharibari C. D. Block	73.17	83.08	49.28	26.83	16.92	50.72
Binnabari	67.84	82.19	37.67	32.16	17.81	62.33
Buraganj	72.28	82.73	54.37	27.72	17.27	45.63
Kharibari Panishali	75.54	85.95	47.93	24.46	14.05	52.07
Raniganj Panishali	75.56	82.20	50.89	24.44	17.80	49.11
Siliguri MC (Part)	88.72	92.67	72.24	11.28	7.33	27.76

Source: Census of India 2011

Most of the working population of Siliguri Sub-division is engaged in main working category. 83.42 percent of working population works as main worker and only 16.58 percent works as marginal worker. Out of the four C.D. Blocks only Matigara C.D. Block has the higher main worker percentage (88.65 percent) than the Sub-division. The two blocks Kharibari (26.83 percent) and Phansidewa (22.33 percent) have highest percentage of marginal worker in the Sub-

division. The Fig 2.11 and Fig 2.12 show that in the study area marginal worker percentage can be found a lot more among females than that of the males. Here 33.09 percent of female working population works as marginal worker and only 10.94 percent male working population works as marginal worker. In Kharibari and Phansidewa C.D. Blocks this female marginal worker percentage rises even more. In Kharibari block 50.72 percent of female workforce work as marginal worker. In Phansidewa block this percentage is 37.58 percent. The main reason behind the high percentage of working females working as marginal worker is there structure of occupations. Most of the females work as daily labourers in some construction sites or in some tea gardens, specifically at the time of plucking.

Fig. 2.10: Distribution of Main & Marginal Workers in Siliguri Sub-division, 2011

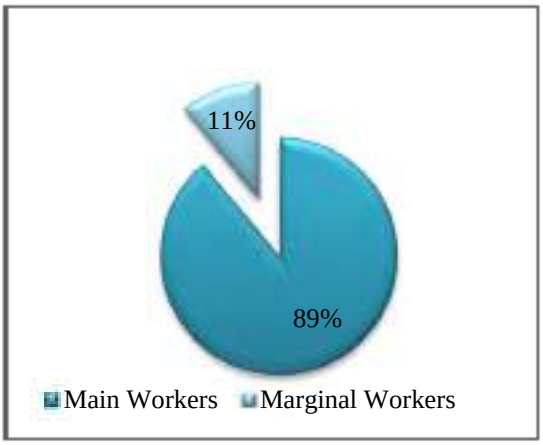

Fig. 2.11: Distribution of Male Main & Marginal Workers in Siliguri Sub-division, 2011

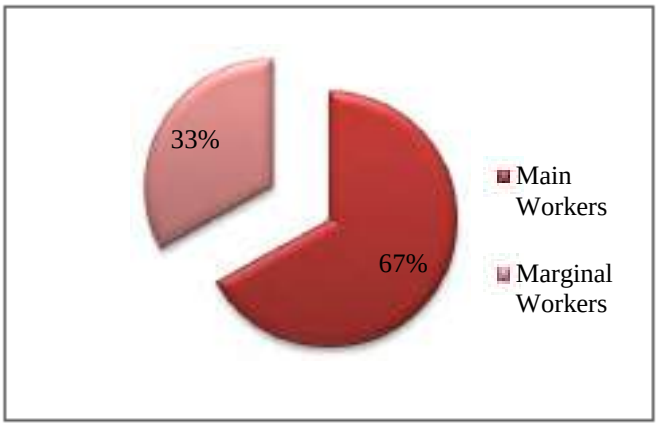

Fig. 2.12: Distribution of Female Main & Marginal Workers in Siliguri Sub-division, 2011

2.4.2 Occupational Structure

According to 2011 census working population is divided into four categories; Cultivators, Agricultural Labourers, Household Industry Workers and Other Workers. Here other worker includes Daily Labourer, Services Sector worker, Plantation worker, Non household industry worker, Transportation worker etc. (Fig.2.13). In Siliguri Sub-division out of the total working population 6.08 percent are cultivators, 8.13 percent are agricultural labourers, 2.54 percent are household industry workers and 83.25 percent are engaged in other working category.

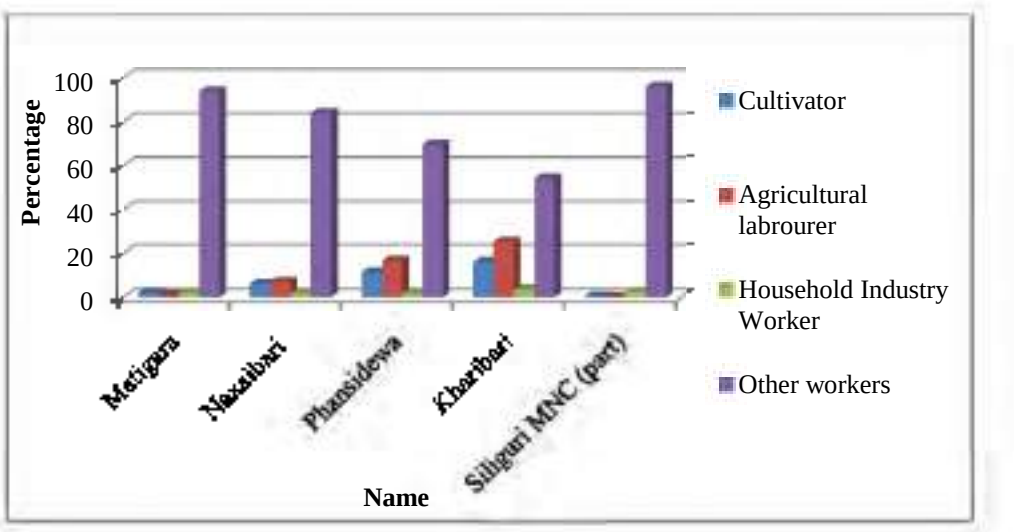

Fig. 2.13: Distribution of Occupational Structure in Siliguri Sub-division, 2011

Likewise the Sub-division, in all of the Gram Panchayats a large number of working population is engaged in other working category. This mainly includes plantation worker and labourer. Diversification of working categories is rare in the study area. Some significant number of Cultivator and Agricultural labourer can be seen only in the Gram Panchyats under Phansidewa and Kharibari C.D Blocks. In Pansidewa C.D. Block 16.80 percent and 11.48 percent of the working population works as Agricultural labourer and Cultivator respectively. In Kharibari C.D. Block the percentages are 25.56 percent and 16.29 percent respectively (Table 2.11). But in all the Gram Panchayats magnitude of Household industries is almost negligible.

Table 2.11 Gram Panchayat-wise Different Occupational Structure, 2011

Name	Cultivator			Agricultural labrourer		
	Total	Male	Female	Total	Male	Female
Siliguri Sub Division	6.08	6.97	3.48	8.13	7.12	11.08
Matigara C. D. Block	2.46	2.45	2.47	1.28	1.13	1.68
Champasari	3.97	4.29	3.20	1.89	1.55	2.71
Matigara I	2.60	2.58	2.73	1.11	1.00	1.64
Matigara II	1.52	1.38	1.91	1.17	1.07	1.45
Atharakhai	1.05	1.10	0.91	0.58	0.63	0.43
Patharghata	3.17	2.96	3.73	1.62	1.40	2.18
Naxalbari C. D. Block	6.30	7.12	3.83	7.18	6.37	9.63
Nakshalbari	4.64	5.39	2.13	7.36	7.03	8.45
Upper Bagdogra	1.82	1.47	3.03	0.97	0.89	1.24
Hatighisa	9.68	12.38	4.88	11.93	11.46	12.78
Gossaipur	5.64	6.46	1.95	3.12	2.66	5.17
Lower Bagdogra	2.41	2.24	3.19	2.00	1.21	5.44
Maniram	14.81	18.65	6.22	18.39	17.73	19.87
Phansidewa C. D. Block	11.48	14.69	4.45	16.80	17.50	15.27
Hetmuri	4.09	5.29	2.35	6.75	6.86	6.59
Bidhan Nagar I	7.02	8.57	2.83	13.76	14.24	12.46
Bidhan Nagar Ii	6.79	9.60	2.28	12.21	12.23	12.17
Chathat Bansgaon	18.17	20.92	6.70	45.60	45.61	45.55
Ghoshpukur	8.21	10.69	4.37	4.54	4.62	4.41
Jalash Nijamtara	17.48	19.44	10.82	18.24	15.74	26.78
Phanshidewa	28.38	33.74	8.87	32.53	29.15	44.86
Kharibari C. D. Block	16.29	20.41	6.37	25.56	20.75	37.17
Binnabari	23.08	29.72	9.12	38.24	32.15	51.01
Buraganj	16.72	22.40	6.98	20.01	16.30	26.38
Kharibari Panishali	12.06	15.53	2.89	33.65	29.06	45.81
Raniganj Panishali	14.72	17.14	5.70	19.53	14.50	38.21
Siliguri MC (Part)	0.62	0.44	1.36	0.40	0.32	0.73

Source: Census of India 2011

Table 2.11 Continued. Gram Panchayat-wise Different Occupational Structure, 2011

Name	HH Industry Worker			Other Worker		
	Total	Male	Female	Total	Male	Female
Siliguri Sub Division	2.54	2.16	3.68	83.25	83.76	81.76
Matigara C. D. Block	2.34	2.16	2.83	93.92	94.25	93.01
Champasari	1.87	2.03	1.48	92.27	92.14	92.61
Matigara I	1.53	1.46	1.84	94.76	94.96	93.79
Matigara II	2.21	2.16	2.36	95.11	95.38	94.27
Atharakhai	2.92	2.47	4.05	95.46	95.79	94.62
Patharghata	2.65	2.34	3.43	92.56	93.30	90.66
Naxalbari C. D. Block	2.25	1.85	3.47	84.27	84.67	83.07
Nakshalbari	2.08	1.96	2.49	85.92	85.61	86.93
Upper Bagdogra	1.83	1.41	3.30	95.39	96.24	92.43
Hatighisa	2.21	1.90	2.77	76.17	74.26	79.57
Gossaipur	3.09	2.32	6.59	88.15	88.56	86.29
Lower Bagdogra	2.56	1.10	8.94	93.03	95.45	82.44
Maniram	2.21	2.49	1.56	64.59	61.12	72.35
Phansidewa C. D. Block	2.05	1.71	2.80	69.66	66.10	77.48
Hetmuri	2.02	2.34	1.55	87.14	85.51	89.52
Bidhan Nagar I	2.49	2.37	2.83	76.72	74.82	81.87
Bidhan Nagar II	1.25	1.30	1.16	79.76	76.87	84.39
Chathat Bansgaon	1.46	0.69	4.68	34.77	32.78	43.07
Ghoshpukur	1.30	1.11	1.60	85.95	83.58	89.62
Jalash Nijamtara	4.39	2.67	10.26	59.88	62.15	52.14
Phanshidewa	1.20	1.05	1.72	37.89	36.07	44.54
Kharibari C. D. Block	3.72	3.45	4.37	54.43	55.40	52.09
Binnabari	1.96	2.25	1.35	36.72	35.87	38.51
Buraganj	2.95	2.00	4.58	60.32	59.31	62.06
Kharibari Panishali	4.26	2.84	8.03	50.02	52.57	43.28
Raniganj Panishali	5.13	5.52	3.68	60.63	62.84	52.41
Siliguri MC (Part)	2.73	2.13	5.24	96.25	97.11	92.67

Source: Census of India 2011

2.5 Conclusion

Out of the three important aspects i.e. physical, social and economic; Physical aspect shows a similar type of physiographic condition in the whole Sub-division. The social characteristics are diverse in respect of religion, caste and literacy. Economic aspects are also diverse in respect of occupational structure. Gender gap is present in all the social and economic aspects. In

conclusion it can be said that more studies require for the development of the people of this Sub-division.

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CHAPTER III

SOCIO-ECONOMIC PROFILE OF TRIBAL POPULATION OF THE STUDY AREA

3.1 Introduction

The tribal communities have some distinct physical and diverse cultural traits. Tribes are relatively isolated from larger cultural influences, they also share cultural homogeneity, and most of them live in isolated terrains, the main sources of their livelihood being agriculture or forest produce. They have some common characteristics like illiteracy, economic backwardness, social deprivation, primitive religious belief, distinct language (Naik, 1984). The tribes have been confined to low status and are often physically and socially isolated instead of being absorbed in the main stream population (Dr.HaseenaV.A & Mohammed, 2014). The tribal social – cultural structure is not only fascinating but also unique in respect of certain elements of culture. Over the centuries they have preserved a distinctive style of life and cultural norms. The tribal community always faces difficulties in socio-economic development due to various factors like geographical and cultural isolation.

3.2 Social Condition

3.2.1 Distribution and Concentration of Scheduled Tribe Population

Population size is an important factor of demographic structure. Table 3.1 is showing Block and Gram Panchayat-wise distribution of tribal population, percentage distribution of ST male and female, sex ratio and concentration of tribal population by Location Quotient. In Siliguri Sub-division a large number of areas come under the tea garden sector. According to a report namely "Survey of Tea Gardens" published by Regional Labour Offices under jurisdiction of Joint Labour Commissioner, North Bengal Zone in 2012, out of total 126 tea estates in Darjiling district, 45 tea estates come under this Sub-division. As the tribal are a cheap source of labour, a large number of tribal population is concentrated in these tea garden areas. In the study area the percentage of tribal population is 15.08 percent. Highest percentage of tribal population is found in Phansidewa C.D. Block i.e. 30.61 percent followed by Naxalbari (19.57 percent) and Kharibari (19.46 percent) Blocks. Lowest percentage of ST population is found in Siliguri Municipal Corporation (Part) (1.26 percent). A large number of the tribal population is engaged in primary economic activities and that is why the rural base concentration is high. In Gram

Panchayat level highest concentration is found in Hetmuri GP i.e. 56.27 percent and the lowest concentration is found in Matigara II with 1.92 percent.

3.2.2 Location Quotient

Location Quotient (LQ) is basically a way of quantifying how concentrated a demographic group is in a region as compared to the nation. Here it shows concentration of ST population in different C.D. Blocks, Gram Panchayats and Siliguri MC (Part) in the study area compared to Siliguri Sub-division. LQ value 1 is considered as balanced concentration, more than 1 is showing the higher concentration of ST population and value nearer less than 1 is showing the lower concentration of ST population compared to Siliguri Sub-division (Mahmood, 2013). In study area block-wise highest ST concentration is found in Phansidewa C.D. Block where the LQ is 2.030 and the lowest LQ is found in Matigara C.D. Block (0.890). The LQ of Siliguri MC (Part) under Siliguri Sub-division is 0.083.

For this particular analysis of Gram Panchayats LQ value in the range of 0.8 to 1.3 is to be considered as balanced concentration. Value greater than 1.3 is to be considered as high concentration and less than 0.8 to be dispersed concentration. From table 3.2 it can be seen that in the study area only two Gram Panchayats, Nakshalbari (1.007), Upper Bagdogra (1.134), come under the balanced concentration tag. Hetmuri (3.732) GP of Phansidewa C.D.Block is with highest LQ and Matigara II (0.127) of Matigara C.D Block is with lowest LQ among the Gram Panchayats in the Sub-division. Out of the total 22 Gram Panchayats in the Sub-division 10 Gram Panchayats come under the tag of high concentration and dispersed concentration each. Champasari (1.844), Patharghata (1.595), Maniram (1.843), Hatighisa (3.491), Bidhan Nagar I (1.552), Bidhan Nagar II (3.241), Ghoshpukur (3.485), Hetmuri (3.732), Binnabari (1.530) and Buraganj (2.442) have been classified as high tribal concentration Gram Panchayats in the Sub-division. And Atharakhai (0.227), Matigara I (0.180), Matigara II (0.127), Lower Bagdogra (0.303), Gossaipur (0.279), Phanshidewa (0.514), Jalash Nijam Para (0.324), Chathat Bansgaon (0.733), Kharibari Panishali (0.412), Raniganj Panishali (0.692); these ten Gram Panchayats have been classified as Gram Panchayats with dispersed tribal concentration.

Table 3.1 Gram Panchayat-wise Distribution of Tribal Population in Siliguri Sub-division, 2011

Name of the Block/GP	ST Population			Percentage of ST Population to Total Population			Sex Ratio (ST)	LQ
	Total	Male	Female	Total	Male	Female		
Siliguri Sub –division	146432	72153	74279	15.08	49.27	50.73	1029	1.000
Matigara C.D.Block	26484	12942	13542	13.42	48.87	51.13	1046	0.890
Champasari	12351	6067	6284	27.81	49.12	50.88	1036	1.844
Matigara I	606	305	301	2.71	50.33	49.67	987	0.180
Matigara II	657	322	335	1.92	49.01	50.99	1040	0.127
Atharakhai	1704	814	890	3.42	47.77	52.23	1093	0.227
Patharghata	11166	5434	5732	24.04	48.67	51.33	1055	1.595
Naxalbari C.D.Block	32388	15989	16399	19.57	49.37	50.63	1026	1.298
Nakshalbari	5105	2532	2573	15.18	49.60	50.40	1016	1.007
Upper Bagdogra	6718	3264	3454	17.10	48.59	51.41	1058	1.134
Hatighisa	10909	5370	5539	52.64	49.23	50.77	1031	3.491
Gossaipur	1001	512	489	4.21	51.15	48.85	955	0.279
Lower Bagdogra	928	477	451	4.57	51.40	48.60	945	0.303
Maniram	7727	3834	3893	27.79	49.62	50.38	1015	1.843
Phansidewa C.D.Block	62595	30744	31851	30.61	49.12	50.88	1036	2.030
Hetmuri	19420	9404	10016	56.27	48.42	51.58	1065	3.732
Bidhan Nagar I	7033	3451	3582	23.40	49.07	50.93	1038	1.552
Bidhan Nagar II	13228	6533	6695	48.88	49.39	50.61	1025	3.241
Chathat Bansgaon	3216	1660	1556	11.05	51.62	48.38	937	0.733
Ghoshpukur	16524	8092	8432	52.54	48.97	51.03	1042	3.485
Jalash Nijam Para	1499	761	738	4.88	50.77	49.23	970	0.324
Phanshidewa	1675	843	832	7.75	50.33	49.67	987	0.514
Kharibari C.D.Block	21262	10615	10647	19.46	49.92	50.08	1003	1.291
Binnabari	4152	2039	2113	23.07	49.11	50.89	1036	1.530
Buraganj	11845	5910	5935	36.82	49.89	50.11	1004	2.442
Kharibari Panishali	1329	661	668	6.22	49.74	50.26	1011	0.412
Raniganj Panishali	3936	2005	1931	10.44	50.94	49.06	963	0.692
Siliguri MC (Part)	3703	1863	1840	1.26	50.31	49.69	988	0.083

Source: Census of India 2011

Table 3.2 Concentration of Tribal Population in Gram Panchayats of Siliguri Sub-division

Concentration	LQ Index	Gram Panchayats
High concentration	>1.300	Champasari, Patharghata, Maniram, Hatighisa, Bidhan Nagar I, Bidhan Nagar II, Ghoshpukur, Hetmuri, Binnabari, Buraganj
Balanced concentration	0.800-1.300	Nakshalbari, Upper Bagdogra,
Dispersed concentration	<0.800	Atharakhai, Matigara I, Matigara II, Lower Bagdogra, Gossaipur, Phanshidewa, Jalash Nijam Para, Chathat Bansgaon, Kharibari Panishali, Raniganj Panishali

Source: Compiled by the Researcher

3.2.3 Sex Ratio

Sex ratio is defined as the number of female per 1000 male population. It is one of the important social indicators which measure the extent of equality between male and female. It also provides an indication of both the relative survival of female and male.

The sex ratio of India has had been remained unfavorable to female. But for tribal population the scenario is quite different. Where the sex ratio of India is 940, the sex ratio of tribal population in India is 990. The scenario is same for the study area also. Where in Siliguri Sub-division the sex ratio is 954, the sex ratio of tribal population of the same is 1029. The reason behind this is generally the tribal community follows Matriarchal Society where there is no gender inequality. Even, when dowry system is a great concern for the whole society; the tribals follow no dowry culture. Though the sad part is during survey it has been observed that the tribals those who are main streamed into urbanism, sex selection has begun among them.

Block-wise the highest sex ratio of tribal population is found in Matigara C. D. Block that is 1046 followed by Phansidewa C. D. Block (1036) and Naxalbari C. D. Block (1026). The lowest tribal sex ratio is found in Kharibari C.D. Block (1003). It can be seen that in Phansidewa C.D. Block, the percentage of ST population (30.61 percent) as well as the sex ratio (1036) is highest among the four C.D. Blocks in the study area. In most of the Gram Panchayats sex ratio of tribal population is above 1000. Highest tribal sex ratio is found in Atharakhai GP (1093) followed by Hetmuri GP (1065). The lowest tribal sex ratio is found in Chathat Bansgaon GP (937) followed by Lower Bagdogra GP (945) and Gossaipur (955). In Siliguri MC (Part) under

Siliguri Sub-division the tribal sex ratio is 988. For this study Gram Panchayats have been classified into three categories according to their tribal sex ratio (Table 3.3). Gram Panchayats with tribal sex ratio between 1000-1030 has been classified as Balanced sex ratio category, Gram Panchayats with tribal sex ratio greater than 1030 are in High sex ratio category and Gram Panchayats with less than 1000 fall in Low sex ratio category. As sex ratio figure 1000 indicates towards an equal male-female number and tribal sex ratio of Siliguri Sub-division is 1029; so here in this study the sex ratio between 1000-1030 has been considered as Balanced tribal sex ratio. According to the above parameters 10 Gram Panchayats in the study area Hatighisa (1031), Champasari (1036), Binnabari (1036), Bidhan Nagar I (1038), Matigara II (1040), Ghoshpukur (1042), Patharghata (1055), Upper Bagdogra (1058), Hetmuri (1065) and Atharakhai (1093) come under the category High tribal sex ratio. 5 Gram Panchayats Buraganj (1004), Kharibari Panishali (1011), Maniram (1015), Nakshalbari (1016) and Bidhan Nagar II (1025) has been classified as with Balanced tribal sex ratio. And the rest 7 Gram Panchayats Chathat Bansgaon (937), Lower Bagdogra (945), Gossaipur (955), Raniganj Panishali (963), Jalash Nijam Para (970), Matigara I (987) and Phanshidewa (987) are with Low tribal sex ratio. During survey it has been observed that generally where the tribal concentration is high or the tribals are still living with hard isolation from the mainstream society, the sex ratio is also high there.

Table 3.3 Sex Ratio of Tribal Population in Gram Panchayats of Siliguri Sub-division

Category	Sex Ratio	Gram Panchayats
High	>1030	Hatighisa, Champasari, Binnabari, Bidhan Nagar I, Matigara II, Ghoshpukur, Patharghata, Upper Bagdogra, Hetmuri, Atharakhai
Balanced	1000-1030	Buraganj, Kharibari Panishali, Maniram, Nakshalbari, Bidhan Nagar II
Low	<1000	Chathat Bansgaon , Lower Bagdogra, Gossaipur, Raniganj Panishali, Jalash Nijam Para, Matigara I, Phanshidewa,

Source: Compiled by the Researcher

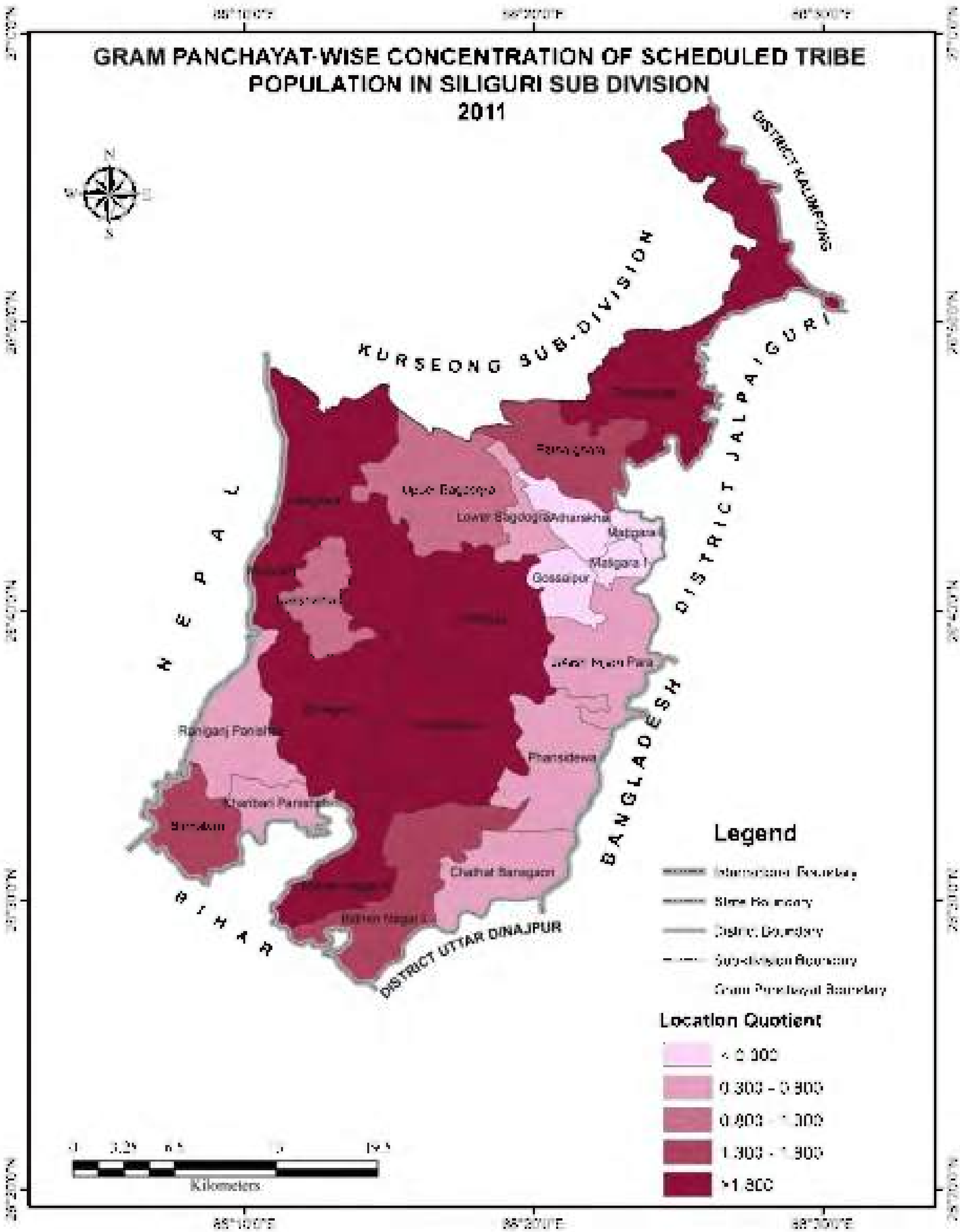
GRAM PANCHAYAT-WISE CONCENTRATION OF SCHEDULED TRIBE
POPULATION IN SILIGURI SUB DIVISION
2011
KURSEONG SUB-DIVISION
DISTRICT KALIMPONG
DISTRICT JALPAIGURI
NEPAL
BANGLADESH
BIHAR
DISTRICT UTTAR DINAJPUR
Upper Bagdogra
Lower Bagdogra
Atharakhai
Matigara I
Gossaipur
Phansidewa
Chathat Banagaon
Legend
Location Quotient
Kilometers

Fig. 3.1

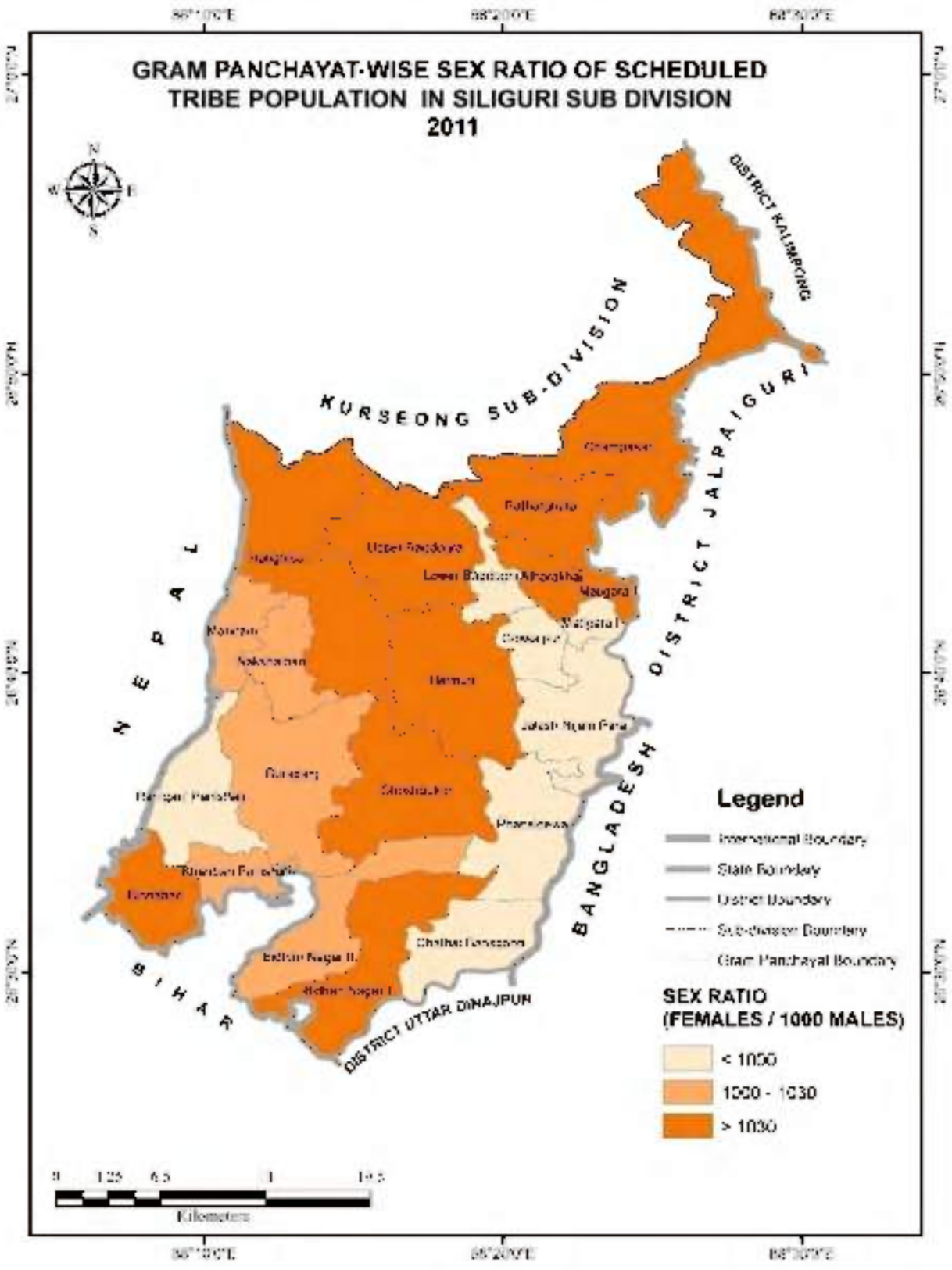
GRAM PANCHAYAT-WISE SEX RATIO OF SCHEDULED TRIBE POPULATION IN SILIGURI SUB DIVISION
2011
KURSEONG SUB-DIVISION
DISTRICT JALPAIGURI
DISTRICT KALIMPONG
NEPAL
BANGLADESH
BIHAR
DISTRICT UTTAR DINAJPUR
Legend
International Boundary
State Boundary
District Boundary
Sub-division Boundary
Gram Panchayat Boundary
SEX RATIO
(FEMALES / 1000 MALES)
< 1000
1000 - 1030
> 1030
Kilometers

Fig. 3.2

3.2.4 Rural Urban Distribution

In the study area highest concentration of tribal population is found mostly in rural areas. Only 6.36 percent of total ST population of Siliguri Sub-division lives in urban areas, which are well below of the total urban population of the Sub-division (20.88 percent). In the study area the scheduled tribes share 25.62 percent of total rural and 2.14 percent of total urban population. Table 3.4 is showing the block-wise rural urban distribution of tribal population. Among the four C. D. Blocks Phansidewa C.D. Block does not have any urban area. So, all the ST population lives in rural areas. In Matigara C.D Block 92.43 percent of ST population lives in rural areas. In Kharibari and Naxalbari C.D.Blocks the percentage of ST rural population are 99.45 percent and 89.23 percent respectively. Among the four C.D Blocks highest ST urban population is found in Naxalbari C.D Block (10.77 percent). Also Naxalbari C.D Block has the highest percentage of urban ST population (5.14 percent) to total urban population in the block. Culturally tribal people are more connected to the forest, tea garden than the modern mainstream society (Paltasigh & Paliwal, 2014). And there is no exception to the tribal people in the study area too. That is why they are more concentrated in the rural areas than in urban areas in the study area. In case of Matigara and Naxalbari C.D. Block as these are the adjacent to Siliguri MC (Part) and number of urban centers comparatively is also high in these two blocks, the study shows a small number of tribal population has been concentrated in these urban centers in search of better income opportunities.

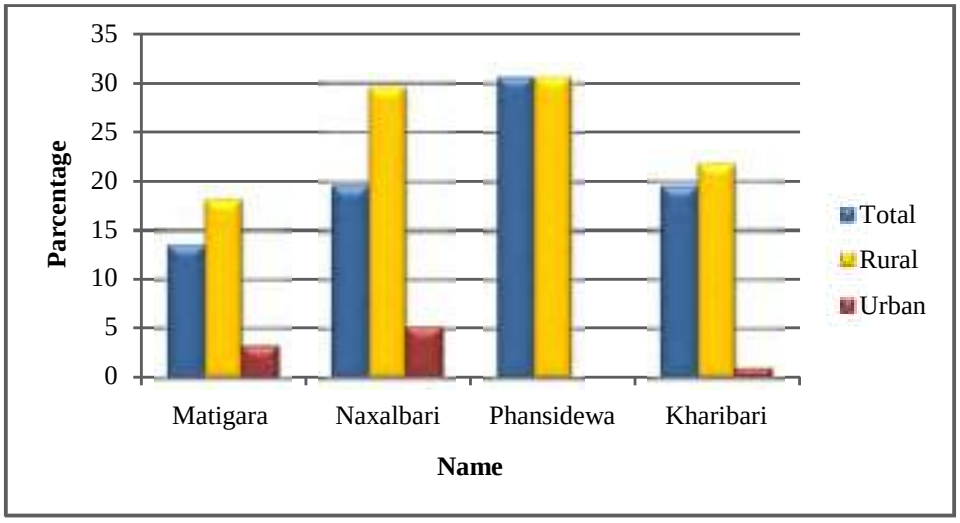

Fig. 3.3: Block-wise Rural Urban Distribution of Scheduled Tribe Population, 2011

Table 3.4 Block-wise Rural Urban Distribution of Tribal Population, 2011

Name of the Blocks	Total ST Population			Percentage Share of ST Population			Percentage of ST Population to Total Population		
	Total	Male	Female	Total	Male	Female	Total	Male	Female
Matigara	26484	12942	13542	100.00	100.00	100.00	13.42	48.87	51.13
Rural	24480	11990	12490	92.43	92.64	92.23	18.06	48.98	51.02
Urban	2004	952	1052	7.57	7.36	7.77	3.25	47.50	52.50
Naxalbari	32388	15989	16399	100.00	100.00	100.00	19.57	49.37	50.63
Rural	28901	14257	14644	89.23	89.17	89.30	29.58	49.33	50.67
Urban	3487	1732	1755	10.77	10.83	10.70	5.14	49.67	50.33
Phansidewa	62595	30744	31851	100.00	100.00	100.00	30.61	49.12	50.88
Rural	62595	30744	31851	100.00	100.00	100.00	30.61	49.12	50.88
Urban	00	00	00	0.00	0.00	0.00	0.00	0.00	0.00
Kharibari	21262	10615	10647	100.00	100.00	100.00	19.46	49.92	50.08
Rural	21146	10554	10592	99.45	99.43	99.48	21.71	49.91	50.09
Urban	116	61	55	0.55	0.57	0.52	0.98	52.59	47.41
Siliguri sub division	146432	72153	74279	100.00	100.00	100.00	15.08	49.27	50.73
Rural	137122	67545	69577	93.64	93.61	93.67	25.62	49.26	50.74
Urban	9310	4608	4702	6.36	6.39	6.33	2.14	49.50	50.50

Source: Census of India 2011

3.2.5 Age-Sex Composition

In Population studies, age distribution which is also called age composition is the proportionate numbers of persons in successive age categories in a given population. Age-Sex structure is one of the most important characteristic of population studies as most of the studies are based on age-sex structure of the population. A proper analysis of age sex composition of an area can help to understand the demographic dynamics of that area. Also it can help policy making and planning according to the need of the demographic dynamics (Boruah). Here in this study, the total scheduled tribe population has been categorized into six different age groups which are (i) Upto 6 years, (ii) 7 to 14 years, (iii) 15 to 29 years, (iv) 30 to 44 years, (v) 45 to 59 years and (vi) 60 & above (Census, 2011). The analysis of primary data (Table 3.5) regarding age composition clearly shows that the age group of 15 to 29 years is the largest and constitutes 36.18 percent of total scheduled tribe population in the study area. The age group of 60 years and above is the lowest in the study area and constitutes 5.69 percent of the total ST population. The National Youth Policy 2014 has defined the population with age group of 15 to 29 years of age as Youth Population of the country (NYP, 2014). The Govt. of India has been classified the population

with age group of 60 & above as Senior Citizen or Elderly Population of the country. So, it can be said that in the study area the scheduled tribe population is very much young. Primary data shows concentration of this youth age group is higher in urban areas than that in the rural areas. In urban areas out of total ST population 42.51 percent belongs to this youth age group. In rural the percentage is 35.45 percent. The population of 0 to 14 years of age group is also very significant because it is the main supplier of school going population and the upcoming youth. The percentage share for this age group is 21.15 percent. In rural 22.47 percent and in urban 8.71 percent of total ST population belong to this age group. Through field survey it has been revealed that in urban areas concentration of youth male ST population is higher than youth female ST population. It can also be seen that the percentage share of 15-29 years of age group is abnormally increases from the percentage share of 0-14 years of age group in urban areas. The probable reason behind this increased percentage share is migration of ST population, mainly male ST population, in search of better economic opportunities in urban areas. There is significant difference between percentage share of 0 to 6 years of age group population in rural (9.92 percent) and urban (5.26 percent) areas. This is mainly due to better consciousness of urban ST population regarding family planning and economic stability than that of the rural ST population.

Table 3.5 Rural Urban Age-Sex Composition of Scheduled Tribe Population

Age group (In years)	Rural			Urban			Total		
	Total	Male	Female	Total	Male	Female	Total	Male	Female
Upto 6	9.92	9.45	10.40	5.26	4.65	5.93	9.44	8.93	9.95
7-14	12.55	13.19	11.91	4.45	5.43	3.39	11.71	12.35	11.05
15-29	35.45	34.33	36.58	42.51	44.19	40.68	36.18	35.39	36.99
30-44	23.27	22.26	24.29	19.84	15.50	24.58	22.91	21.54	24.32
45-59	12.83	13.94	11.72	24.70	27.13	22.03	14.07	15.36	12.76
60 & above	5.97	6.83	5.10	3.24	3.10	3.39	5.69	6.43	4.93

Source: Field Survey 2019-20

Table 3.6 is showing the Gram Panchayat-wise age-sex composition in different blocks in Siliguri Sub-division. Out of total ST Population in Phansidewa C.D. Block, 12.04 percent belongs to 0 to 6 years of age group, which is highest among the four C.D. Blocks for same age group. Likewise if consider the age group of 0 to 14 years of age, then Kharibari C.D Block (27.12 percent) tops the list, followed by Phansidewa C.D. Block (25.77 percent). The primary

data shows in Matigara C.D. Block out of total ST population the share percentage of youth (36.71 percent) is highest among all the four C.D Blocks; followed by Naxalbari C.D Block (36.49 percent). So, as a whole considering below 30 years of age as the young population, Phansidewa C.D Block has the highest share of young population percentage i.e. 61.06 percent and Karibari C.D. Block (60.14 percent) follows the list. The highest share percentage of 60 years and above age group population can be found in Naxalbari C.D. Block (7.66 percent) and the lowest of the same is in Kharibari C.D. Block (4.72 percent). So, the analysis on age sex composition describes the tribal population in the study area is mainly dominated by the young age population and the main demographic dynamics can be determined by this population only.

Table 3.6 Gram Panchayat-wise Age-Sex Composition of Scheduled Tribe Population

Name of the Block/GP	0-6			7-14			15-29		
	Total	**Male**	**Female**	**Total**	**Male**	**Female**	**Total**	**Male**	**Female**
Matigara	8.92	8.37	9.50	8.72	9.96	7.44	36.71	35.06	38.43
Champasari	7.66	6.56	8.73	8.47	9.84	7.14	36.69	33.61	39.68
Matigara I	12.50	13.64	11.11	2.50	0.00	5.56	37.50	31.82	44.44
Matigara II	11.11	11.11	11.11	11.11	11.11	11.11	22.22	22.22	22.22
Atharokhai	10.71	11.76	9.09	3.57	0.00	9.09	46.43	58.82	27.27
Patharghata	9.43	8.64	10.26	11.32	14.81	7.69	36.48	34.57	38.46
Naxalbari	6.65	7.17	6.12	11.90	11.95	11.84	36.49	36.25	36.73
Naxalbari	5.95	4.88	6.98	8.33	9.76	6.98	41.67	43.90	39.53
Upper Bagdogra	6.43	6.06	6.76	15.00	16.67	13.51	35.00	30.30	39.19
Hatighisa	8.99	11.11	6.82	12.36	8.89	15.91	30.34	31.11	29.55
Gossaipur	1.82	3.45	0.00	20.00	27.59	11.54	40.00	34.48	46.15
Lower Bagdogra	10.53	17.39	0.00	7.89	8.70	6.67	21.05	21.74	20.00
Maniram	6.67	4.26	9.30	6.67	2.13	11.63	44.44	51.06	37.21
Phansidewa	12.04	11.80	12.29	13.73	14.04	13.41	35.29	33.15	37.43
Hetmuri	12.27	9.91	14.68	10.91	11.71	10.09	36.36	34.23	38.53
Bidhan Nagar I	8.85	9.43	8.33	20.35	22.64	18.33	30.97	26.42	35.00
Bidhan Nagar II	12.67	11.84	13.51	12.00	15.79	8.11	34.67	30.26	39.19
Chathat Bansgao	10.29	13.89	6.25	14.71	8.33	21.88	36.76	38.89	34.38
Ghoshpukur	18.42	18.52	18.33	12.28	7.41	16.67	36.84	38.89	35.00
Jalash Nijamtara	4.76	8.33	0.00	14.29	16.67	11.11	38.10	33.33	44.44
Phasidewa	3.57	7.14	0.00	21.43	28.57	14.29	35.71	28.57	42.86
Kharibari	11.32	9.48	13.15	15.80	17.06	14.55	33.02	33.18	32.86
Binnabari	15.96	13.95	17.65	14.89	18.60	11.76	29.79	30.23	29.41
Buraganj	9.38	10.77	7.94	21.88	20.00	23.81	27.34	29.23	25.40
Kharibari Panisali	10.45	6.90	13.16	16.42	17.24	15.79	34.33	31.03	36.84
Raniganj Panisali	10.37	6.76	14.75	10.37	13.51	6.56	40.00	39.19	40.98

Source: Field Survey 2019-20

Table 3.6 Continued.Gram Panchayat-wise Age-Sex Composition of Scheduled Tribe Population

Name of the Block/GP	30-44			45-59			60 & above		
	Total	Male	Female	Total	Male	Female	Total	Male	Female
Matigara	24.95	22.31	27.69	14.20	16.33	11.98	6.49	7.97	4.96
Champasari	24.60	22.13	26.98	15.73	18.85	12.70	6.85	9.02	4.76
Matigara I	22.50	27.27	16.67	17.50	18.18	16.67	7.50	9.09	5.56
Matigara II	38.89	44.44	33.33	11.11	0.00	22.22	5.56	11.11	0.00
Atharokhai	10.71	0.00	27.27	21.43	23.53	18.18	7.14	5.88	9.09
Patharghata	27.04	23.46	30.77	10.06	12.35	7.69	5.66	6.17	5.13
Naxalbari	21.57	20.32	22.86	15.73	17.13	14.29	7.66	7.17	8.16
Naxalbari	15.48	9.76	20.93	22.62	26.83	18.60	5.95	4.88	6.98
Upper Bagdogra	20.00	19.70	20.27	15.71	18.18	13.51	7.86	9.09	6.76
Hatighisa	32.58	33.33	31.82	7.87	8.89	6.82	7.87	6.67	9.09
Gossaipur	16.36	17.24	15.38	14.55	10.34	19.23	7.27	6.90	7.69
Lower Bagdogra	36.84	34.78	40.00	10.53	4.35	20.00	13.16	13.04	13.33
Maniram	15.56	12.77	18.60	20.00	25.53	13.95	6.67	4.26	9.30
Phansidewa	22.69	24.16	21.23	11.06	10.11	12.01	5.18	6.74	3.63
Hetmuri	25.00	27.93	22.02	10.91	10.81	11.01	4.55	5.41	3.67
Bidhan Nagar I	30.09	30.19	30.00	5.31	5.66	5.00	4.42	5.66	3.33
Bidhan Nagar II	20.67	21.05	20.27	15.33	14.47	16.22	4.67	6.58	2.70
Chathat Bansgao	20.59	19.44	21.88	8.82	8.33	9.38	8.82	11.11	6.25
Ghoshpukur	19.30	22.22	16.67	9.65	7.41	11.67	3.51	5.56	1.67
Jalash Nijamtara	14.29	16.67	11.11	19.05	8.33	33.33	9.52	16.67	0.00
Phasidewa	10.71	14.29	7.14	17.86	14.29	21.43	10.71	7.14	14.29
Kharibari	24.29	21.33	27.23	10.85	13.74	7.98	4.72	5.21	4.23
Binnabari	21.28	18.60	23.53	11.70	11.63	11.76	6.38	6.98	5.88
Buraganj	28.13	24.62	31.75	10.16	12.31	7.94	3.13	3.08	3.17
Kharibari Panisali	17.91	13.79	21.05	13.43	20.69	7.89	7.46	10.34	5.26
Raniganj Panisali	25.93	22.97	29.51	9.63	13.51	4.92	3.70	4.05	3.28

Source: Filed Survey 2019-20

3.2.6 Marital status

Marital status describes a person's relationship with significant other. Married, Unmarried, Widow/ Widower and Separated; these are the four categories in this section (Census, 2011). Uniformity has been found in terms of percentage share of married and unmarried ST population in both rural and urban areas. In rural areas 50.31 percent of ST population is married and in urban areas the percentage is 52.23 percent. Share percentage of unmarried in rural areas is 43.30

percent and in urban the percentage is 42.89 percent. The widow and widower share percentage is 4.51 percent and 1.81 percent respectively in the study area. Legal separation is very rare among tribals. In most of the cases the separation is mutual kind of separation. Though mutual separation is also rare among tribals. Only 0.13 percent of total ST population comes under this mutual separation. In rural, the separated tribal population is 0.09 percent and in urban it is 0.40 percent.

Table 3.7 Marital Status of Tribal Population

Marital status	Rural			Urban			Total		
	Total	Male	Female	Total	Male	Female	Total	Male	Female
Married	50.31	50.61	50.00	52.23	49.61	55.08	50.51	50.50	50.51
Unmarried	43.30	45.46	41.12	42.89	48.06	38.05	43.05	45.74	40.31
Widow	4.42	NA	8.88	3.26	NA	6.02	4.51	NA	9.10
Widower	1.88	3.74	NA	1.21	2.33	NA	1.81	3.59	NA
Separated	0.09	0.19	0.00	0.40	0.00	0.85	0.13	0.17	0.09

Source: Field Survey 2019-20

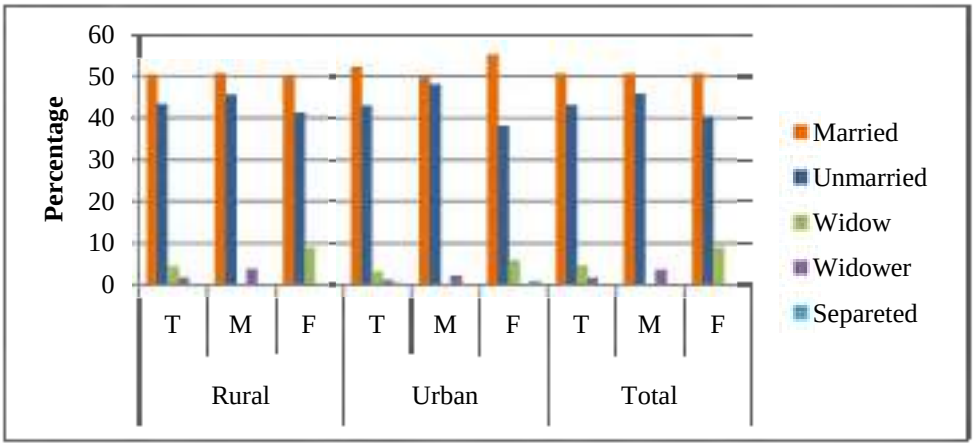

Fig. 3.4: Rural Urban Distribution of Marital Status of Scheduled Tribe Population

In the all four blocks married percentage is higher than the unmarried. Even in most of the Gram Panchayats married population is higher than the unmarried population. It can be seen that among 22 Gram Panchayats in 19 GP female unmarried percentage is lower than the married percentage. In most of the Gram Panchayats percentage of widow is higher than the widower. This is due to the high mortality rate among tribal male compared to tribal female. Even some of the widow is early age widow.

Table 3.8 Block-wise Marital Status of Tribal Population

Name of the Block	Married			Unmarried			Widow/Widower			Separated		
	T	M	F	T	M	F	T	M	F	T	M	F
Matigara	52.54	51.00	54.13	39.96	43.43	36.36	7.3	5.18	9.5	0.2	0.4	0
Naxalbari	50.6	50.6	50.61	43.75	47.81	39.59	5.65	1.59	9.8	0	0	0
Phansidewa	48.46	49.72	47.21	44.68	46.07	43.3	6.72	3.93	9.5	0.14	0.28	0
Kharibari	50.47	51.66	49.3	44.34	44.08	44.6	5.19	4.27	6.1	0	0	0

Source: Field Survey 2019-20

3.2.7 Female Age of Marriage

Female age of marriage is a key indicator of a healthy and sustainable society. For different nations the minimum age bar of marriage is different. In India the minimum age of marriage for female has been set to 18 years. Marriage before 18 years is to be considered as Child Marriage for female. In India, child marriage is a major concern for females. Tribal societies are not exception to that. In the study area the primary data (Table 3.9) reveals 38.22 percent of total married ST female population is a victim of child marriage. This is a big concern for a particular society. In recent time as per report published Supreme Court of India has agreed to examine a transfer petition pending before the Rajasthan High Court regarding fixing of uniform minimum marriage age in India indiscriminately of gender (Dutta, 2021). On the occasion of 74th Independence Day speech, Prime Minister of India announced that a committee had set up by the central government under Ministry for Women and Child Development to examine the matter regarding lowering the maternal mortality ratio and improvement of women nutritional levels and this committee is also considering increment of minimum female marriage age in India (Vishwanath & Roy, 2020). Primary data reveals that girl child marriage is more common in rural areas (39.51 percent) than that of the urban (27.69 percent). A lot more aware and conscious urban society than rural is playing the main role to curtail the child marriage in the urban areas.

Table 3.9 Female Age of Marriage

Age of Marriage	Rural	Urban	Total
<less than 18	39.51	27.69	38.22
18-21	37.43	41.54	37.88
22-25	16.07	21.54	16.67
26-29	4.91	6.15	5.05
>29	2.08	3.08	2.19

Source: Field Survey 2019-20

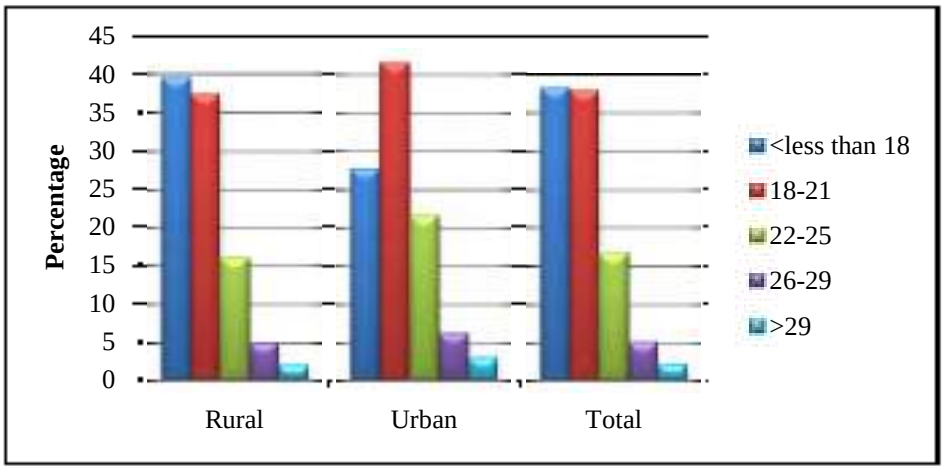

Fig. 3.5: Rural Urban Distribution of Female Age of Marriage

Table 3.10 shows highest girl child marriage percentage is found in Kharibari C.D Block (44.76 percent) and followed by Phansidewa C.D. Block (43.79 percent). The lowest of the same can be found in Matigara C.D. Block (33.59 percent) which is very high in itself. More than half of married ST women in Binnabari GP (59.26 percent) under Kharibari block and Ghoshpulur GP (52.00 percent) under Pansidewa block is a victim of girl child marriage. This is a major concern for those Gram Panchayats. Among all these negativities Pansidewa GP shows some ray of hope of a better society. There percentage of girl child marriage has been recorded nil during field survey.

Table 3.10 Gram Panchayat-wise Female Age of Marriage

Name of the Block/GP	Age of Marriage				
	<less than 18	18-21	22-25	26-29	>29
Matigara	33.59	38.93	18.32	5.34	3.82
Champasari	29.41	47.06	14.71	5.88	2.94
Matigara I	16.67	41.67	25.00	8.33	8.33
Matigara II	47.00	19.67	33.33	0.00	0.00
Atharokhai	0.00	66.67	16.67	0.00	16.67
Patharghata	38.46	33.33	20.51	5.13	2.56
Naxalbari	35.48	37.90	16.94	6.45	3.23
Naxalbari	26.09	65.22	4.35	4.35	0.00
Upper Bagdogra	22.58	51.61	16.13	3.23	6.45
Hatighisa	34.78	39.13	17.39	8.70	0.00
Gossaipur	27.27	18.18	27.27	27.27	0.00
Lower Bagdogra	18.18	45.45	27.27	0.00	9.09
Maniram	36.00	36.00	20.00	4.00	4.00

Name of the Block/GP	Age of Marriage				
	<less than 18	18-21	22-25	26-29	>29
Phansidewa	43.79	37.28	14.20	4.14	0.59
Hetmuri	42.86	38.78	14.29	2.04	2.04
Bidhan Nagar I	46.43	35.71	17.86	0.00	0.00
Bidhan Nagar II	44.74	39.47	15.79	0.00	0.00
Chathat Bansgao	43.75	25.00	18.75	12.50	0.00
Ghoshpukur	52.00	48.00	0.00	0.00	0.00
Jalash Nijamtara	42.86	28.57	14.29	14.29	0.00
Phasidewa	0.00	33.33	33.33	33.33	0.00
Kharibari	44.76	35.24	15.24	3.81	0.95
Binnabari	59.26	29.63	7.41	0.00	3.70
Buraganj	33.33	50.00	16.67	0.00	0.00
Kharibari Panisali	38.89	16.67	27.78	16.67	0.00
Raniganj Panisali	46.67	36.67	13.33	3.33	0.00

Source: Field Survey 2019-20

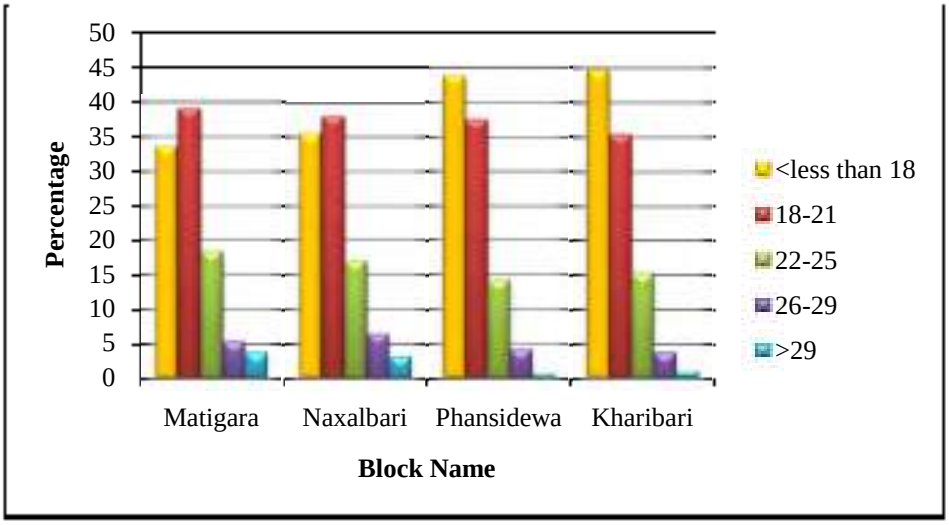

Fig 3.6: Block-wise Distribution of Female Age of Marriage

3.2.8 Literacy Rate

Literacy rate is a key indicator of socio-economic progression of a society. A society with high literacy rate is a better respondent to social, cultural, political and economic events. It has direct impact on per capita income, level of living and ultimately life expectancy (Khan 2004 Literacy plays the most valuable role to remove ignorance and increase awareness among the tribal people for their rights (Raja & Krishnaveni, 2019) Historically despite of different government programs initiated time to time, the literacy percentage of scheduled tribes in India is far below

than the national average. In study area the tribal literacy rate is 60.09 percent in which literacy rate for tribal male is 65.17 percent and tribal female is 54.86 percent (Table 3.11). Clearly this shows female tribals are more neglected than the male tribals in terms of literacy. In study area, the primary data also reveals that the tribal literacy rate in rural areas (58.56 percent) is far below than that of the urban areas (72.65 percent). Both the cases follow the national trend. Tribal male literacy rate in rural is 63.53 percent and in urban it is 78.05 percent. The tribal female literacy rate in rural is 53.48 percent and in urban it is 66.67 percent. The poor economic condition, transportation barrier, early age household work, lack of awareness of the parents and health issues are the main reasons behind this disparity between rural-urban literacy rate among tribals in the study area

Table 3.11 Rural Urban Distribution of Tribal Literacy Rate

Literacy Rate	Rural	Urban	Total
Male	63.53	78.05	65.17
Female	53.48	66.67	54.86
Total	58.56	72.65	60.09

Source: Field Survey 2019-20

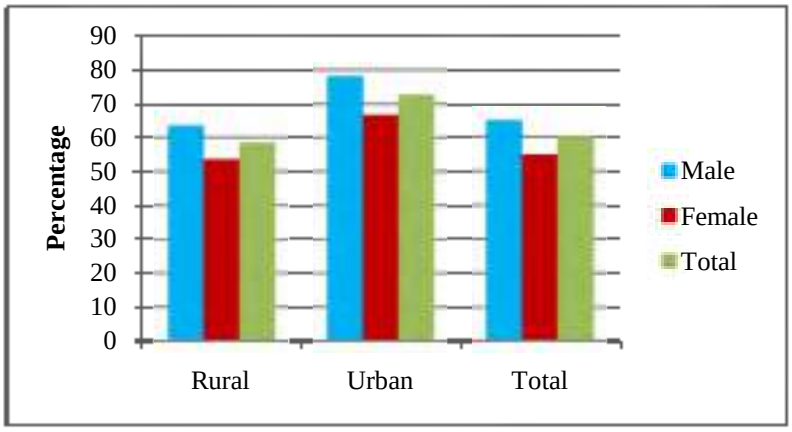

Fig. 3.7: Rural Urban Distribution of Tribal Literacy Rate

Table 3.12 shows block and Gram Panchayat-wise rural tribal literacy rate in study area. This shows block-wise highest literacy rate is found in Naxalbari C.D.Block (63.07 percent), followed by Khribari C.D. Block 59.04 percent and the lowest literacy rate is in Phansidewa C.D. Block i.e 54.78 percent.Block-wise highest rural tribal male literacy rate is also in Naxalbari C.D. Block (67.81 percent) and followed by Matigara C.D. Block (66.09 percent).Likewise the Sub-division, the rural tribal female literacy rate is lower than that of the male literacy rate in every block. Naxalbari C.D.Block has the highest female literacy percentage (58.26 percent) with Kharibari C.D. Block (55.68 percent) in second position. The lowest both male and female rural

tribal literacy rate is found in Phansidewa C.D. Block i.e 59.24 percent and 50.32 percent respectively. Gram Panchayat-wise highest tribal literacy rate can be found in Matigara I GP (74.29 percent) and for male the same can be found also in Matigara I GP, 84.21 percent. The primary data shows Chathat Bansgao GP under Phansidewa C.D. Block is the most fallen behind GP among all the Gram Panchayats in study area in terms of literacy rate. Here all the parameters i.e tribal literacy rate (45.90 percent), male (51.61 percent) and female (40.00 percent) tribal literacy rate, are lowest among all the GPs'.

Table 3.12 Gram Panchayat-wise Tribal Literacy Rate

Name of the Block/GP	Literacy Rate		
	Total	Male	Female
Matigara	58.80	66.09	51.14
Champasari	57.21	62.28	52.17
Matigara I	74.29	84.21	62.50
Matigara II	68.75	75.00	62.50
Atharokhai	64.00	73.33	50.00
Patharghata	55.56	64.86	45.71
Naxalbari	63.07	67.81	58.26
Naxalbari	65.82	71.79	60.00
Upper Bagdogra	66.41	67.74	65.22
Hatighisa	61.73	67.50	56.10
Gossaipur	51.85	57.14	46.15
Lower Bagdogra	58.82	63.16	53.33
Maniram	65.48	73.33	56.41
Phansidewa	54.78	59.24	50.32
Hetmuri	55.96	57.00	54.84
Bidhan Nagar I	57.28	66.67	49.09
Bidhan Nagar II	51.15	53.73	48.44
Chathat Bansgao	45.90	51.61	40.00
Ghoshpukur	60.22	68.18	53.06
Jalash Nijamtara	50.00	54.55	44.44
Phasidewa	59.26	69.23	50.00
Kharibari	59.04	62.30	55.68
Binnabari	58.23	64.86	52.38
Buraganj	59.48	63.79	55.17
Kharibari Panisali	66.67	70.37	63.64
Raniganj Panisali	55.37	56.52	53.85

Source: Field Survey 2019-20

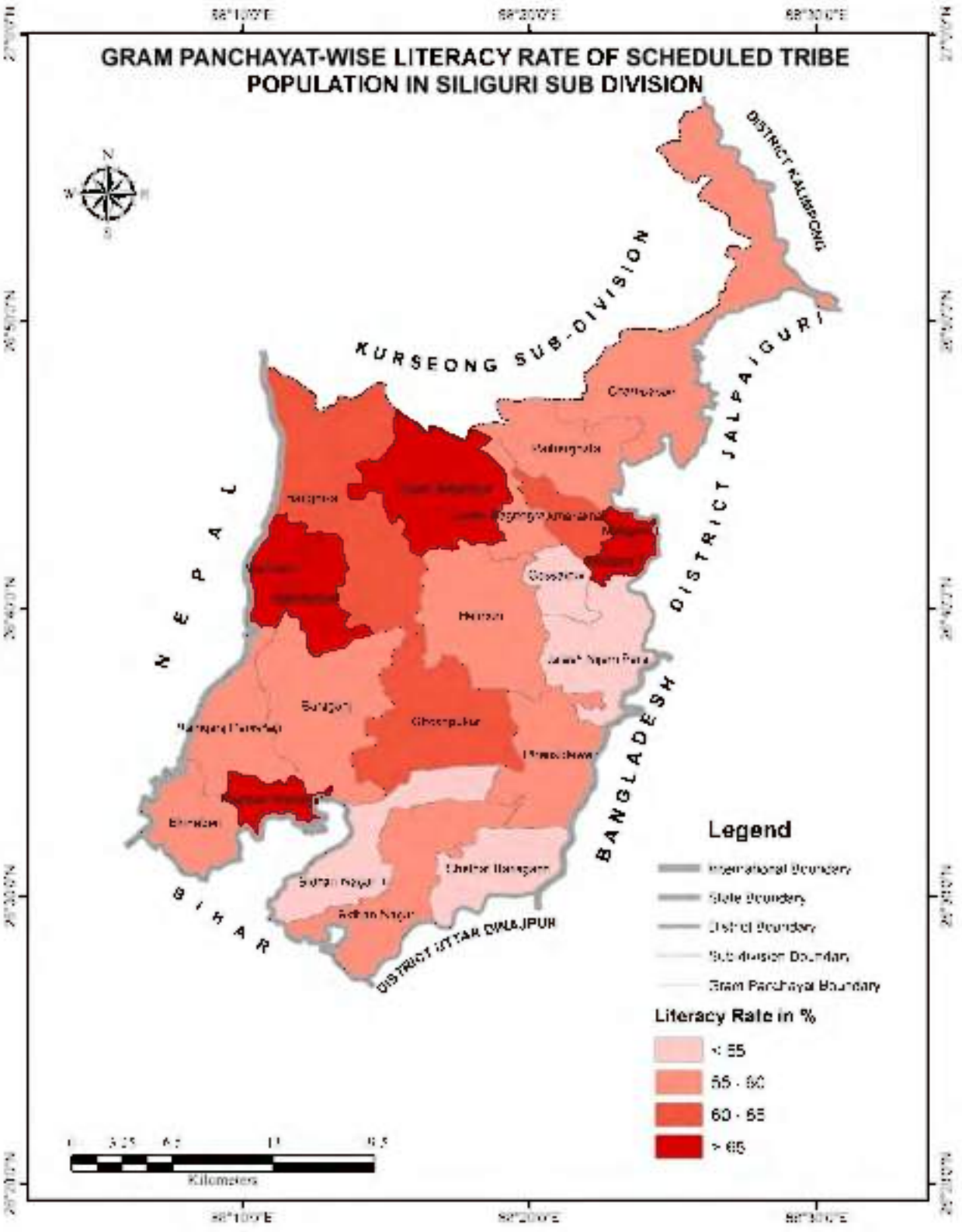
GRAM PANCHAYAT-WISE LITERACY RATE OF SCHEDULED TRIBE POPULATION IN SILIGURI SUB DIVISION
KURSEONG SUB-DIVISION
DISTRICT KALIMPONG
DISTRICT JALPAIGURI
NEPAL
BANGLADESH
BIHAR
DISTRICT UTTAR DINAJPUR
Legend
Literacy Rate in %
< 55
55 - 60
60 - 65
> 65
Kilometers

Fig 3.8

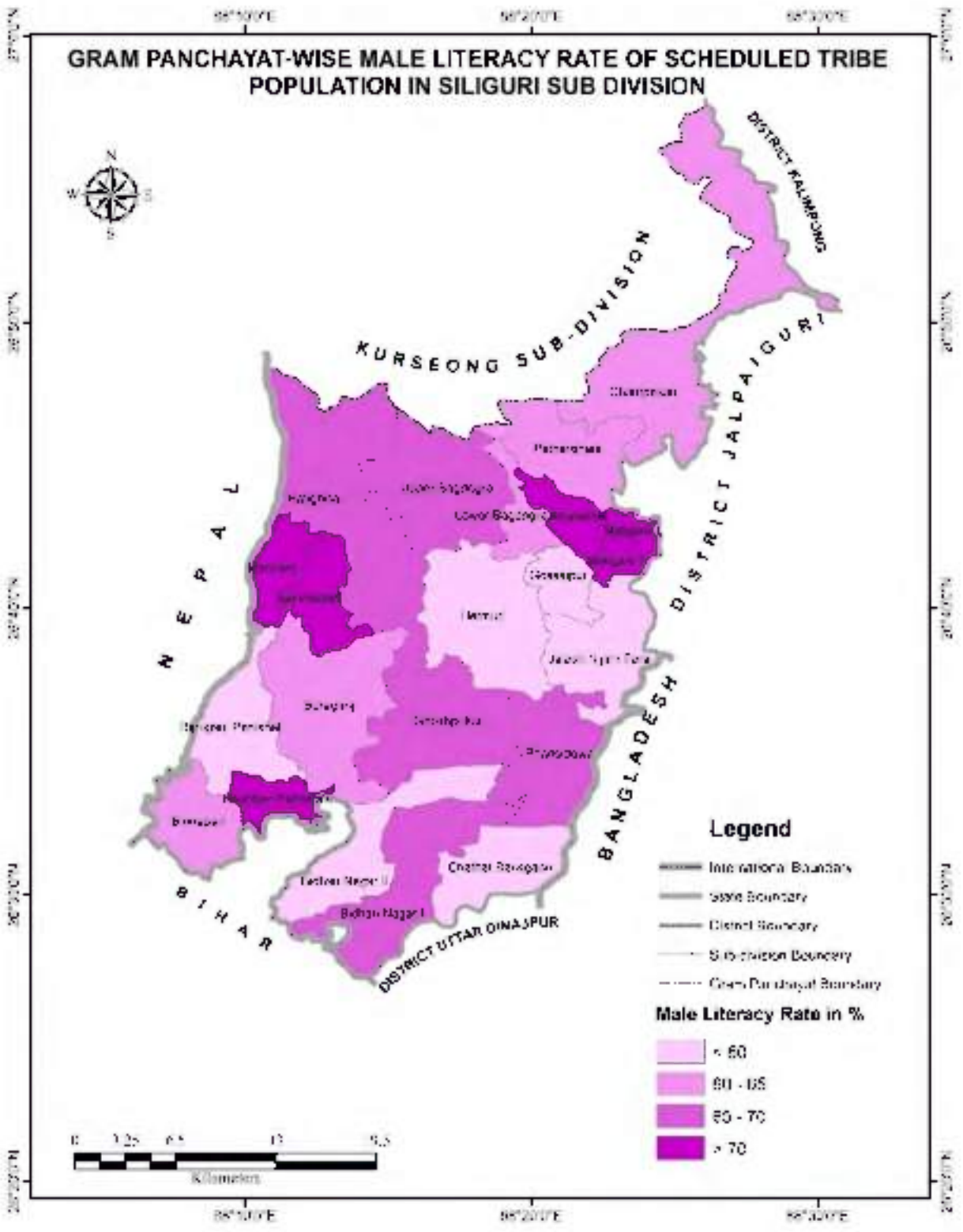
GRAM PANCHAYAT-WISE MALE LITERACY RATE OF SCHEDULED TRIBE POPULATION IN SILIGURI SUB DIVISION
KURSEONG SUB-DIVISION
DISTRICT KALIMPONG
DISTRICT JALPAIGURI
NEPAL
BANGLADESH
BIHAR
DISTRICT UTTAR DINAJPUR
Legend
Male Literacy Rate in %
< 60
60 - 65
65 - 70
> 70
Kilometers

Fig 3.9

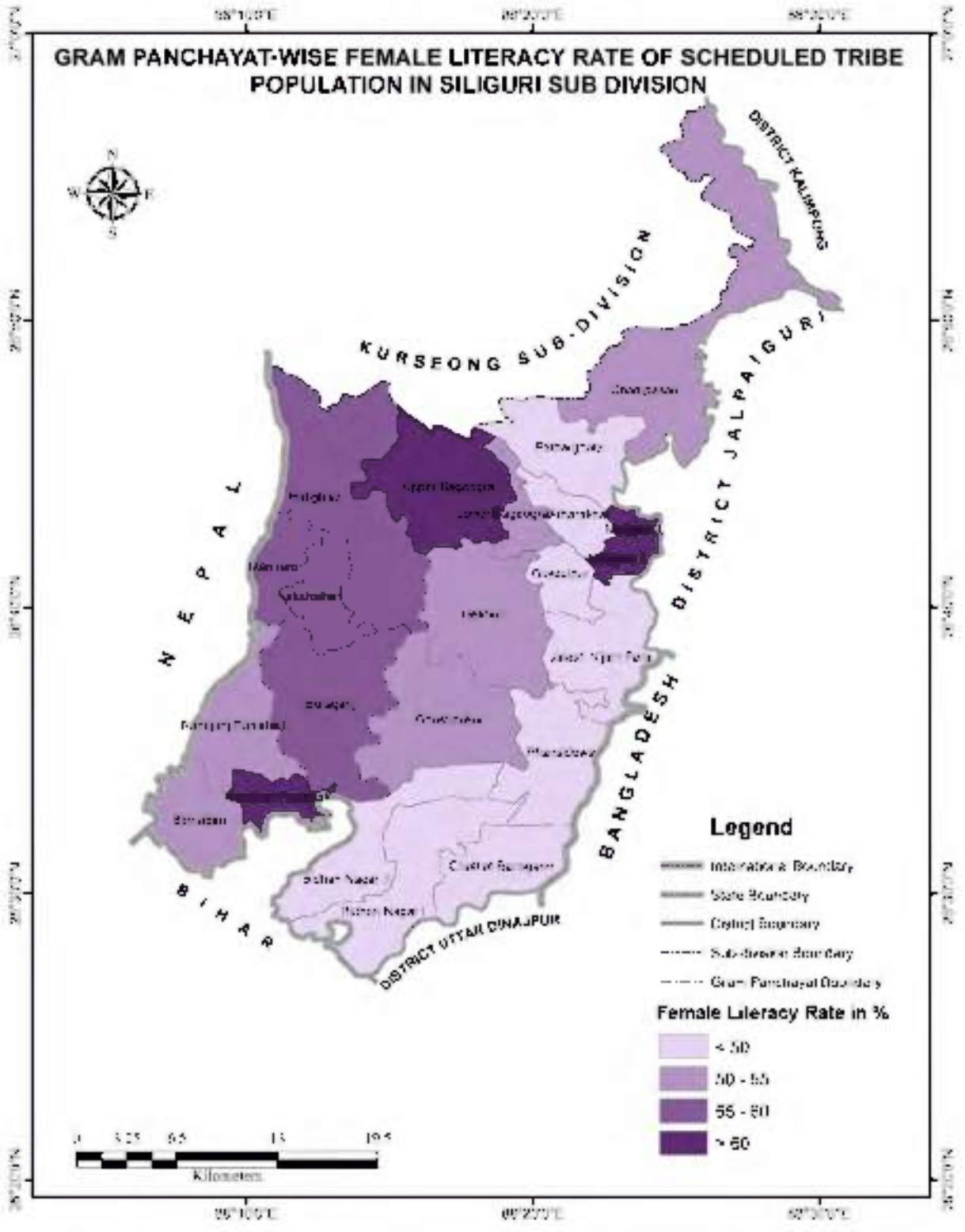
GRAM PANCHAYAT-WISE FEMALE LITERACY RATE OF SCHEDULED TRIBE POPULATION IN SILIGURI SUB DIVISION
KURSEONG SUB-DIVISION
DISTRICT KALIMPONG
DISTRICT JALPAIGURI
NEPAL
BANGLADESH
BIHAR
DISTRICT UTTAR DINAJPUR
Legend
Female Literacy Rate in %
< 50
50 - 55
55 - 60
> 60
Kilometers

Fig 3.10

In the above two points (3.2.7 and 3.2.8) status of age of marriage and literacy rate of tribal women has been discussed. And it is very obvious that there is a relationship among age of marriage and literacy of tribal women in the study area. To find out the relation the hypothesis as mentioned in the introduction chapter "***Age of marriage is related to the literacy of tribal woman"*** is tested here.

Hypothesis: ***Age of marriage is related to the literacy of tribal woman*****.**

Statistical Test:

In present case the variable in question (age of marriage of tribal woman) is a metric variable while the independent variable (educational level) is a categorical variable with two categories – illiterate and literate and data has been collected independently i.e., same person does not appear twice within or between two the groups. So, to verify the present hypothesis the most powerful statistical test is the Two Sample Independent t-Test but here Mann-Whitney *U* test, the non-parametric counter part of the two samples t-test, has been used since the sample data violets the assumption of normality which is required for application of t-Test.

Mann-Whitney *U* test is the rank based non-parametric test which is used to determine whether two independent samples have been drawn from the same population. The Null and Alternative Hypothesis for this test, in present context, is defined as follows:

$$H_0: \mu_1 = \mu_2$$

$$H_a: \mu_1 \neq \mu_2$$

Where, μ is the mean age of marriage of tribal woman and subscript 1 and 2 refer to the educational category i.e., one is illiterate while other is literate.

The test statistic is calculated using following formula:

$$U = n_1.n_2 + \frac{n_1(n_1+1)}{2} - R_1,$$

Where $n_1$and n_2 are the sample size and $R_1$is the sum of rank assigned to the values of the first sample. The first sample, here, refers to that sample for which the sum of rank is greater. If the null hypothesis becomes true, the *U* statistic follows the sampling distribution with following mean and standard deviation (standard error):

$$Mean(\mu_U) = \frac{n_1.n_2}{2}\text{, Standard Deviation } (\sigma_U) = \sqrt{\frac{n_1.n_2(n_1+n_2+1)}{12}}$$

When the sample size for each group is more than eight, the sampling distribution of *U* approximately follows the normal distribution and the limit of acceptance or rejection region is determined accordingly at a given significance level.

The Result of Mann-Whitney *U* Test

For verifying the research hypothesis, the Mann-Whitney *U* Test was applied with 5 percent significance level ($\alpha = 0.05$) using z approximation of Sampling Distribution of Mann-Whitney *U* statistic since the sample size of each group (number of literate women = 291 and that of illiterate one = 303) is more than 8 in the present case. It is observed that sum of rank of literate women (R_1 = 97198) is more than that of illiterate women (R_2 = 79517) in the tribal community which provides evidence that mean age of marriage of tribal woman for literate group (Observed mean for literate group = 19.90) is more than that of illiterate group (Observed mean for illiterate group = 18.44) and the difference between these two is found significant at 5 percent significance level ($p < 0.05$). So, it can be concluded that there are enough evidences to say that the mean age of marriage of literate woman of tribal community is different from the mean age of marriage of illiterate tribal woman.

Table 3.13 Descriptive Statistics of the Variable Age of Marriage of Tribal Women

	Education Level		Statistic
Age of marriage of tribal woman	**Illiterate**	Mean	18.44
		Std. Deviation	3.878
	Literate	Mean	19.90
		Std. Deviation	3.744

Source: Computed by the researcher using SPSS v. 23 based on primary data.

Table 3.14 The Ranks Assigned to the Data Point for Performing Mann-Whitney U Test

Ranks				
	Education Level	**N**	**Mean Rank**	**Sum of Ranks**
Age of Marriage of Tribal Woman	Illiterate	303	262.43	79517.00
	Literate	291	334.01	97198.00
	Total	594		

Source Computed by the researcher using SPSS v. 23 based on primary data.

Table: 3.15 The Result of Mann-Whitney U Test

Test Statistics[a]	
	Age of Marriage
Mann-Whitney U	33461.000
Asymp. Sig. (2-tailed)	.000
a. Grouping Variable: Education Level	

Source: Computed by the researcher using SPSS v. 23 based on primary data.

One of the greatest boons of education is that an educated person is always a better respondent to social problems. With higher level of education a person achieves higher level of capabilities to response the problems. In that way it is obvious that a literate person will be a better respondent to social problems than an illiterate person. In our country 18 years is the legal age of marriage for females. Marriage before the legal age is responsible for the negative impact on overall development of females; whether it is related to their health, education or emotion. So it is a great social decease and a curse towards the social status development of women as well the whole society. Being the most primitive community in the study area it is inevitable that the child marriage will play a great hindrance towards the development of tribal women. Only through proper education awareness can be developed against the child marriage. In the study area the statistics shows (Table 3.16) 48.51 percent illiterate tribal woman is a victim of child marriage. And with literate tribal woman this percentage comes down to 27.12 percent. This shows literacy is delaying the age of marriage of tribal females. Engagement in schools refrains the parents to get the girl married at early age. Free education and govt. initiatives like mid day meal in schools up to a certain level has a strong negative impact on child marriage.

Table 3.16 Relationship between Literacy and Female Age of Marriage

Literacy Status	**Age of Marriage**	
	Less than 18 Years	**18 Years and Above**
Illiterate	48.51	51.49
Literate	27.12	72.88

Source: Field Survey 2019-20

3.2.9 Head of the Family

Most of the ST households in study area are headed by male heads. Almost 82.08 percent (Table 3.17) of total ST households are under male headship. In both the rural and urban areas the scenario is almost same. Both the areas are dominated by male headship. Only in Binnabari GP

(35.29 percent) under Kharibari C.D. Block and Ghoshpukur GP (31.82 percent) under Phansidewa C.D. Block female headship households can be found at a handsome rate. In other cases maximum female headship households are those where the female head is widow or separated.

Table 3.17 Rural-Urban Head of the Family Distribution

Headship	Rural	Urban	Total
Male Head	81.78	84.48	82.08
Female Head	18.22	15.52	17.92

Source: Field Survey 2019-20

Table 3.18 Block-wise Head of the Family Distribution

Name of the Block	Male Head	Female Head
Matigara	82.17	17.83
Naxalbari	84.76	15.24
Phansidewa	77.7	22.3
Kharibari	84.44	15.56

Source: Field Survey 2019-20

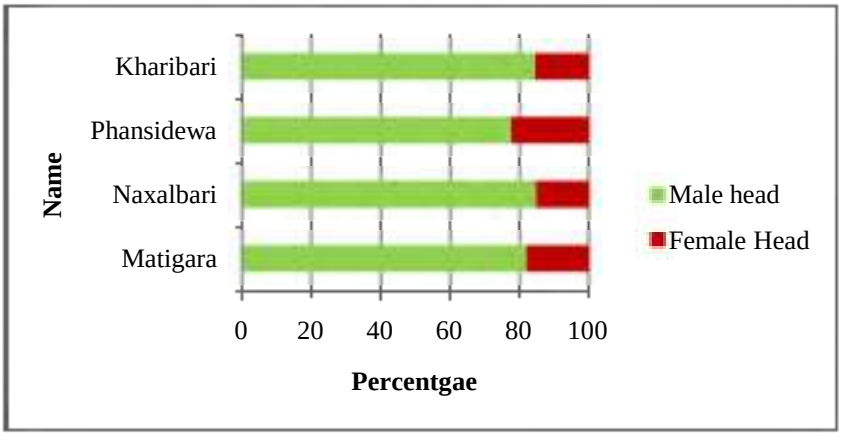

Fig. 3.11: Block-wise Head of the Family Distribution

3.2.10 Ownership of House

A large number of portions of the study area come under tea garden sector and a huge portion of tribal population concentrates in these tea garden areas. In tea garden areas ownership of land is a very complicated issue. That's why only the 46.79 percent of total ST households have their own houses in Siliguri Sub-division (Table 3.19). In rural areas the percentage is 45.76 percent and in urban it is 55.17 percent. A minor 6.04 percent ST households live in rented houses and 47.17 percent of total ST households live in houses where the status of ownership of the houses

are neither own nor rented. Reason behind this is in tea gardens the houses are provided by the employer to the labours. As almost all the tea gardens are comes under rural area, the percentage of ownership status 'Neither Own nor Rented' is very high in rural areas (49.36 percent).

Block-wise highest own ownership of households can be found in Naxalbari C.D. Block (62.86 percent) and lowest is in Phansidewa C.D. Block (39.86 percent) (Table 3.20). The scenario turns exactly opposite when it comes about the percentage of Neither Own nor Rented ownership category. Phansidewa C.D. Block (58.11 percent) tops the list in this category and Naxalbari C.D. Block (28.57 percent) stands last.

Table 3.19 Rural Urban Distribution of Ownership of Houses of Scheduled Tribe Population

Ownership	Rural	Urban	Total
Own	45.76	55.17	46.79
Rented	4.87	15.52	6.04
Neither Own nor Rented	49.36	29.31	47.17

Source: Field Survey 2019-20

Table 3.20 Block-wise Ownership of Houses

Name of the Block	Own	Rented	Neither own nor rented
Matigara	41.09	3.10	55.81
Naxalbari	62.86	8.57	28.57
Phansidewa	39.86	2.03	58.11
Kharibari	41.11	7.78	50.00

Source: Field Survey 2019-20

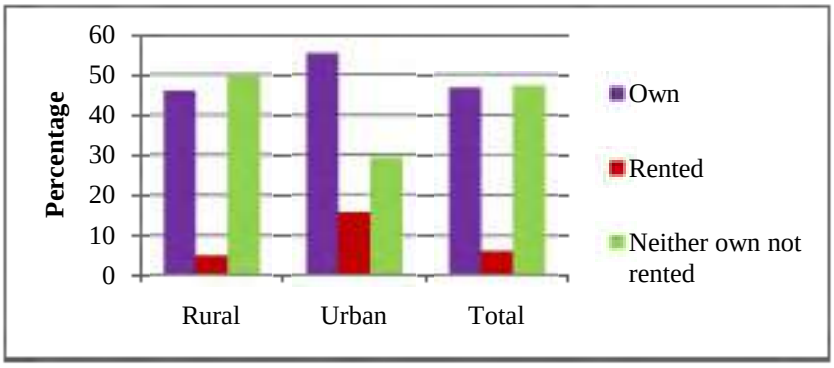

Fig. 3.12: Rural Urban Distribution of Ownership Status of Houses Scheduled Tribe Population

3.2.11 Social Development Index

To find out the Gram Panchayat-wise social development status of the study area Social Development Index has been derived by using Dimension Index (DI) formula. For this study, five important social variables have been selected. In two steps the Social Development Index has been prepared. In step one, individual Dimension Indices of these five selected variables have been constructed. In step two, Social Development Index for each Gram Panchayat has been prepared by finding the Mean of those five DI values.

The five social variables are,

1. Total Literacy Rate (X1)
2. Male Literacy Rate(X2)
3. Female Literacy Rate(X3)
4. Married below 18 Years(X4)
5. Sex Ratio(X5)

Among these five social variables all are positive variables except Married below 18 years (X4). This particular variable is a negative variable.

Formula used to prepare the Dimension Index is as follows:

Dimension Index= (Actual Value - Minimum Value) / (Maximum Value - Minimum Value)

Actual value means original value of the variable for a particular Gram Panchayat.

Maximum and Minimum values indicate the highest and lowest values of the same variable among the 22 Gram Panchayats.

The values of five dimension indices vary between ranges of 0 to 1. For positive variables, DI value 1 represents the best condition and 0 represents the worst condition. For negative variable the same DI value represents the exactly opposite status. That is, DI value of 1 represents the worst condition for the variable and 0 represents the best condition. The values of the negative indicators have been again subtracted from 1 to equalize the figures with the positive indicators. After this subtraction, for negative variables the DI value of 1 represents the best condition and 0 represents the worst condition.

Formula used to prepare Composite Index is as follows:

$$\textit{Social Development Index} = (\Sigma\ DI) / N$$

Where,

ΣDI is summation of all the dimension indices.

N indicates the total number of dimension indices.

The values of the Social Development Index vary between ranges of 0 to 1. The Index value 1 represents the best condition and 0 represents the worst condition.

Table 3.21 Gram Panchayat-wise Social Development Index

Name of the Block/GP	X1	X2	X3	X4	X5	Social Index
Matigara	0.48	0.8	0.10	1.00	1.00	0.68
Champasari	0.4.	0.33	0.48	0.5	0.63	0.47
Matigara I	1.00	1.00	0.89	0.72	0.32	0.79
Matigara II	0.80	0.72	0.89	0.16	0.66	0.65
Atharokhai	0.64	0.67	0.4	1.00	1.00	0.74
Patharghata	0.34	0.41	0.23	0.35	0.76	0.42
Naxalbari	1.00	1.00	1.00	0.83	0.52	0.87
Naxalbari	0.7	0.62	0.79	0.56	0.51	0.64
Upper Bagdogra	0.72	0.49	1.00	0.13	0.78	0.62
Hatighisa	0.56	0.49	0.64	0.41	0.61	0.54
Gossaipur	0.21	0.17	0.24	0.54	0.12	0.26
Lower Bagdogra	0.46	0.35	0.53	0.69	0.05	0.42
Maniram	0.69	0.67	0.65	0.39	0.50	0.58
Phansidewa	0.00	0.00	0.00	0.09	0.76	0.17
Hetmuri	0.35	0.17	0.59	0.28	0.82	0.44
Chathat Bansgao	0.00	0.00	0.00	0.26	0.00	0.05
Bidhan Nagar I	0.4	0.46	0.36	0.22	0.65	0.42
Bidhan Nagar II	0.18	0.07	0.33	0.25	0.56	0.28
Ghoshpukur	0.5	0.51	0.52	0.12	0.67	0.46
Jalash Nijamtara	0.14	0.09	0.18	0.28	0.21	0.18
Phansidewa	0.47	0.54	0.40	1.00	0.32	0.55
Kharibari	0.51	0.36	0.67	0.00	0.00	0.31
Binnabari	0.43	0.41	0.49	0.00	0.64	0.39
Buraganj	0.48	0.37	0.60	0.44	0.43	0.46
Kharibari Panisali	0.73	0.58	0.94	0.34	0.47	0.61
Raniganj Panisali	0.33	0.15	0.55	0.21	0.17	0.28

Source: Calculated by the Researcher

From the table 3.21 block-wise and Gram Panchayat-wise Social Development Index can be found. This shows among the four blocks best social development condition can be found in Naxalbari C.D. Block (0.87), followed by Matigara C.D. Block (0.68). The worst social development condition can be found in Phansidewa C.D. Block (0.17) and it is followed by Kharibari C.D. Block (0.31). In Phansidewa C.D. Block out of the five variables, DI values of the three variables are 0. That represents condition of Total Literacy Rate (X1), Male Literacy Rate (X2) and Female Literacy Rate (X3) in Phansidewa block is worst among the four blocks. In Naxalbari C.D. Block out of the five variables DI values of three variables are 1. That means

condition of those three variables, Total Literacy Rate (X1), Male Literacy Rate (X2) and Female Literacy Rate (X3), are best among the four blocks. Gram Panchayat-wise best social condition is found in Matigara I (0.79) and the lowest is found in Chathat Bansgaon (0.05). In Matigara I GP the DI value of 2 variables (Total literacy rate X1 and Male literacy rate X2) among 5 social variables are in best condition among the 22 Gram Panchayats in the study area. The DI values of another two social variables, female literacy rate (X3) and married below 18 years female (X4), are also very high for Matigara I GP. Good conditions of these 4 variables out of the total 5 social variables are the reasons of Matigara I GP to become the best GP among all the Gram Panchayats in the study area having best Social Development Index value.For this study the Gram Panchayats are classified into three groups, Developed, Moderately Developed and Least Developed. The Gram Panchayats having Social Development Index Value of greater than 0.60 has been classified as Developed. Gram Panchayats having Index values between 0.45-0.60 have been classified as Moderately Developed and index value with less than 0.45 have been classified as Least Developed. Among the 22 Gram Panchayats 6 Gram Panchayats each are in developed and moderately developed category and 12 Gram Panchayats stand as least developed according to their social development index value. Among these 12 least developed Gram Panchayats 5 Gram Panchayats are under Phansidewa C.D. Block

Table 3.22 Gram Panchayat-wise Social Development Categories

Social Development Status	Index Value	GP Name
Developed	>0.60	Kharibari Panisali, Upper Bagdogra, Naxalbari, Matigara II, Atharokhai, Matigara I
Moderately Developed	0.45-0.60	Ghoshpukur, Buraganj, Champasari, Hatighisa, Phasidewa, Maniram
Least Developed	<0.45	Chathat Bansgao, Jalash Nijamtara, Gossaipur, Bidhan Nagar II, Raniganj Panisali, Binnabari, Lower Bagdogra, Patharghata, Bidhan Nagar I, Hetmuri

Source: Compiled by the Researcher

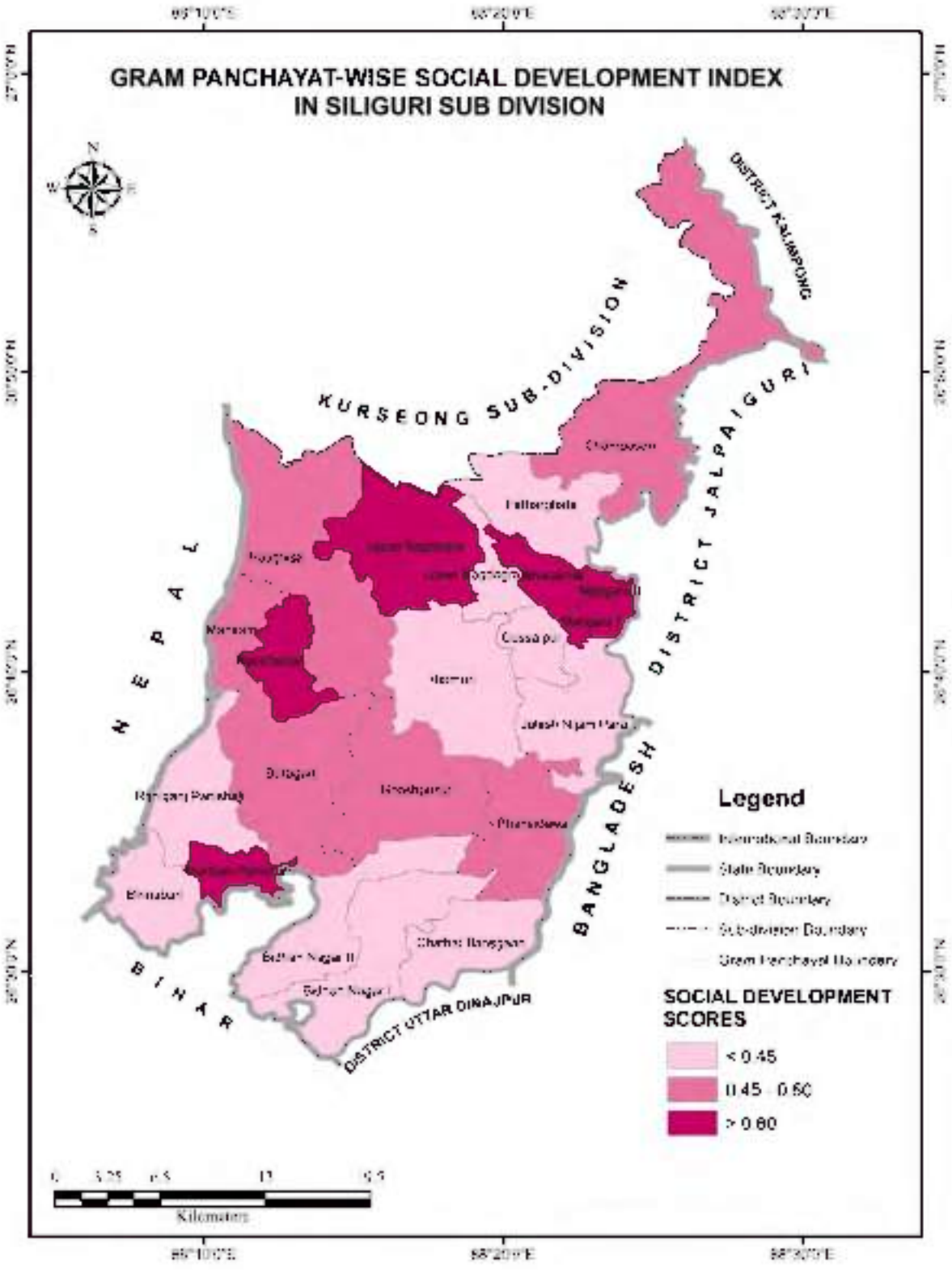
GRAM PANCHAYAT-WISE SOCIAL DEVELOPMENT INDEX
IN SILIGURI SUB DIVISION
KURSEONG SUB-DIVISION
DISTRICT KALIMPONG
DISTRICT JALPAIGURI
NEPAL
BANGLADESH
BIHAR
DISTRICT UTTAR DINAJPUR
Legend
SOCIAL DEVELOPMENT SCORES
< 0.45
0.45 - 0.60
> 0.60
Kilometers

Fig 3.13

3.3 Housing

Shelter or Housing is one of the must requisites of human development. Housing condition means how a shelter of a household is made of and Household Amenities mean facilities that a household is currently enjoying. Both housing condition and household amenities are two very important factors to determine the quality of life of a society.

There are three most important parts of a house; Floor, Roof and Wall. Here the housing condition of study area has been classified by these three categories. In housing amenities, data has been collected for Electrification, Use of Latrine, Fuel Used for Cooking, Water Accessibility, Source of Drinking Water Facility, No of Rooms in a Household, Availability of Separate Kitchen in a Household and Access to Some Basic Household Assets.

3.3.1 Housing Condition

3.3.1.1 Floor

Floor of a house has been classified into three categories; Kaccha, Pakka and Mixed. In Kaccha floor category floors of all the rooms of a household are made of mud. Pakka floor means floors of all the rooms of a household are made of concrete or bricks. If a household has both Kaccha and Pakka types of floors, it has been classified as Mixed floor.

From field survey it has been found that in Siliguri Sub-division most of the tribal households live in mixed floor type houses (38.30 percent) (Table 3.23). Like Sub-division in rural areas the percentage is also highest for mixed floor type houses (39.41 percent) and in urban pakka floor type shares the highest percentage (55.17 percent). Block-wise highest kaccha floored rural tribal households can be seen in Phasidewa C.D. Block (36.49 percent) and pakka floored percentage is highest in Matigara C.D Block (38.76 percent) (Table 3.24).

Table 3.23 Rural Urban Distribution of Household by Floor Type

Floor	Rural	Urban	Total
Kuccha	31.35	15.52	29.62
Pakka	29.24	55.17	32.08
Mixed	39.41	29.31	38.30

Source: Field Survey 2019-20

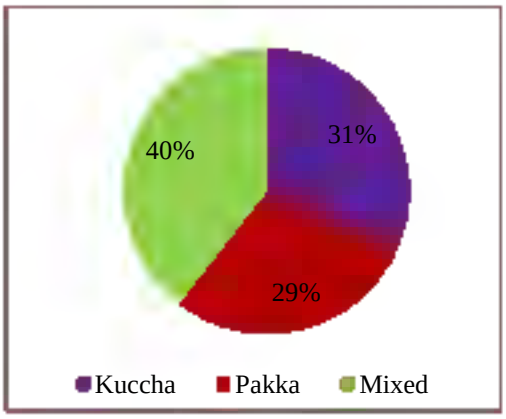

Fig. 3.14: Distribution of Rural Households by Floor Type

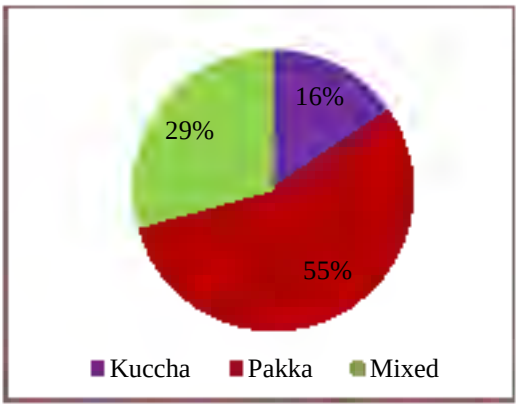

Fig. 3.15: Distribution of Urban Households by Floor Type

Table 3.24 Block-wise Distribution of Household by Floor Type

Name of the Block	Floor		
	Kuccha	Pakka	Mixed
Matigara	29.46	38.76	31.78
Naxalbari	25.71	31.43	42.86
Phansidewa	36.49	23.65	39.86
Kharibari	32.22	22.22	45.56

Source: Field Survey 2019-20

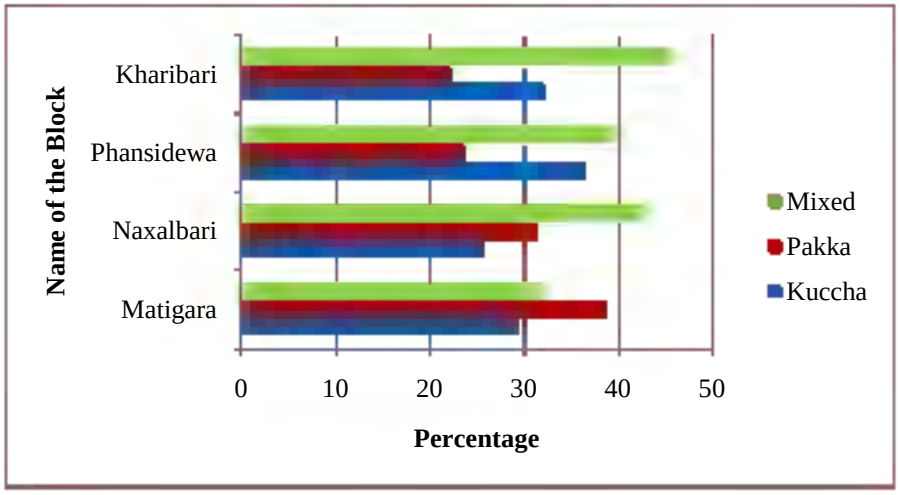

Fig. 3.16: Block-wise Distribution of Households by Floor Type

3.3.1.2 Roof

In tea garden area the employers provide accommodation facility to the labourers. And roof of the most of these accommodations are made of either Tin or asbestos. As the tribals are highly concentrated in these tea garden areas that's why the percentage of households having house roof made of tin or asbestos (88.50 percent) are very high. There are no differences between rural and urban in this category. Both have very high percentage of tribal households having house roof

made of tin or asbestos. Only in some urban areas, households with concrete roof are found. During field survey it has been found that only 11.34 percent of tribal urban households have concrete roof in their houses (Table 3.25). In Pansidewa C.D. Block 93.24 percent of rural tribal households are live in houses with concrete roof which is highest percentage share among all the C.D Blocks. Only in Naxalbari C.D. Block few tribal rural households (5.71 percent) live under concrete roof.

Table 3.25 Rural Urban Distribution of Households by Roof Type

Roof	Rural	Urban	Total
Thatched	3.39	0.00	3.21
Tiled	3.39	9.34	3.96
Tin or Asbestos	89.83	77.60	88.50
Wood	0.64	1.72	0.75
Concrete	2.75	11.34	3.58

Source: Field Survey 2019-20

Table 3.26 Block-wise Distribution of Households by Roof Type

Name of the Block	Roof				
	Thatched	Tiled	Tin or Asbestos	Wood	Concrete
Matigara	2.33	4.65	89.92	0	3.1
Naxalbari	5.71	4.76	82.86	0.95	5.71
Phansidewa	3.38	2.7	93.24	0	0.68
Kharibari	2.22	1.11	92.22	2.22	2.22

Source: Field Survey 2019-20

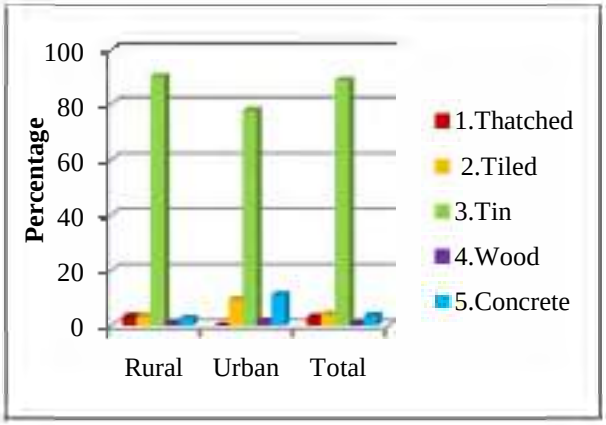

Fig. 3.17: Rural Urban Distribution of Households by Roof Type

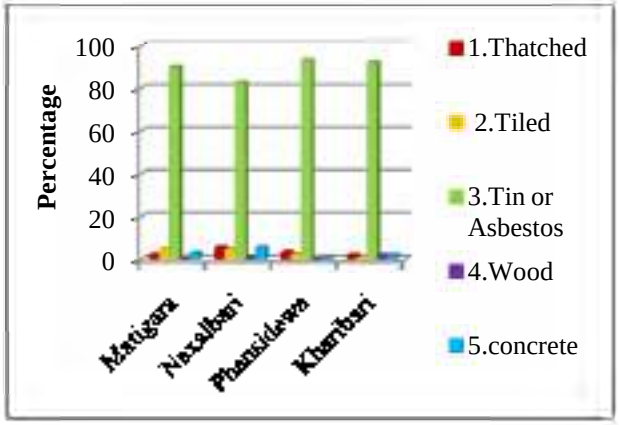

Fig. 3.18: Block-wise Distribution of Household by Roof Type

3.3.1.3 Wall

The wall types of houses of tribal households are being categorized into 6 categories based on the materials used to make the walls. These are walls made of Bamboo, Wood, Brick, Plaster, Clay, and Tin. Primary data reveals most of the household's walls are made of Brick (47.92 percent). The next common wall types are plastered wall (21.70 percent) and walls made of bamboo (16.98 percent). Walls made of clay, wood and tin are very rare among tribal households in Siliguri Sub-division. As a large number of own houses concentrate in urban areas that's why highest percentage share of plaster made walls (51.72 percent) is found in urban. In rural areas most of the households use Brick walls (48.73 percent). Block-wise in rural areas highest plastered walls households are found in Matigara C.D. Block (28.68 percent). In Kharibari and Pansidewa C.D. Blocks a handsome no of rural tribal households still live in houses those are made of bamboo walls (25.56 percent & 20.95 percent respectively).

Table 3.27 Rural Urban Distribution of Households by Wall Type

Wall	Rural	Urban	Total
Bamboo	18.64	3.45	16.98
Wood	2.75	3.45	2.83
Brick	48.73	41.38	47.92
Plaster	18.01	51.72	21.70
Clay	5.30	0.00	4.72
Tin	6.57	0.00	5.85

Source: Field Survey 2019-20

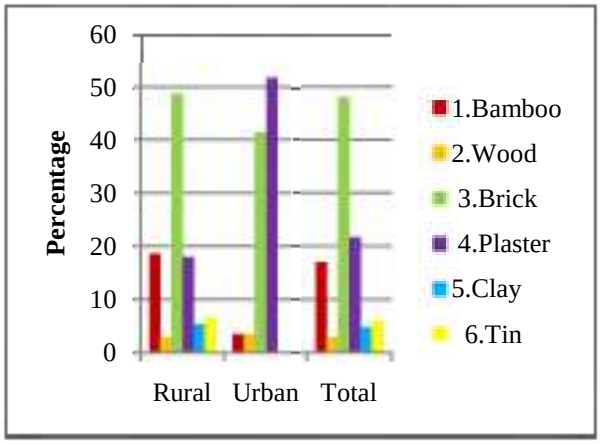

Fig. 3.19: Rural Urban Distribution of Households by Wall Type

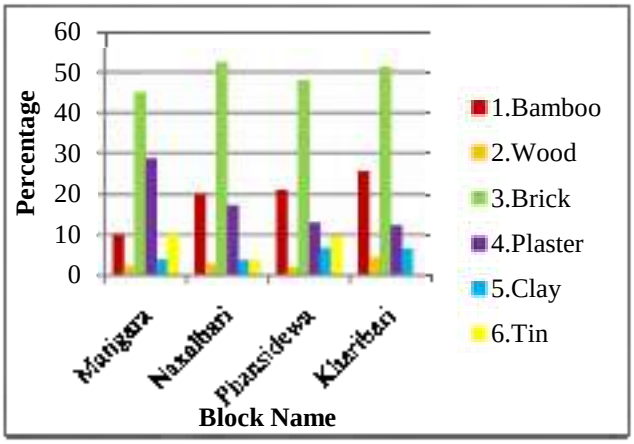

Fig. 3.20: Block-wise Distribuion of Household by Wall Type

Table 3.28 Block-wise Distribution of Households by Wall Type

Name of the Block	Wall					
	Bamboo	Wood	Brick	Plaster	Clay	Tin
Matigara	10.08	2.33	44.96	28.68	3.88	10.08
Naxalbari	20	2.86	52.38	17.14	3.81	3.81
Phansidewa	20.95	2.03	47.97	12.84	6.76	9.46
Kharibari	25.56	4.44	51.11	12.22	6.67	0

Source: Field Survey 2019-20

3.3.2 Household Amenities

3.3.2.1 Electricity

Electrification of household is a key factor to upgrade households to modernization. According to a report published on Business Standard, 2020 99.90 percent of households of West Bengal have come under electrification with 100 percent in Darjiling district. Primary data shows 100 percent of urban tribal households in study area have been electrified and all of them utilize the facilility. During field survey it has been observed that in rural areas despite of having electricity facility, 8.90 percent of tribal households don't utilize the facility. Rather they use kerosene as fuel to light up. In Pansidewa block this percentage is highest among all the blocks, followed by Kharibari C.D. Block. 14.86 percent and 8.89 percent of rural tribal households in these blocks don't utilize electricity facility respectively.

Table 3.29 Households Utilizing Electricity Facility

Light	Rural	Urban	Total
Electric	91.10	100.00	92.08
Others	8.90	0.00	7.92

Source: Field Survey 2019-20

Table 3.30 Block-wise Distribution of Households Utilizing Electricity Facility

Name of the Block	Electric	Others
Matigara	95.35	4.65
Naxalbari	94.29	5.71
Phansidewa	85.14	14.86
Kharibari	91.11	8.89

Source: Field Survey 2019-20

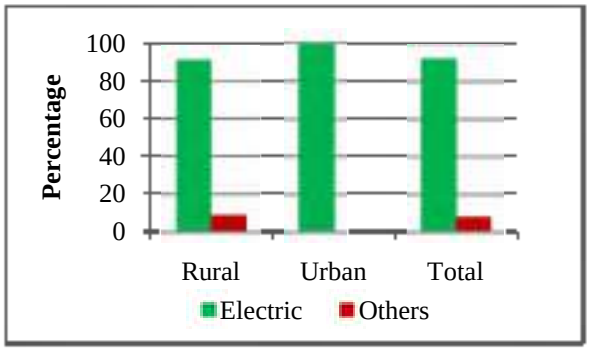

Fig. 3.21: Rural Urban Distribution Households Utilizing Electric Facility

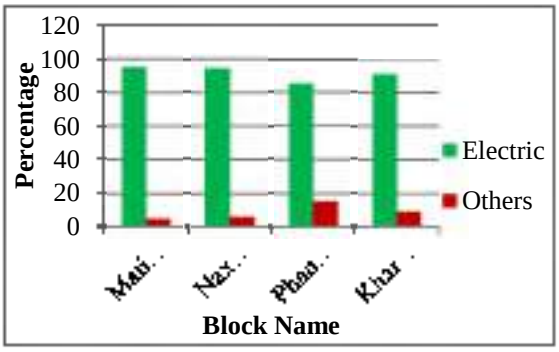

Fig. 3.22: Block-wise Distribution of Households Utilizing Electric Facility

3.3.2.2 Use of Latrine

Access to latrine and toilet is most important factor to determine sanitation awareness of a society. Open defecation can cause many health hazards. To make India open defecation free (ODF) the Government of India launched Swachh Bharat Mission on 2nd October 2014. The phase 1 of the mission continued till November 2019. Along with that Mission Nirmal Bangla, an initiative with same objectives by Government of West Bengal was running. One of the main objectives of these missions was to construct latrine for every household. The initiatives were very much successful. The Rural Bengal was the biggest beneficiaries of these initiatives. On 2nd Aug 2019 the rural Bengal was declared ODF. According to report the urban Bengal may get the ODF status very soon as some of the Urban Local Bodies still to complete almost 5-7 percent of their work (Economic times, October, 2020). As far as the Siliguri Sub-division is concern, all the rural and urban areas are declared open defecation free. During field survey it has been observed that despite having latrine facility, members of many households in rural areas still not using it. At least one member of 13.98 percent of total rural tribal households still releases their body waste in open fields. Block-wise this trend can be seen highest in Phansidewa C.D. Block (22.97 percent) and followed by Kharibari C.D. Block (14.44 percent).

Table 3.31 Distribution of Households Using Latrine Facility

Latrine	Rural	Urban	Total
Private	81.99	96.55	83.58
Common	4.03	3.45	3.96
Open field	13.98	0.00	12.45

Source: Field Survey 2019-20

Table 3.32 Block-wise Distribution of Households Using Latrine Facility

Name of the Block	Latrine		
	Private	Common	Open field
Matigara	93.8	1.55	4.65
Naxalbari	85.71	2.86	11.43
Phansidewa	72.3	4.73	22.97
Kharibari	76.67	8.89	14.44

Source: Field Survey 2019-20

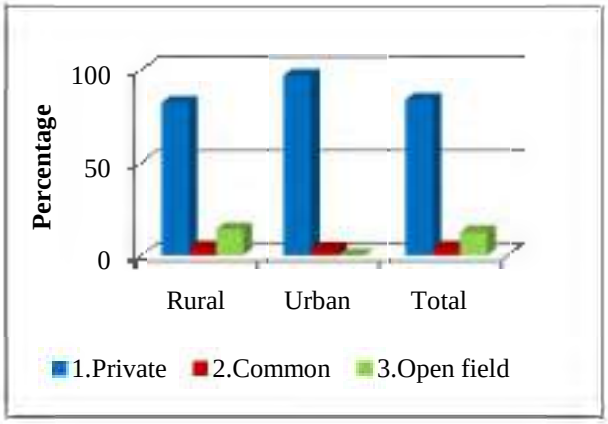

Fig. 3.23: Rura Urban Distribution of Households Using Latrine Facility

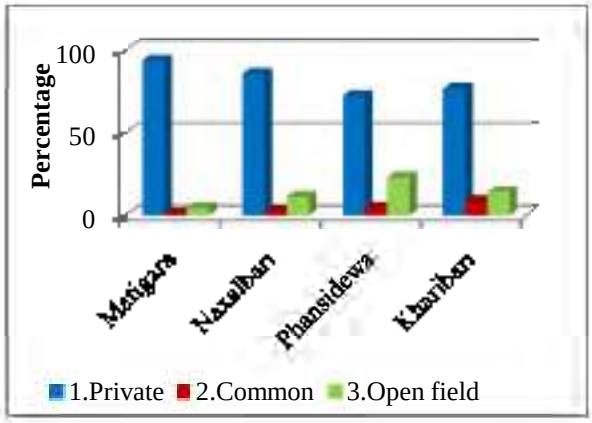

Fig. 3.24: Block-wise Distribution of Households Using Latrine Facility

3.3.2.3 Fuel Used for Cooking

Primary data shows (Table 3.33) urban tribal households use mostly LPG as cooking fuel. 68.97 percent of total urban tribal households use only LPG as cooking fuel. The reaming 31.03 percent households use LPG along with any other fuel like wood, kerosene etc to cook. Though in rural areas use of LPG as only fuel source for cooking is not very common among tribal households. Only 21.82 percent of total rural tribal households use LPG as only source of fuel for cooking. As availability of wood is ample in rural tribal concentrated areas, use of wood is very common among these households. 51.69 percent of rural tribal households use wood as cooking fuel. Block-wise in Phansidewa (65.54 percent) and Kharibari (58.89 percent) blocks the percentage is highest. 17.16 percent rural tribal households use wood, kerosene etc along with LPG.

Table 3.33 Distribution of Households by Fuel Used for Cooking

Fuel Used	Rural	Urban	Total
LPG	21.82	68.97	26.98
Kerosene	5.51	0.00	4.91
Wood	51.69	0.00	46.04
LPG With Other	17.16	31.03	18.68
Other	3.81	0.00	3.40

Source: Field Survey 2019-20

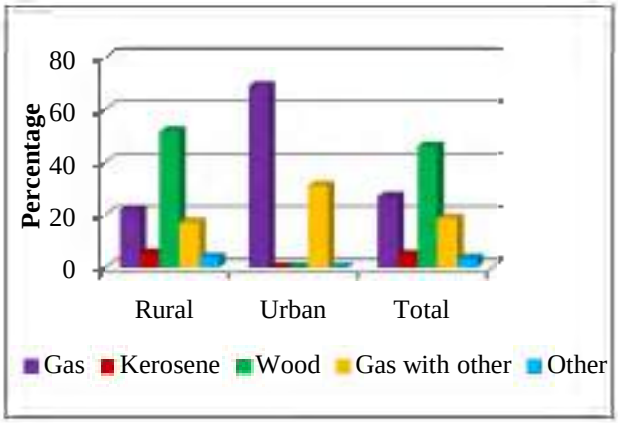

Fig. 3.25: Rural Urban Distribution of Households by Fuel Used for Cooking

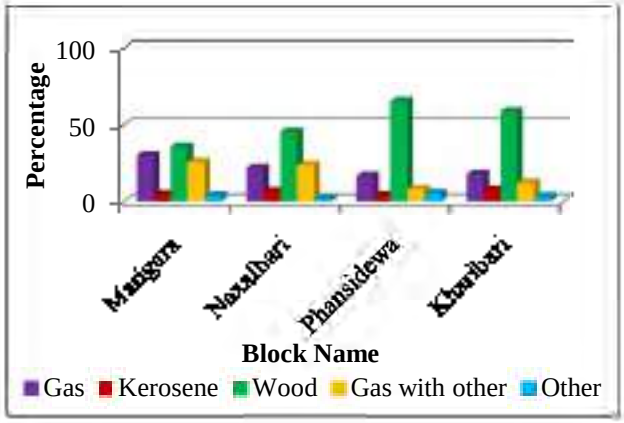

Fig. 3.26: Block-wise Distribution of Households by Fuel Used for Cooking

Table 3.34 Block-wise Distribution of Households by Fuel Used for Cooking

Name of the Block	Fuel Used				
	Gas	Kerosene	Wood	Gas with other	Other
Matigara	30.23	4.65	35.66	25.58	3.88
Naxalbari	21.9	6.67	45.71	23.81	1.9
Phansidewa	16.89	4.05	65.54	8.11	5.41
Kharibari	17.78	7.78	58.89	12.22	3.33

Source: Field Survey 2019-20

3.3.2.4 Drinking Water Accessibility

Water is an essential need of humans in their day to day life. Without water a human can't live. So, drinking water accessibility is an important social indicator of a society. In this study sources

of drinking water have been classified into three categories; first within premises, second near to premises (within 200 mt) and last is away from premises. Primary data shows 52.45 percent of total surveyed tribal households have drinking water accessibility within their premises (Table 3.35). Only 9.62 percent households have to go more than 200 mt to have access to drinking water. During the survey no urban tribal household has been found that has to go more than 200 mt to have access to drinking water facility. But in rural areas 10.81 percent tribal households have to cover more than 200 mt to get their daily drinking water. In Naxalbari and Phansidewa C.D. Blocks still 20 percent and 11.49 percent tribal households cover a distance of more than 200 mt to have drinking water accessibility respectively. During survey it has been found that in Patharghata ,Upper Bagdogra ,Hatighisha, Hetmuri., Bidhan nagar I and II Gram Panchayats the households needs to go far away to collect the drinking water as there are even one well or tube well in the whole village.

Table 3.35 Distribution of Households by Distance from Drinking Water

Drinking water	Rural	Urban	Total
Within Premise	50.00	72.41	52.45
Near Premise	39.19	27.59	37.92
Away	10.81	0.00	9.62

Source: Field Survey 2019-20

Tabel 3.36 Block-wise Distribution of Households by Distance from Drinking Water

Name of the Block	Drinking water		
	Within Premises	Near Premises	Away
Matigara	38.76	51.94	9.3
Naxalbari	63.81	16.19	20
Phansidewa	47.97	40.54	11.49
Kharibari	53.33	45.56	1.11

Source: Field Survey 2019-20

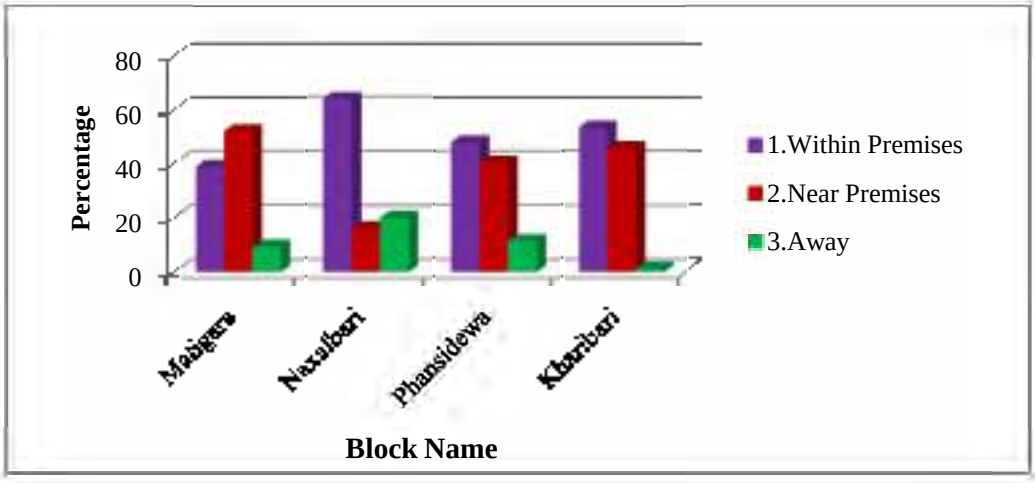

Fig. 3.27: Block-wise Distribution of Households by Distance from Drinking Water

3.3.2.5 Source of Drinking Water Facility

Table 3.37 is showing the different source of drinking water in the study area. During survey it is observed that a large percentage of people collect water from tube well. From the table 3.37 it can be seen in the rural area 52.54 percent people used water from the tube well. 31.78 percent households from the rural area uses well water. Tap water from the treated source is the source of drinking water which is provided to the people through pipes within their premises or through a common taps that is by the government departments, local bodies, panchayats etc. In the study area it can be seen that 17.74 percent are used tap water from treated source. In the urban area this percentage is high that is 36.21 percent. In different Gram Panchayats use of tube well and well water is also high. In Matigara C. D. Block 48.84 percent household uses well water. In Naxalbari C. D. Block 62.86 percent household uses tube well in their houses as the source of drinking water. During survey it has been observed that in some area especially in Lower Bagdogra G. P. there is scarcity of water in summer season. During summer most of the well water of this area dries up. There have water problem in Hetmuri G.P. Hatighisha G. P.,Upper Bagdogra G.P., Binnabari G.P.,Chathat Bansgaon too

Table 3.37 Distribution of Households by Source of Drinking Water

Drinking Water	Rural	Urban	Total
Tap water from treated source	15.47	36.21	17.74
Well	31.78	22.41	30.75
Tube well	52.54	41.38	51.32
Other	0.21	0.00	0.19

Source: Field Survey 2019-20

Table 3.38 Block-wise Distribution of Households by Source of Drinking Water

Name of the Block	Tap water from treated source	Well	Tube well	Other
Matigara	27.91	48.84	23.26	0.00
Naxalbari	12.38	23.81	62.86	0.95
Phansidewa	10.14	26.35	63.51	0.00
Kharibari	10.00	25.56	64.44	0.00

Source: Field Survey 2019-20

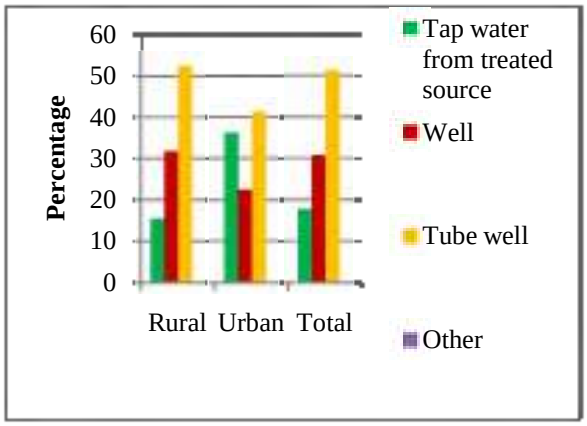

Fig. 3.28: Rural Urban Distribution of Households by Source of Drinking Water

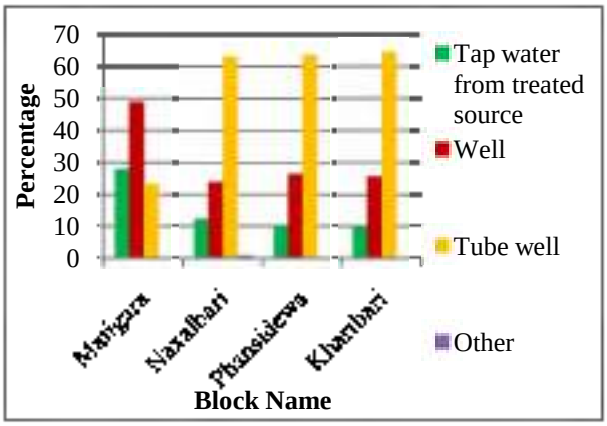

Fig. 3.29: Block-wise Distribution of Households by Source of Drinking Water

3.3.2.6 No of Rooms in a Household

From table 3.39 it can be seen two room houses are more in rural area. 55.08 percent households have two rooms in their houses. 26.69 percent households have three rooms. In the urban area 34.48 percent household have two room and 41.38 percent have three rooms. 17.24 percent for household in urban area have four and above room in their houses. Table no 3.40 is showing the number of rooms in different block. In Phansidewa 59.46 percent households have two rooms in their houses. In Phansidewa it is highest (59.46 percent) followed by Kharibari (58.89 percent) and Naxalbari (55.24 percent) Percentage of three room in a household is highest in Matigara C. D. Block (34.88 percent). Percentages of 4 and above room are very less in most of the Gram Panchayat even zero for some Gram Panchayat.

Table 3.39 Distribution of Households by Number of Rooms

No. of room	Rural	Urban	Total
1	12.29	6.90	11.70
2	55.08	34.48	52.83
3	26.69	41.38	28.30
4 & above	5.93	17.24	7.17

Source: Field Survey 2019-20

Table 3.40 Block-wise Distribution of Households by Number of Rooms

Name of the Block	No. of Room			
	1	2	3	4 & above
Matigara	7.75	47.29	34.88	10.08
Naxalbari	11.43	55.24	25.71	7.62
Phansidewa	16.22	59.46	21.62	2.7
Kharibari	13.33	58.89	24.44	3.33

Source: Field Survey 2019-20

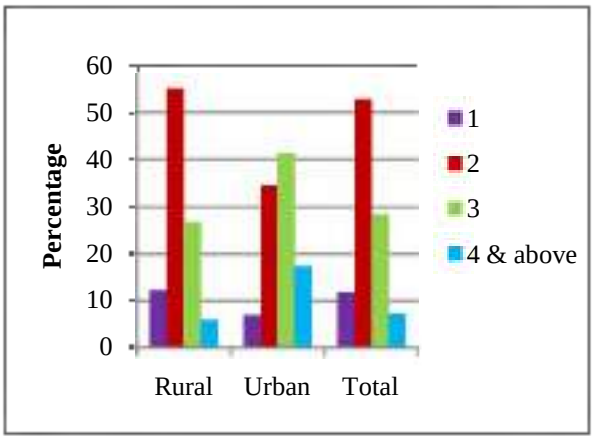

Fig. 3.30: Rural Urban Distribution of Households by Number of Rooms

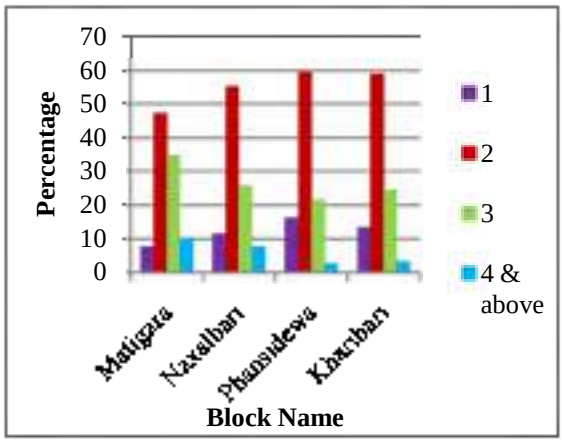

Fig. 3.31: Block-wise Distribution of Households by Number of Rooms

3.3.2.7 Availability of Separate Kitchen

Availability of separate kitchen in a household holds an important factor to the human health. As the tribal people in the study area uses wood as their main source of fuel for cooking, it becomes very important for them to have a separate kitchen in their house. In the study area 47.74 percent of the total household has access to separate kitchen in their house. In urban areas the percentage of household with availability of separate kitchen is 60.34 percent and in rural the percentage is 46.19 percent. It has been observed during the survey that those households, who have not access

to a separate kitchen in their houses, use open kitchen for cooking. Block-wise highest percentage of households with separate kitchen can be seen in Matigara C.D. Block (49.61 percent). And the lowest can be seen in Phansidewa C.D. Block where only 41.89 percent of households have the access of separate kitchen in their houses.

Table 3.41 Distribution of Availability of Separate Kitchen in Households

Kitchen	Rural	Urban	Total
Separate	46.19	60.34	47.74
Open	53.81	39.66	52.26

Source: Field Survey 2019-20

Table 3.42 Block-wise Availability of Kitchen in Households

Name of the Block	Kitchen	
	Separate	Open
Matigara	49.61	50.39
Naxalbari	47.62	52.38
Phansidewa	41.89	58.11
Kharibari	46.67	53.33

Source: Field Survey 2019-20

3.3.2.8 Access to Household Assets

Table no 3.43 is showing the percentage of different household assets among tribals in the study area. Nowadays, mobile is the most used mode of communication in the society. Tribal households are also using this mode of communication in a large scale. Almost 96.55 percent of urban and 80.93 percent of rural tribal households have the access of mobile.

Table 3.43 Distribution of Households having Different Assets

Household Asset	Rural	Urban	Total	Household Asset	Rural	Urban	Total
Cycle	71.82	86.21	73.4	Radio	1.91	1.72	1.89
Bike	10.17	18.97	11.13	TV	43.43	67.24	46.04
Car	0.21	3.45	0.57	Mobile	80.93	96.55	82.64
Refrigerator	3.81	31.03	6.79	Compute	0.64	12.07	1.89

Source: Field Survey 2019-20

Television is another basic household asset that is widely used as mode of entertainment. 67.24 percent of urban and 43.43 percent of rural tribal household have television in their houses. Cycle and bikes are the two mainly used assets for travelling among tribal households. In rural areas 71.82 percent and 10.17 percent households have cycle and bike respectively. In urban

areas the percentage are 86.21 percent and 18.97 percent respectively. Use of refrigerators is rarely found in rural areas. Only 3.81 percent of rural tribal households have access to refrigerators. For urban households the percentage is 31.03 percent.

Table 3.44 Block-wise Distribution of Households having Different Assets

Name of the Block	Household asset							
	Cycle	Bike	Car	Refrigerator	Radio	TV	Mobile	Compute
Matigara	77.52	17.05	0.78	4.65	1.55	47.29	81.4	1.55
Naxalbari	83.81	13.33	0	7.62	4.76	49.52	81.9	0.95
Phansidewa	64.86	3.38	0	0.68	0.68	40.54	79.05	0
Kharibari	61.11	7.78	0	3.33	1.11	35.56	82.22	0

Source: Field Survey 2019-20

3.3.3 Housing Development Index

To find out housing development status of the study area Housing Development Index has been derived. To prepare this index the same process of finding Social Development Index (3.45) has been followed. Here six housing variables have been selected. Out of these six variables one is negative variable; that is Household with One Room (X6) and the rest five are positive variables.

The housing variables are:

1. Household with One Room (X6)
2. Pakka House (X7)
3. Household using Latrine Facility (X8)
4. Water near Premise (X9)
5. Household having Electricity (X10)
6. Household having LPG Connection (X11)

The values of the Housing Development Index vary between ranges of 0 to 1. The Index value 1 represents the best condition and 0 represents the worst condition.

Table 3.45 Gram Panchayat-wise Housing Development Index

Name of the Block/GP	X6	X7	X8	X9	X10	X11	Housing index
Matigara	1.00	1.00	1.00	0.00	1.00	1.00	0.83
Champasari	0.85	0.60	0.87	0.33	0.72	0.44	0.64
Matigara I	0.58	0.25	1.00	0.90	1.00	0.71	0.74
Matigara II	0.17	0.25	1.00	0.41	1.00	0.86	0.62
Atharokhai	0.29	0.86	0.69	0.16	1.00	1.00	0.67
Patharghata	0.36	0.65	0.84	0.00	0.91	0.35	0.52
Naxalbari	0.57	0.56	0.62	1.00	0.90	0.38	0.67

Name of the Block/GP	X6	X7	X8	X9	X10	X11	Housing index
Naxalbari	0.67	0.80	1.00	0.68	1.00	0.17	0.72
Upper Bagdogra	0.31	0.26	0.56	0.39	0.87	0.24	0.44
Hatighisa	0.05	0.64	0.29	0.16	0.83	0.55	0.42
Gossaipur	0.64	0.32	0.85	0.75	0.48	0.19	0.54
Lower Bagdogra	1.00	0.64	1.00	1.00	1.00	1.00	0.94
Maniram	0.47	0.39	0.89	0.94	0.61	0.22	0.59
Phansidewa	0.00	0.09	0.00	0.07	0.00	0.00	0.03
Hetmuri	0.11	0.20	0.00	0.34	0.35	0.00	0.17
Chathat Bansgao	0.33	1.00	1.00	0.76	0.76	0.55	0.73
Bidhan Nagar I	0.20	0.00	0.40	0.10	0.56	0.52	0.30
Bidhan Nagar II	0.14	0.41	0.19	0.18	0.62	0.11	0.28
Ghoshpukur	0.32	0.61	0.81	0.57	0.00	0.09	0.40
Jalash Nijamtara	0.00	0.30	1.00	0.53	1.00	0.30	0.52
Phasidewa	0.29	0.21	1.00	1.00	0.48	1.00	0.66
Kharibari	0.34	0.00	0.20	0.27	0.59	0.07	0.24
Binnabari	0.71	0.62	0.75	0.72	1.00	0.25	0.68
Buraganj	0.26	0.39	0.37	0.30	0.73	0.41	0.41
Kharibari Panisali	0.33	0.30	0.86	0.13	0.27	0.17	0.34
Raniganj Panisali	0.19	0.15	0.31	0.58	0.41	0.16	0.30

Source: Calculated by the Researcher

The above table shows block-wise and Gram Panchayat-wise housing development status by showing their Housing Development Index. In the study area block-wise best housing condition is found in Matigara .C.D. Block (0.83) followed by Naxalbari C.D. Block (0.67). The worst housing development condition is found in Phansidewa C.D. Block (0.03) and it is followed by Kharibari C.D. Block (0.24). In Matigara C.D. Block out of the six housing variables, DI values of five variables; Household with One Room (X6), Pakka House (X7), Household using Latrine Facility(X8), Household with Electricity (X10) & Household with LPG Connection (X11); are 1. That means in this four housing parameters Matigara C.D. Block is in best condition. In Phansidewa C.D. Bock DI values of 4 housing variables; Household with One Room (X6), Household using Latrine Facility(X8), Household with Electricity (X10) & Household with LPG Connection (X11); are 0. That means in these four housing parameters Phansidewa block is in worst condition among the four blocks in the study area. Gram Panchayat-wise best housing condition is found in Lower Bagdogra GP (0.94) followed by Matigara I (0.74). In Lower Bagdogra GP out of the 6 variables the status of 5 variables i.e. Household with one room (X6), Household using latrine facility (X8), Water near primises (X9), Household having electricity facility (X10) and Household having LPG connection (X11), are in best condition among the 22

Gram Panchayats. The best condition of these variables is the reason for Lower Bagdogra of having best Housing Development Index maong the all Gram Panchayats in the study area. The worst housing development condition is found in Hetmuri GP (0.17) and it is followed by Bidhan Nagar II (0.28). In Hetmuri GP out of the 6 housing variables 2 variables, Household using latrine facility (X8) and Household having LPG connection (X11) are in worst condition among the 22 Gram Panchayats in the study area. The status of another two housing variables, Household with one room (X6) and Household with pakka house (X7), is also very poor. These four housing variables collectively play the major role to make the status of Housing Development Index in Hetmuri GP as lowest among all the GPs' in the study area. For this study the Gram Panchayats are classified into three groups, Developed, Moderately Developed and Least Developed; according to their value of Housing Development Index. The Gram Panchayats having Housing Development Index Value of greater than 0.60 has been classified as Developed. Gram Panchayats having Index values between 0.45-0.60 have been classified as Moderately Developed and index value with less than 0.45 have been classified as Least Developed. In Matigara C.D. Block out of the 05 Gram Panchayats 04 Gram Panchayats has been classified as with Developed housing condition. And Phansidewa C.D Block out of the 07 Gram Panchayats 04 Gram Panchayats are classified as with Least Developed housing condition. Among the 22 Gram Panchayats 09 Gram Panchayats each have been classified as with Developed housing status and Least Developed housing status. The rest 04 Gram Panchayats are classified as with Moderately Developed housing status.

Table 3.46 Gram Panchayat-wise Housing Development Categories

Housing Development Status	Index Value	GP Name
Developed	>0.60	Champasari, Matigara II, Phasidewa, Atharokhai, Binnabari, Naxalbari, Chathat Bansgao, Matigara I, Lower Bagdogra
Moderately Developed	0.45-60	Patharghata, Jalash Nijamtara, Gossaipur, Maniram,
Least Developed	<0.45	Hetmuri, Bidhan Nagar II, Bidhan Nagar I, Raniganj Panisali, Kharibari Panisali, Ghoshpukur, Buraganj, Hatighisa, Upper Bagdogra

Source: Compiled by the Researcher

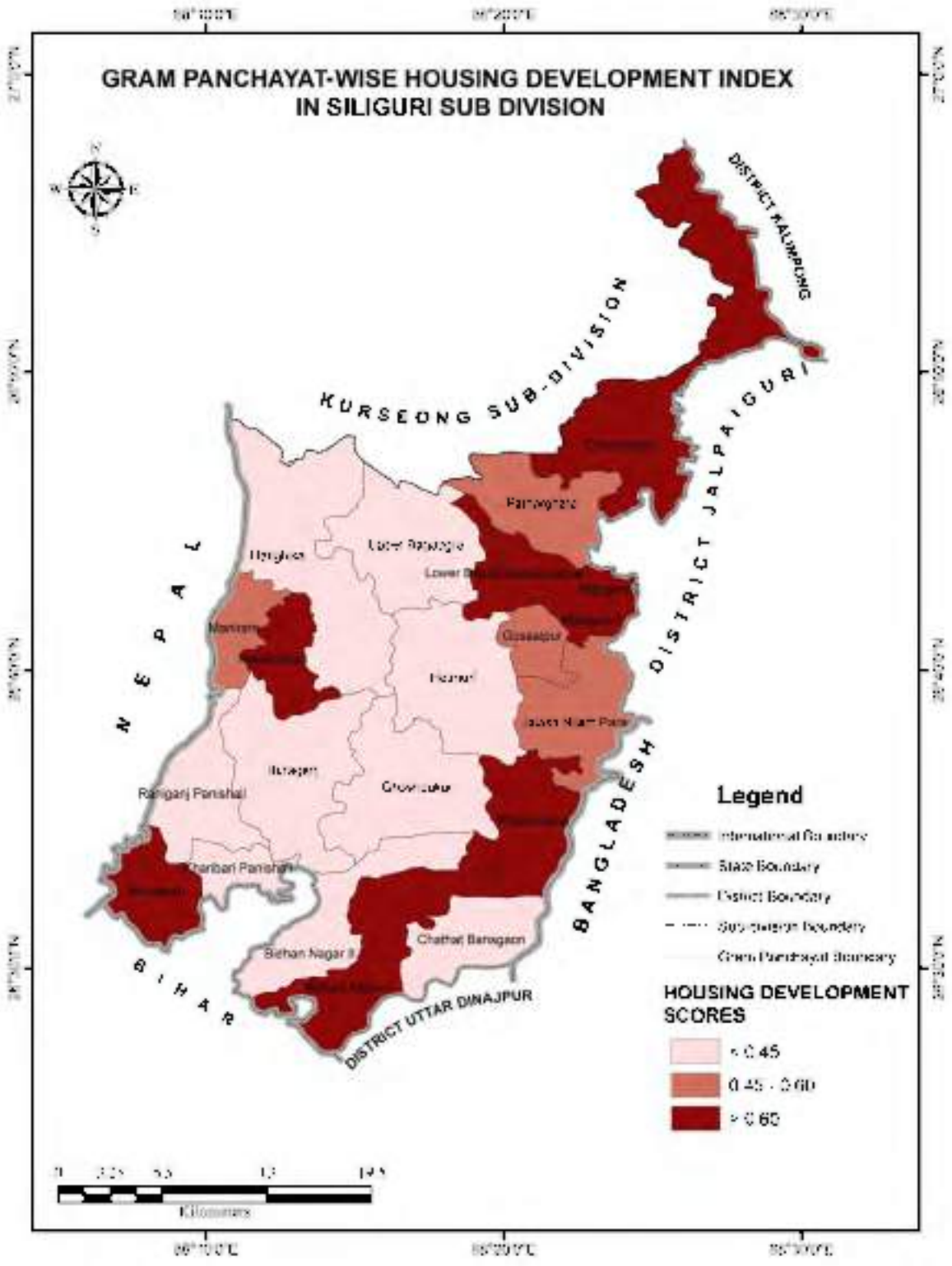
GRAM PANCHAYAT-WISE HOUSING DEVELOPMENT INDEX
IN SILIGURI SUB DIVISION
DISTRICT KALIMPONG
KURSEONG SUB-DIVISION
DISTRICT JALPAIGURI
NEPAL
BANGLADESH
BIHAR
DISTRICT UTTAR DINAJPUR
Legend
HOUSING DEVELOPMENT SCORES
< 0.45
0.45 - 0.60
> 0.60

Fig. 3.32

3.4 Economic Condition

The existence of economy is very requisite for formation and sustainability of a society. No society can survive without a proper efficient economy which can fulfill the basic requirements of a society. Consumption power of a society directly related with the economic condition of that society. There are two main factors of economic condition of a society; one is Work Participation or Employment Rate and the other is Income. Here this part discus about the employment rate, employment categories, age-wise employment rate, and household income among scheduled tribes in Siliguri Sub-division.

3.4.1 Employment Rate

Here employment rate or work participation rate indicates to the percentage of worker and non worker among tribal population in the study area. As per census 2011, total work participation rate in the study area is 37.48 percent and the percentage for tribals is 42.99 percent. In most of the communities gender gap in work participation rate is very much alarming. Females are being deprived in most of the communities. But in tribal communities the female work participation rate is very much promising. As per census 2011, the overall female work participation rate in Siliguri Sub-division is only 19.56 percent but for the tribal female the percentage (35.70 percent) is almost double of the overall female percentage.

Primary data shows (Table 3.47) out of total tribal population 48.74 percent are worker and 51.26 percent are non worker. Work participation rate among tribal male (58.18 percent) is higher than the female (39.12 percent). The main reason behind this is majority of the tribal females are engaged in household works. The work participation rate in rural areas (49.74 percent) is marginally higher than the urban areas (40.08 percent). But female work participation rate in rural areas (40.83 percent) is almost double than the urban areas (23.73 percent). It indicates better engagement in economic activities among tribal females in rural than urban. In study area the tribal concentration is more in rural areas than urban and in rural areas a handsome percentage of tribal female population works as tea garden labourer.

Further the worker groups can be classified into two major sections; Main Worker and Marginal Worker. A worker will be categorized as main worker if he or she is engaged in any economically productive work for more than half of the year i.e. at least for 183 days and a person who is engaged in any kind of economically productive work for less than 183 days, will be categorized as marginal worker. Through field survey it is to be noted that out of total workers

main workers dominate the classification. In study area out of total tribal worker 73.90 percent are main workers (Table 3.47). Only 26.10 percent come under marginal worker. Analyzing the primary data it is to be observed that mainly rural tribal females contribute to this percentage. In rural areas a number of females work only during the plucking season in the tea gardens which provide them working days of less than 6 months. Out of total female workers in rural areas 40.74 percent are marginal workers. In urban areas almost all the workers are main workers (88.89 percent). Only 11.11 percent workers come under marginal workers. Though the WPR is on the higher side but this does not reflect on the household income very promisingly. 53.24 percent of the rural tribal workers are engaged with plantation sector (Table 3.50) and official daily wage of this workers is as low as 176/-. In addition to that the field survey reveals they receive daily wage of rupees 125/- in actual. So, with this daily wage it impossible to run a household in present day. So, it becomes necessity for all the household members to contribute to the household income as many as they can. And even after doing so, the household income of tribal population in the study area is very low. The field survey reveals more than 1/5 th of the tribal household has monthly household income not more than rupees 5000 and a total 71.70 percent tribal household has monthly household income not more than even rupees 10000 (Table 3.56).

Table 3.47 Percentage Distribution of Worker, Non-Worker, Main Worker and Marginal Worker among Scheduled Tribe Population

Category	Rural			Urban			Total		
	Total	Male	Female	Total	Male	Female	Total	Male	Female
Worker	49.74	58.56	40.83	40.08	55.04	23.73	48.74	58.18	39.12
Main Worker	72.50	81.63	59.26	88.89	90.14	85.71	73.90	82.50	60.87
Marginal Worker	27.50	18.37	40.74	11.11	9.86	14.29	26.10	17.50	39.13
Non-Worker	50.26	41.44	59.17	59.92	44.96	76.27	51.26	41.82	60.88

Source: Field Survey 2019-20

Table 3.48 shows the statistics of Gram Panchayat-wise work participation rate during field survey in study area. Gram Panchayat-wise highest work participation rate can be found in Bidhan nagar II (59.33 percent) in Phansidewa C.D. Block. Among the four C.D. Blocks in the study area Phansidewa C.D. Block has the highest rural tribal concentration and most of them work as tea garden labourers. Not only males but also the females of the households work in the tea garden. That is why Phansidewa block has the highest work participation rate (52.52 percent) as well as highest female work participation rate (45.81 percent). Kharibari C.D.Block is 2nd highest in the mentioned parameters. Gram Panchayat-wise lowest work participation rate and

lowest female work participation rate can be found in Atharokhai in Matigara C.D. Block. The percentages are only 39.29 percent and 27.27 percent respectively.

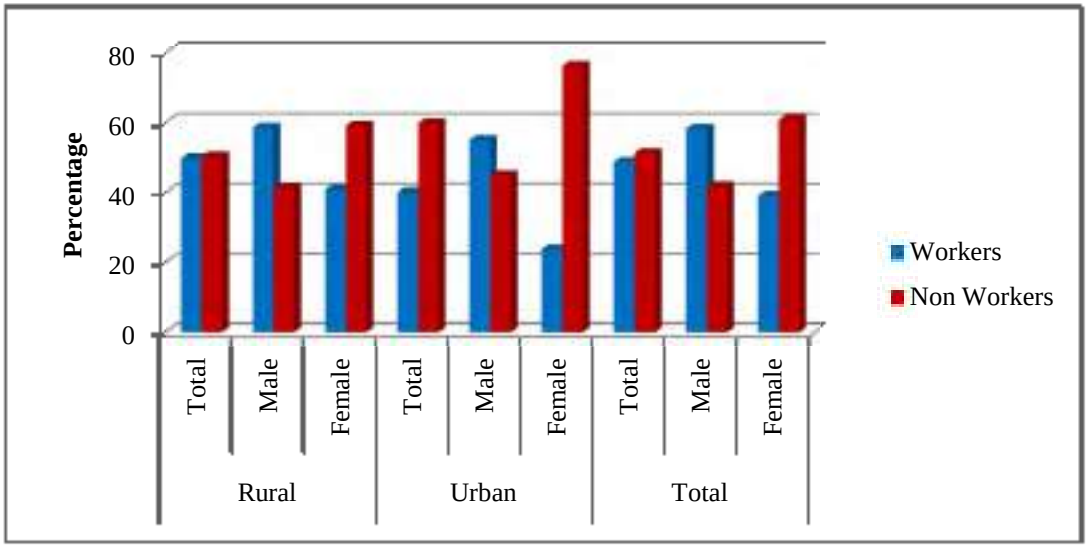

Fig. 3.33: Rural Urban Distribuiton of Workers & Non-Workers of Scheduled Tribe Population

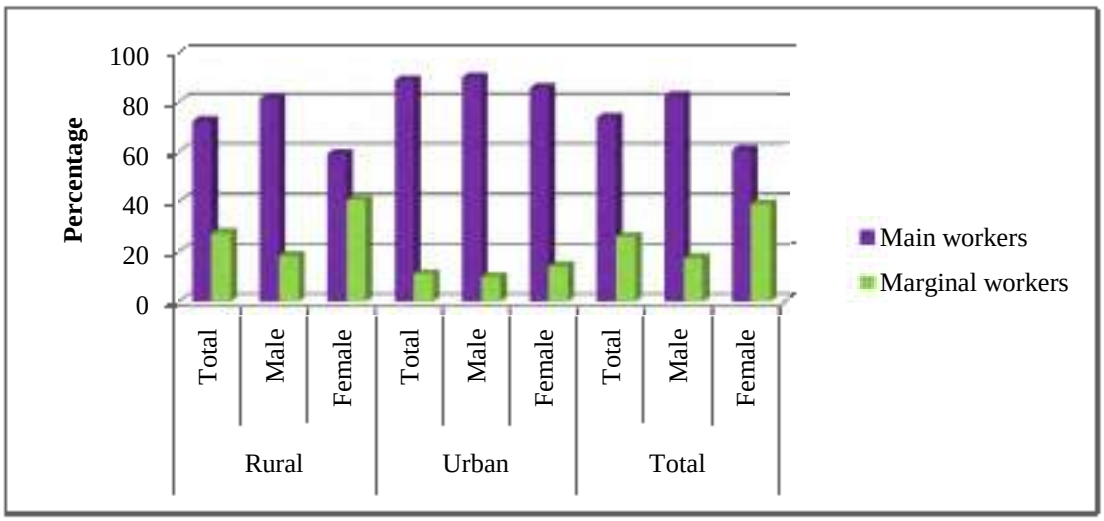

Fig. 3.34: Rural Urban Distribution of Main & Marginal Workers of Scheduled Tribe Population

As discussed earlier, out of total working tribal population share percentage of main workers are significantly high. In all the Gram Panchayats main worker's percentage is higher than the marginal worker. Two Gram Panchayats namely Bidhan Nagar I and Raniganj Panisali have a lot more marginal workers comparing to the other Gram Panchayats in the study area. 44.43 percent in Bidhan Nagar I and 48.48 percent in Raniganj Panisala of the total tribal working population in those Gram Panchayats are classified as marginal workers. In almost all the Gram Panchayats

of Phansidewa and Kharibari C.D.Blocks female marginal workers percentage are high because of highly concentrated seasonal female tea garden labourers.

Table 3.48 Gram Panchayat-wise Percentage Distribution of Worker and Non-Worker of Scheduled Tribe Population

Name of the Block/GP	Worker			Non-Worker		
	Total	Male	Female	Total	Male	Female
Matigara	47.87	59.36	35.95	52.13	40.64	64.05
Champasari	45.97	62.30	30.16	54.03	37.70	69.84
Matigara I	45.00	59.09	27.78	55.00	40.91	72.22
Matigara II	44.44	55.56	33.33	55.56	44.44	66.67
Atharokhai	39.29	47.06	27.27	60.71	52.94	72.73
Patharghata	53.46	58.02	48.72	46.54	41.98	51.28
Naxalbari	47.58	57.37	37.55	52.42	42.63	62.45
Naxalbari	45.24	63.41	27.91	54.76	36.59	72.09
Upper Bagdogra	43.57	53.03	35.14	56.43	46.97	64.86
Hatighisa	46.07	51.11	40.91	53.93	48.89	59.09
Gossaipur	45.45	51.72	38.46	54.55	48.28	61.54
Lower Bagdogra	55.26	60.87	46.67	44.74	39.13	53.33
Maniram	55.56	65.96	44.19	44.44	34.04	55.81
Phansidewa	52.52	59.27	45.81	47.48	40.73	54.19
Hetmuri	52.27	58.56	45.87	47.73	41.44	54.13
Bidhan Nagar I	51.33	56.60	46.67	48.67	43.40	53.33
Bidhan Nagar II	59.33	60.53	58.11	40.67	39.47	41.89
Chathat Bansgao	48.53	55.56	40.63	51.47	44.44	59.38
Ghoshpukur	50.00	62.96	38.33	50.00	37.04	61.67
Jalash Nijamtara	52.38	66.67	33.33	47.62	33.33	66.67
Phasidewa	42.86	57.14	28.57	57.14	42.86	71.43
Kharibari	49.76	57.82	41.78	50.24	42.18	58.22
Binnabari	47.87	58.14	39.22	52.13	41.86	60.78
Buraganj	52.34	58.46	46.03	47.66	41.54	53.97
Kharibari Panisali	49.25	65.52	36.84	50.75	34.48	63.16
Raniganj Panisali	48.89	54.05	42.62	51.11	45.95	57.38

Source: Field Survey 2019-20

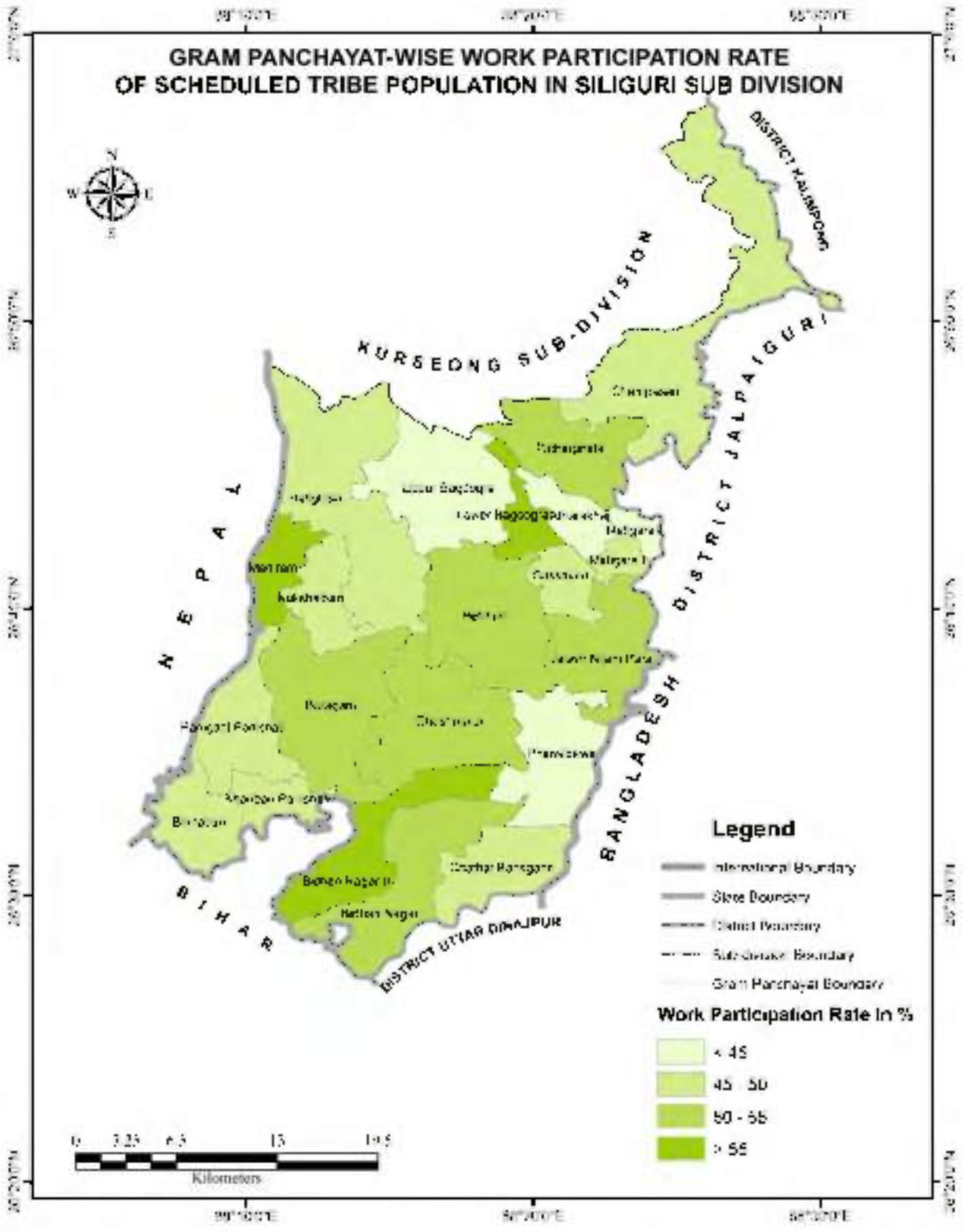
GRAM PANCHAYAT-WISE WORK PARTICIPATION RATE
OF SCHEDULED TRIBE POPULATION IN SILIGURI SUB DIVISION
KURSEONG SUB-DIVISION
DISTRICT KALIMPONG
DISTRICT JALPAIGURI
NEPAL
BANGLADESH
BIHAR
DISTRICT UTTAR DINAJPUR
Legend
International Boundary
State Boundary
District Boundary
Sub-division Boundary
Gram Panchayat Boundary
Work Participation Rate in %
< 45
45 - 50
50 - 55
> 55
Kilometers

Fig. 3.35

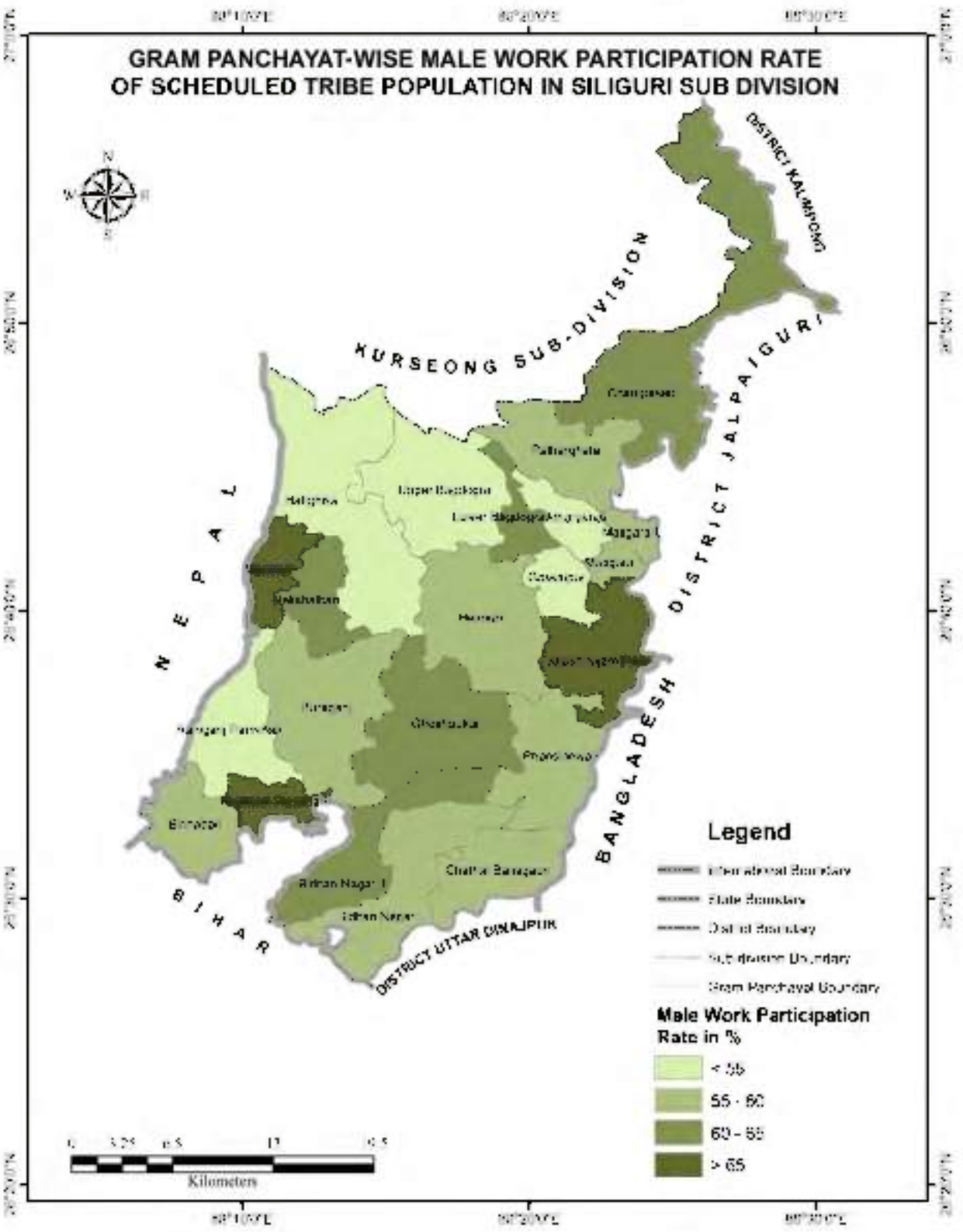
GRAM PANCHAYAT-WISE MALE WORK PARTICIPATION RATE
OF SCHEDULED TRIBE POPULATION IN SILIGURI SUB DIVISION
KURSEONG SUB-DIVISION
DISTRICT KALIMPONG
DISTRICT JALPAIGURI
NEPAL
BANGLADESH
BIHAR
DISTRICT UTTAR DINAJPUR
Legend
Male Work Participation Rate in %
< 55
55 - 60
60 - 65
> 65
Kilometers

Fig. 3.36

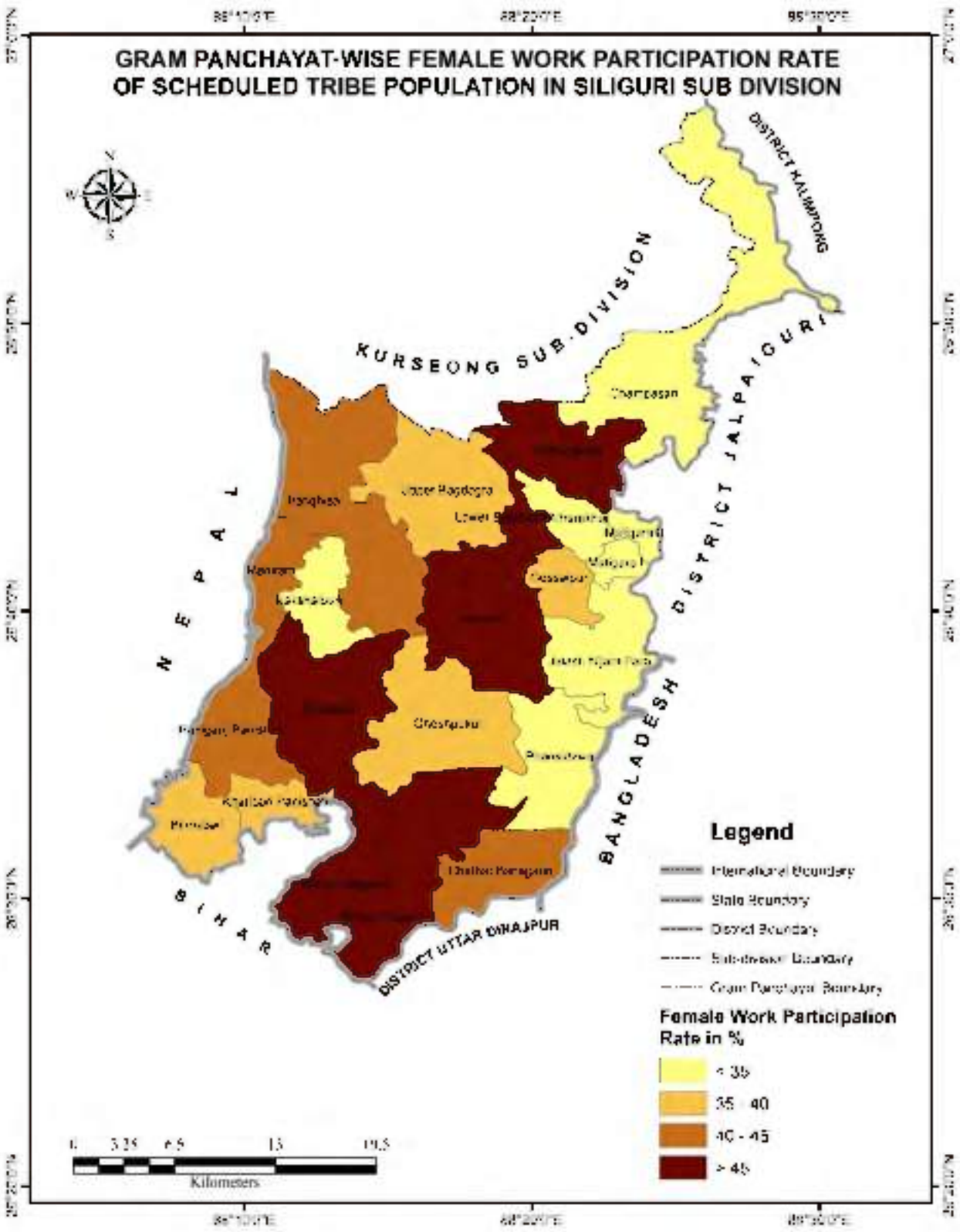
GRAM PANCHAYAT-WISE FEMALE WORK PARTICIPATION RATE
OF SCHEDULED TRIBE POPULATION IN SILIGURI SUB DIVISION
KURSEONG SUB-DIVISION
DISTRICT KALIMPONG
DISTRICT JALPAIGURI
BANGLADESH
NEPAL
BIHAR
DISTRICT UTTAR DINAJPUR
Legend
International Boundary
State Boundary
District Boundary
Sub-division Boundary
Gram Panchayat Boundary
Female Work Participation Rate in %
< 35
35 - 40
40 - 45
> 45
Kilometers

Fig. 3.37

Table 3.49 Gram Panchayat-wise Percentage Distribution of Main Worker and Marginal Worker of Scheduled Tribe Population

Name of the Block/GP	Main Worker			Marginal Worker		
	Total	Male	Female	Total	Male	Female
Matigara	80.93	88.59	67.82	19.07	11.41	32.18
Champasari	80.70	90.79	60.53	19.30	9.21	39.47
Matigara I	83.33	84.62	80.00	16.67	15.38	20.00
Matigara II	87.50	100.00	66.67	12.50	0.00	33.33
Atharokhai	81.82	87.50	66.67	18.18	12.50	33.33
Patharghata	80.00	85.11	73.68	20.00	14.89	26.32
Naxalbari	78.39	89.58	60.87	21.61	10.42	39.13
Naxalbari	84.21	88.46	75.00	15.79	11.54	25.00
Upper Bagdogra	73.77	85.71	57.69	26.23	14.29	42.31
Hatighisa	75.61	86.96	61.11	24.39	13.04	38.89
Gossaipur	80.00	86.67	70.00	20.00	13.33	30.00
Lower Bagdogra	90.48	92.86	85.71	9.52	7.14	14.29
Maniram	76.00	96.77	42.11	24.00	3.23	57.89
Phansidewa	66.67	73.93	57.32	33.33	26.07	42.68
Hetmuri	68.70	67.69	70.00	31.30	32.31	30.00
Bidhan Nagar I	55.17	63.33	46.43	44.83	36.67	53.57
Bidhan Nagar II	67.42	78.26	55.81	32.58	21.74	44.19
Chathat Bansgao	66.67	80.00	46.15	33.33	20.00	53.85
Ghoshpukur	71.93	85.29	52.17	28.07	14.71	47.83
Jalash Nijamtara	63.64	75.00	33.33	36.36	25.00	66.67
Phasidewa	75.00	75.00	75.00	25.00	25.00	25.00
Kharibari	66.82	77.05	52.81	33.18	22.95	47.19
Binnabari	80.00	88.00	70.00	20.00	12.00	30.00
Buraganj	70.15	86.84	48.28	29.85	13.16	51.72
Kharibari Panisali	72.73	78.95	64.29	27.27	21.05	35.71
Raniganj Panisali	51.52	60.00	38.46	48.48	40.00	61.54

Source: Field Survey 2019-20

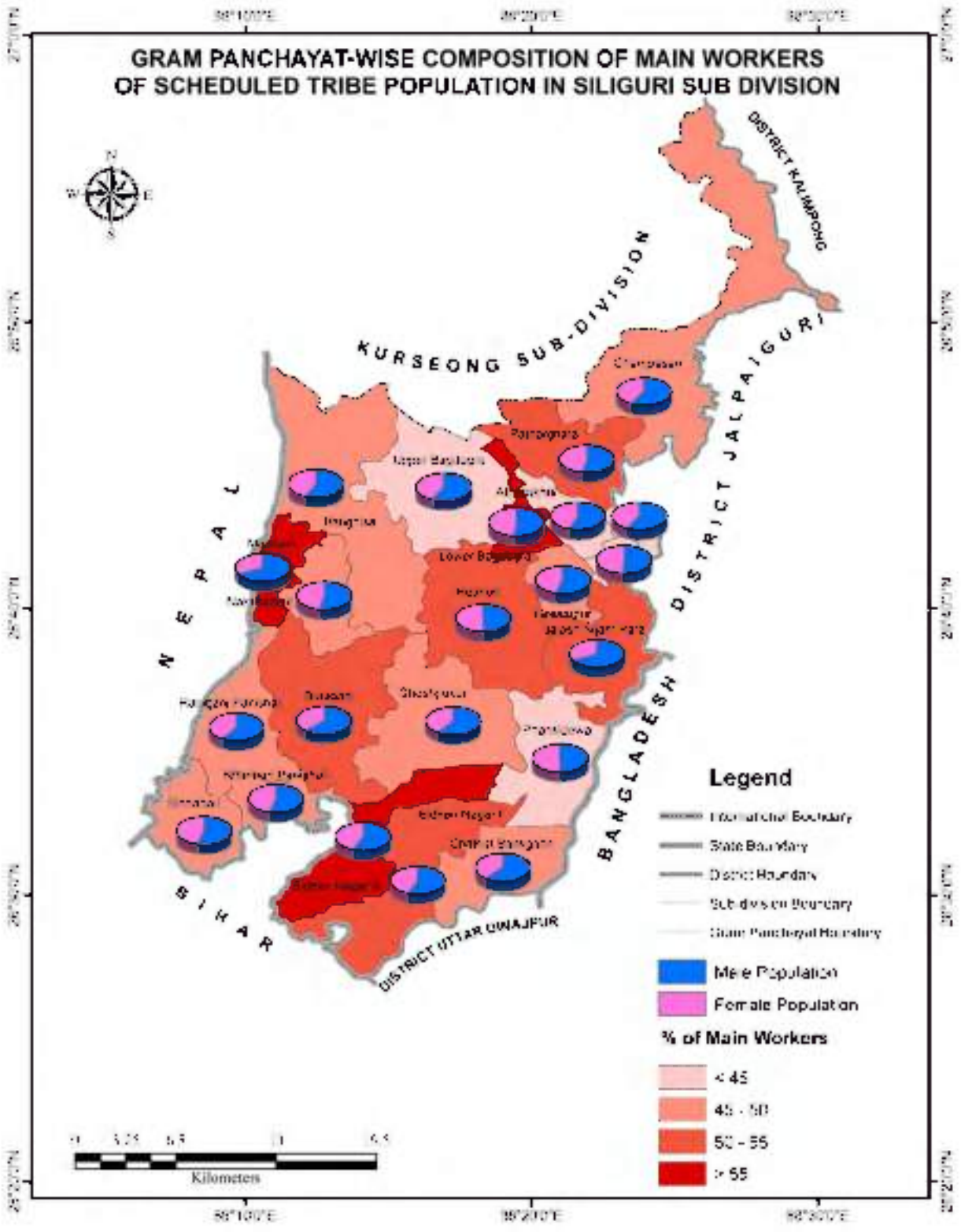
GRAM PANCHAYAT-WISE COMPOSITION OF MAIN WORKERS
OF SCHEDULED TRIBE POPULATION IN SILIGURI SUB DIVISION
KURSEONG SUB-DIVISION
DISTRICT KALIMPONG
DISTRICT JALPAIGURI
NEPAL
BANGLADESH
BIHAR
DISTRICT UTTAR DINAJPUR
Legend
State Boundary
District Boundary
Male Population
Female Population
% of Main Workers
< 45
45 - 50
50 - 55
> 55
Kilometers

Fig. 3.38

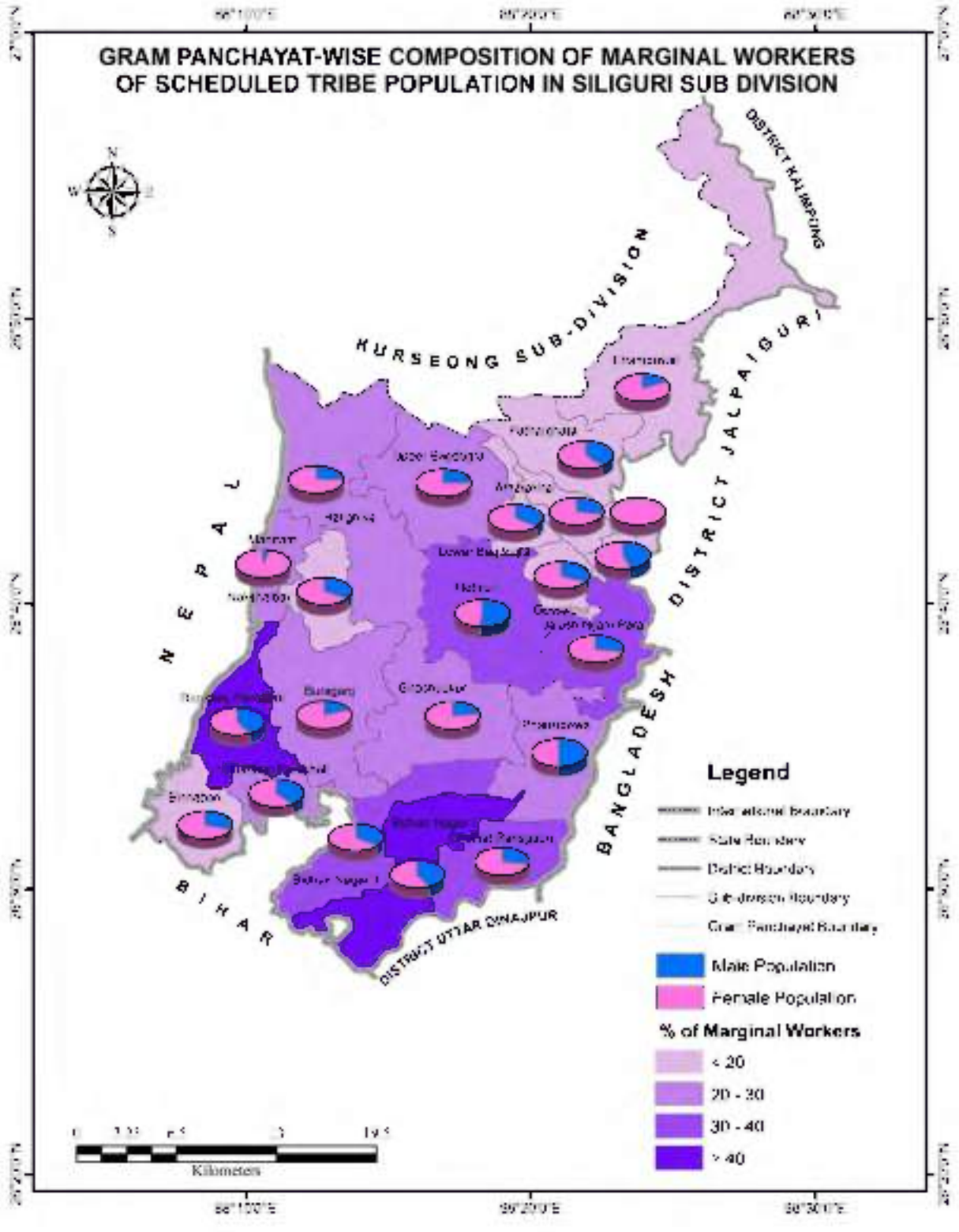
GRAM PANCHAYAT-WISE COMPOSITION OF MARGINAL WORKERS
OF SCHEDULED TRIBE POPULATION IN SILIGURI SUB DIVISION
KURSEONG SUB-DIVISION
DISTRICT KALIMPONG
DISTRICT JALPAIGURI
NEPAL
BANGLADESH
BIHAR
DISTRICT UTTAR DINAJPUR
Legend
Male Population
Female Population
% of Marginal Workers
< 20
20 - 30
30 - 40
> 40
Kilometers

Fig. 3.39

3.4.2 Occupational Categories

The study of occupational categories helps to understand the detail classification of workforce of an area. To study the economic condition of a community in a systematic way, the population needs to be classified according to their nature of economic activities. According to nature of different economic activities in the study area, the worker group can be categorized into 09 (Nine) different categories; cultivator, agricultural labourer, plantation worker i.e. tea garden worker, industry worker, daily labourer, business person, private sector employee, government sector employee and other worker. Other worker mainly involves self-employed persons, servant and labourer on monthly salary basis and household industry. Table 3.50 shows the percentage share of different tribal worker groups in the study area. As discussed earlier, that the majority concentration of tribal population is tea garden centric; it is obvious that majority of the workers are associated with tea garden sector. More than half of the working population (53.24 percent) work as plantation worker i.e tea garden worker. More interestingly 70 percent of the total female workforce in study area comes under this category. This is mainly because of high demand of female workers in tea gardens at the time of plucking seasons. 42.18 percent of tribal male worker works as plantation worker. After tea garden worker, the working group that shares second highest percentage is daily labourer. Almost one fifth of the total tribal workforce (19.19 percent) comes under this working group. Daily labourers mainly involve in construction associated work. Some are also work in some shops as daily wage earners. Percentages of male and female daily labourers are 22.53 percent and 14.13 percent respectively. Only 9.42 percent of workers are associated with private sectors. Although female private sector workers are very marginal. Only 3.70 percent of female workers work in private sector and the percentage for male worker in this sector is 13.20 percent. Other worker group shares 5.27 percent of total tribal workforce. The remaining categories i.e. cultivator (3.28 percent), agricultural labourer (2.33 percent), industry worker (2.51 percent), business person (3.20 percent) and government sector (1.82 percent) share very minimal percentages of total tribal workforce.

In urban areas a lot of tribal workers work as daily labourer. Table 3.50 shows 33.33 percent of total urban tribal working group work as daily labourer and it is highest among all work categories. For male and female the percentages are 35.21 percent and 28.57 percent respectively. A lot of urban tribal population works at different financial institutions, hotels, motels, restaurants, shopping malls and different small companies. There is no gender inequality present here. Percentage share for male (29.58 percent) and female (25.00 percent) private sector workers are almost same. Urban tribal females also work as maids or servants. Almost one fifth

of tribal female workforce in urban areas comes under other worker (17.86 percent). Other than these, a small portion of tribal workforce of urban areas work as industry worker (5.05 percent) and in government sector (7.07 percent).

Table 3.50 Rural Urban Distribution of Occupational Categories of Scheduled Tribe Workforce

Category	Rural			Urban			Total		
	Total	Male	Female	Total	Male	Female	Total	Male	Female
Cultivator	3.21	4.47	1.39	4.04	4.23	3.57	3.28	4.45	1.52
Agri. labourer	2.27	2.40	2.08	3.03	2.82	3.57	2.33	2.44	2.17
Plantation	58.03	46.96	74.07	2.02	0.00	7.14	53.24	42.18	70.00
Industry Worker	2.27	3.67	0.23	5.05	5.63	3.57	2.51	3.87	0.43
Daily Labourer	17.86	21.09	13.19	33.33	35.21	28.57	19.19	22.53	14.13
Business	2.93	3.35	2.31	6.06	7.04	3.57	3.20	3.73	2.39
Private Sector	7.66	11.34	2.31	28.28	29.58	25.00	9.42	13.20	3.70
Govt Sector	1.32	1.76	0.69	7.07	7.04	7.14	1.82	2.30	1.09
Other	4.73	4.95	4.40	11.11	8.45	17.86	5.27	5.31	5.22

Source: Field Survey 2019-20

Majority of rural tribal workforce either works at tea garden or works as a daily labourer. Although tea garden sector is the main supply chain of rural tribal economy. Primary data shows (Table 3.50) 58.03 percent of total rural workforce is plantation worker. Not only this, 74.07 percent of rural female workforce work as plantation worker. For male the percentage is 46.96 percent. Block-wise data shows other than Naxalbari C.D. Block, in all the blocks more than half of the tribal working population are plantation workers; Phansidewa C.D. Block (72.53 percent) having the highest percentage of plantation workers. So, it is very much clear that rural tribal economic activities mainly revolve around the tea gardens. 17.86 percent of rural workforce does work as daily labourers, mostly associated with construction work. During field survey it has been observed that in Naxalbari C.D. Block 22.46 percent of tribal workers are daily labourers. This is highest among the four blocks. In Matigara, Phansidewa and Kharibari C.D Blocks the percentages are 15.68 percent, 14.93 percent and 20.38 percent respectively. As Matigara C.D Block being the immediate adjacent to Siliguri Municipal Corporation, a lot of tribal people as respondent revealed that everyday they went to the ‘town’ to work in some private sector offices. The percentage of private sector working group in Matigara C.D. Block is 15.25 percent which is highest among all the four blocks.

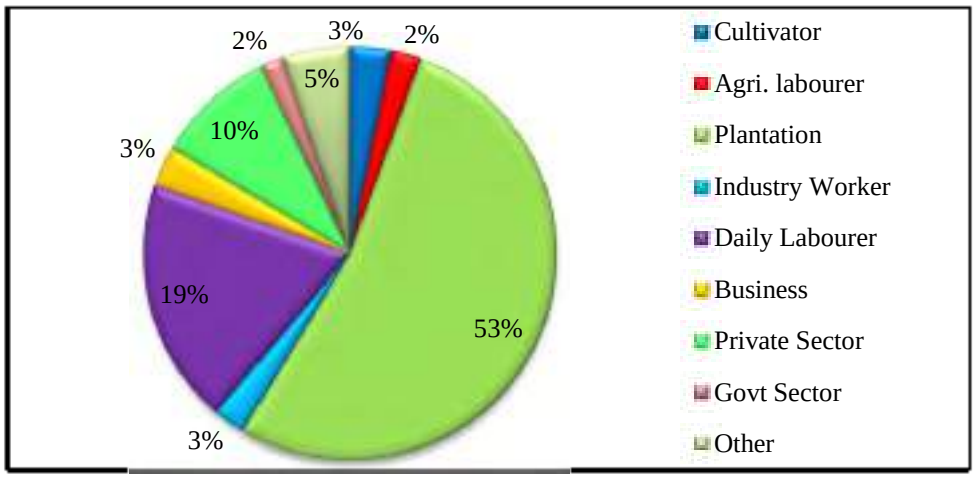

Fig. 3.40: Occupational Structure of Scheduled Tribe Population

Table 3.51 Block-wise Occupational Structure of Scheduled Tribe Population

Name of the Block	Cultivator			Agricultural Labourer			Plantation		
	Total	Male	Female	Total	Male	Female	Total	Male	Female
Matigara	0.42	0.67	0	1.69	2.68	0	59.32	45.64	82.76
Naxalbari	8.47	12.5	2.17	6.78	5.56	8.7	30.93	20.14	47.83
Phansidewa	1.07	1.42	0.61	0.53	0.47	0.61	72.53	62.56	85.37
Kharibari	4.27	4.92	3.37	0.95	1.64	0	61.14	53.28	71.91

Name of the Block	Industry Worker			Daily Labourer			Business		
	Total	Male	Female	Total	Male	Female	Total	Male	Female
Matigara	1.69	2.68	0.00	15.68	18.12	11.49	0.85	1.34	0.00
Naxalbari	2.97	4.86	0.00	22.46	23.61	20.65	6.36	6.94	5.43
Phansidewa	2.4	4.27	0.00	14.93	19.43	9.15	1.87	1.90	1.83
Kharibari	1.9	2.46	1.12	20.38	24.59	14.61	3.32	4.10	2.25

Name of the Block	Private Sector			Govt Sector			Others		
	Total	Male	Female	Total	Male	Female	Total	Male	Female
Matigara	15.25	22.15	3.45	1.69	2.68	0.00	3.39	4.03	2.3
Naxalbari	8.47	12.5	2.17	1.69	2.08	1.09	13.56	11.81	16.3
Phansidewa	3.73	5.69	1.22	1.07	1.42	0.61	1.87	3.32	0.00
Kharibari	5.21	6.56	3.37	0.95	0.82	1.12	1.42	0.82	2.25

Source: Field Survey 2019-20

3.4.3 Employed Member per Household

Table 3.52 reflects the primary data for employed member per tribal household in the study area. Previously in table 3.47 it has been shown that in tribal communities' gender gap in case of

employment is not as alarming as that of the other communities. Rather it is very much promising in rural areas. In rural areas for tribal households each adult members are considered as medium of income. To generate more income both able male and female go to work. That is why in rural areas two employed members per tribal household percentage (54.03 percent) is highest. Overall in Siliguri Sub-division the percentage is 51.89 percent. Out of the total sample households surveyed, in 16.79 percent tribal households working members were three and in 10.75 percent households the number is more than three. Block-wise in rural areas Phansidewa C.D. Block has the highest three employed member per household (20.95 percent). Followed by Kharibari C.D. Block (18.89 percent). Highest single earning member household can be seen in Matigara C.D. Block (26.36 percent) as this is very next to Siliguri MC (Part). In urban areas the trend of single earning member household is very prominent. 44.83 percent of total urban tribal household are depending on single earning member.

Table 3.52 Employed Members per Household

Employed member per Household	Rural	Urban	Total
1	17.58	44.83	20.57
2	54.03	34.48	51.89
3	17.37	12.07	16.79
4& more	11.02	8.62	10.75

Source: Field Survey 2019-20

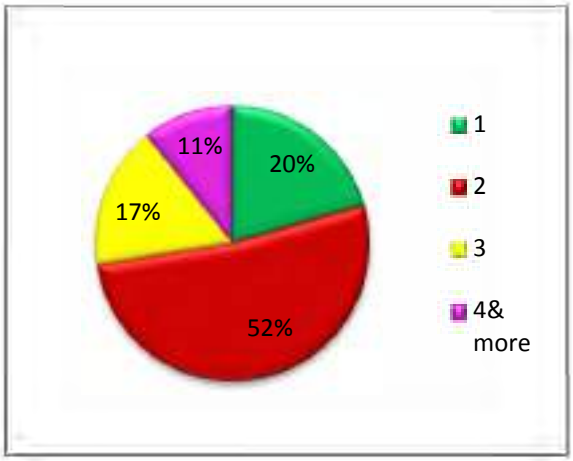

Fig. 3.41: Employed Members per Scheduled Tribe Household

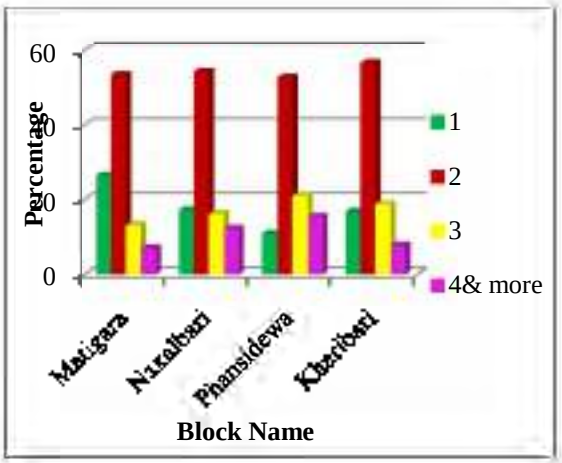

Fig. 3.42: Block-wise Distribution of Employed Members per Scheduled Tribe Household

Table 3.53 Block-wise Distribution of Employed Members per Household

Name of the Block	Employed Member per Household			
	1	2	3	4& more
Matigara	26.36	53.49	13.18	6.98
Naxalbari	17.14	54.29	16.19	12.38
Phansidewa	10.81	52.7	20.95	15.54
Kharibari	16.67	56.67	18.89	7.78

Source: Field Survey 2019-20

3.4.4 Relation between Work Participation Rate and Age Group

Table 3.54 shows work participation rate among tribal working population according to their age in the study area. Through this table it can be seen that out of the total sample tribal working population surveyed, almost 74.07 percent of them are 15 to 44 years of age group. In which 34.83 percent are 15 to 29 years of age and 39.24 percent are 30 to 44 years of age. For female workforce the highest percentage can be seen in 30 to 44 years age band. The chart shows senior citizen worker group is rare in the study area. This is a good sign for a community. For rural and urban both the trend is same. In both the areas highest age band of working population can be seen in 30 to 44 years of age. During field survey, in rural areas a lot of male respondents responded that they didn't continue their study after secondary or higher secondary, rather they went to work to earn for their family. But in urban areas this percentage was less. This is why the in rural areas 37.22 percent of male workers are in the age band of 15-29 years of age and in urban this percentage is 28.17 percent.

Table 3.54 Work Participation Rate according to Age Group

Work Participation according to age	Rural			Urban			Total		
	Total	Male	Female	Total	Male	Female	Total	Male	Female
15-29	35.26	37.22	32.41	30.30	28.17	35.71	34.83	36.30	32.61
30-44	39.98	36.58	44.91	44.12	45.07	42.86	39.24	35.58	44.78
45-59	19.57	20.13	18.75	25.58	26.76	21.43	21.18	22.67	18.91
60 & above	5.20	6.07	3.94	0.00	0.00	0.00	4.75	5.45	3.70

Source: Field Survey 2019-20

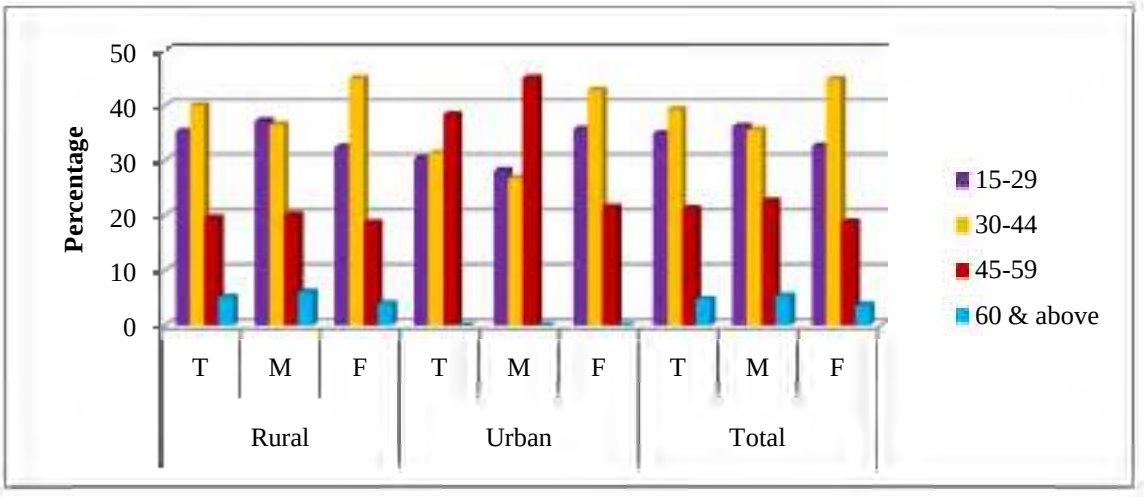

Fig. 3.43: Rural Urban Distribution of Age Group-wise Work Participation Rate

Table 3.55 Block-wise Work Participation Rate according to Age Group

Name of the Block	15-29			30-44			45-59			60 & above		
	T	M	F	T	M	F	T	M	F	T	M	F
Matigara	38.56	38.26	39.08	38.98	36.24	43.68	18.22	20.81	13.79	4.24	4.7	3.45
Naxalbari	32.2	34.03	29.35	37.71	35.42	41.3	22.03	22.92	20.65	8.05	7.64	8.7
Phansidewa	37.07	39.34	34.15	39.73	38.39	41.46	18.93	16.11	22.56	4.27	6.16	1.83
Kharibari	31.75	36.07	25.84	44.08	35.25	56.18	19.43	22.95	14.61	4.74	5.74	3.37

Source: Field Survey 2019-20

3.4.5 Monthly Household Income

Income of a household means the collective income by the members of a household. Often it is measured on monthly basis. Income of a household is the fuel to meet its daily consumption and basic needs. Income of a household indicates its affordability. It is also the indicator of economic health of a household. Higher income means higher affordability of a household. It opens up the opportunity to enjoy some basic to luxurious amenities. Here, the surveyed tribal households have been classified into four categories as per their monthly income; households having monthly income of (i) less than rupees 5000, (ii) rupees 5001-10000, (iii) rupees 10001-15000 and (iv) above rupees 15000. Out of the total tribal households surveyed, half of them (50.19 percent) have monthly income between rupees 5001-10000 (Table 3.56). 17.36 percent households have monthly income range of rupees 10001-15000 and 21.51 percent households come under the monthly income slab of less than 5000. In total 10.94 percent of tribal households have a monthly income of more than rupees 15000. Although urban percentage of this income slab is much higher than the rural. 25.86 percent of urban tribal households have monthly income of above rupees 15000 and in rural the percentage is only 9.11 percent So, it can

be seen that monthly household income of 71.70 percent tribal household in the study area is within rupees 10000 and it justifies the fact that the most of the tribal population in the study area comes under the lower income category. Gram Panchayat-wise Naxalbari (33.33 percent) and Lower Bagdogra (28.57 percent) in Naxalbari C.D Block have highest percentage of this income band. Block-wise highest percentage of this income band can be seen in Naxalbari C.D. Block (12.38 percent) itself. A main reason behind this is during field survey a considerable number of respondents responded that members of their "family" work outside of West Bengal, mainly in Gujurat, Maharastra, Delhi, Tamilnadu and Kerala. They earn a good amount of money there and send the money to their family down here at Naxalbari block. The lowest monthly household income can be seen in Kharibari Panisali and Atharokhai GP. 46.67 percent and 42.86 percent of total tribal household of the respective GPs' have monthly income less than rupees 5000. Both the block Phansidewa and Kharibari involve highest work participation rate as well as highest percentage of household with monthly income less than 5000. This is only because of the monopoly plantation working sector in these two blocks. From table 3.51 it can be seen that Phansidewa involves 72.53 percent of working population in plantation sector and for Kharibari this percentage is 61.14 percent, top two in the study area. It is also to be noted that the majority of ownership of house status of these two blocks mainly recorded as "Neither own nor rented" (Table 3.20). This is also because of the working sector with which the majority of the tribal population of these areas are involved with. 58.11 percent of the tribal household of Phansidewa C.D. Block has ownership status of their houses as "Neither own nor rented" (Table 3.20). In Naxalbari C.D. Block only 30.93 percent (lowest among all the four blocks) of tribal working population is engaged with plantation sector and 65.71 percent of tribal household has monthly household income up to 10000 (Among all the four blocks in Naxalbari the percentage of monthly household income up to 10000 is lowest and it has highest percentage of monthly household income more than 10000) (Table 3.57). During survey it has been recorded that only 28.57 percent of household has ownership status of their house as "Neither own nor rented" and 62.86 percent of household has own ownership of house (Table 3.20). So, there is a proper relationship between the income and ownership of house among the tribal population in the study area. As the monthly income of a tribal household increases, the percentage of own ownership status of household also increases. Table 3.58 shows the percentage of "own ownership" of houses is lowest (35.96 percent) when the monthly family income is less than 5000. And for this income category 57.89 percent of household has been recorded ownership of house as "Neither own nor rented". The table 3.58 also shows highest percentage of "own ownership" (77.59 percent) of house recorded when the monthly household income is above 15000.

Table 3.56 Rural Urban Distribution of Monthly Household Income

Income	Rural	Urban	Total
less than 5000	22.25	15.52	21.51
5001-10000	51.06	43.10	50.19
10001-15000	17.58	15.52	17.36
above 15000	9.11	25.86	10.94

Source: Field Survey 2019-20

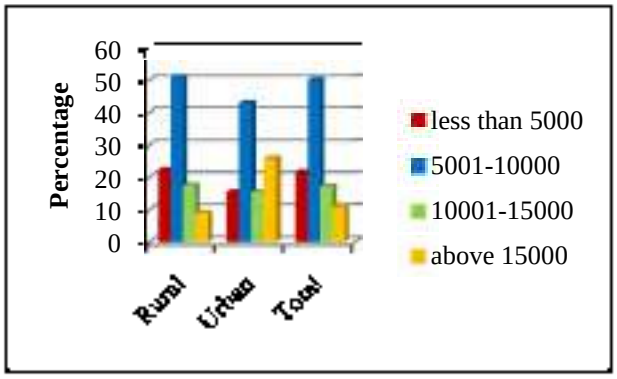

Fig. 3.44: Rural Urban Distribution of Monthly Household Income

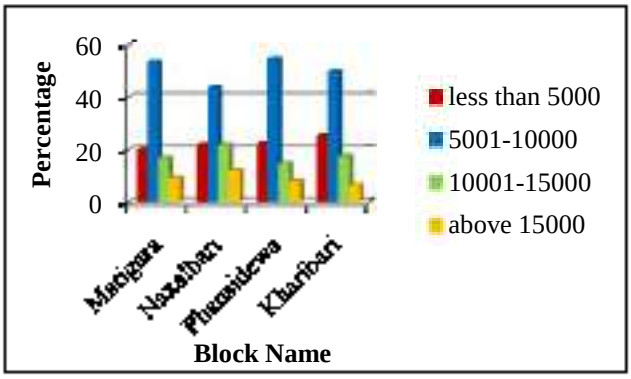

Fig. 3.45: Block-wise Distribution of Monthly Household Income

Table 3.57 Gram Panchayat-wise Distribution of Monthly Household Income

Name of the Block/GP	Income			
	less than 5000	5001-10000	10001-15000	above 15000
Matigara	20.16	53.49	17.05	9.30
Champasari	9.23	66.15	13.85	10.77
Matigara I	15.17	59.83	16.67	8.33
Matigara II	16.67	66.67	0.00	16.67
Atharokhai	42.86	28.57	14.29	14.29
Patharghata	23.08	46.15	25.64	5.13
Naxalbari	21.90	43.81	21.90	12.38
Naxalbari	13.33	40.00	13.33	33.33
Upper Bagdogra	20.69	37.93	34.48	6.90
Hatighisa	19.05	66.67	9.52	4.76
Gossaipur	14.29	64.29	14.29	7.14
Lower Bagdogra	14.29	14.29	42.86	28.57
Maniram	42.11	26.32	21.05	10.53
Phansidewa	22.30	54.73	14.86	8.11
Hetmuri	26.67	53.33	13.33	6.67
Bidhan Nagar I	16.00	76.00	8.00	0.00
Bidhan Nagar II	27.59	41.38	20.69	10.34
Chathat Bansgao	6.67	60.00	20.00	13.33

Name of the Block/GP	Income			
	less than 5000	5001-10000	10001-15000	above 15000
Ghoshpukur	27.27	50.00	9.09	13.64
Jalash Nijamtara	40.00	40.00	20.00	0.00
Phasidewa	0.00	57.14	28.57	14.29
Kharibari	25.56	50.00	17.78	6.67
Binnabari	5.88	47.06	35.29	11.76
Buraganj	14.81	55.56	22.22	7.41
Kharibari Panisali	46.67	33.33	13.33	6.67
Raniganj Panisali	35.48	54.84	6.45	3.23

Source: Field Survey 2019-20

Table 3.58 Relation between Income and Ownership of Houses

Household Monhly Income	Ownership Status of House		
	Own	Rented	Neither Own nor Rented
less than 5000	35.96	6.14	57.89
5001-10000	38.72	4.89	56.39
10001-15000	63.04	8.7	28.26
above 15000	77.59	6.9	15.52

Source: Field Survey 2019-20

3.4.6 Economic Development Index

To find out economic development status of the study area Economic Development Index has been derived. To prepare this index the same process of finding Social Development Index (Table 3.21) has been followed. Here seven housing variables have been selected. All of seven variables are positive variables.

The economic variables are:

1. Work Participation Rate(X12)
2. Male Work Participation Rate(X13)
3. Female Work Participation Rate (X14)
4. Main Workers(X15)
5. Male Main Workers(X16)
6. Female Main Workers(X17)
7. Monthly Household Income above 10000 (X18)

Like the values of the Housing Development Index, the values of Economic Development Index vary between ranges of 0 to 1. The Index value 1 represents the best condition and 0 represents the worst condition.

Table 3.59 Gram Panchayat-wise Economic Development Index

Name of the Block/GP	X12	X13	X14	X15	X16	X17	X18	Economic Index
Matigara	0.26	1.00	0.00	1.00	0.94	1.00	0.30	0.64
Champasari	0.33	0.78	0.09	0.75	0.77	0.52	0.26	0.50
Matigara I	0.28	0.61	0.02	0.82	0.62	0.89	0.27	0.50
Matigara II	0.26	0.43	0.20	0.92	1.00	0.64	0.14	0.51
Atharokhai	0.00	0.00	0.00	0.78	0.69	0.64	0.32	0.35
Patharghata	0.71	0.56	0.70	0.73	0.63	0.77	0.36	0.64
Naxalbari	0.00	0.00	0.16	0.82	1.00	0.54	1.00	0.50
Naxalbari	0.30	0.83	0.02	0.84	0.71	0.80	0.61	0.59
Upper Bagdogra	0.21	0.30	0.26	0.57	0.64	0.47	0.53	0.42
Hatighisa	0.34	0.21	0.44	0.62	0.67	0.53	0.10	0.42
Gossaipur	0.31	0.24	0.36	0.73	0.67	0.70	0.21	0.46
Lower Bagdogra	0.80	0.70	0.63	1.00	0.82	1.00	1.00	0.85
Maniram	0.81	0.96	0.55	0.63	0.92	0.17	0.37	0.63
Phansidewa	1.00	0.95	1.00	0.00	0.00	0.30	0.00	0.46
Hetmuri	0.65	0.59	0.60	0.44	0.19	0.70	0.19	0.48
Chathat Bansgao	0.46	0.43	0.43	0.39	0.50	0.24	0.40	0.41
Bidhan Nagar I	0.60	0.49	0.63	0.09	0.08	0.25	0.00	0.31
Bidhan Nagar II	1.00	0.39	0.52	0.41	0.29	0.20	0.28	0.43
Ghoshpukur	0.53	0.81	0.36	0.52	0.63	0.36	0.23	0.49
Jalash Nijamtara	0.65	1.00	0.20	0.31	0.38	0.00	0.19	0.39
Phasidewa	0.18	0.51	0.04	0.60	0.38	0.80	0.55	0.44
Kharibari	0.44	0.23	0.59	0.01	0.20	0.00	0.13	0.23
Binnabari	0.43	0.56	0.39	0.73	0.70	0.70	0.62	0.59
Buraganj	0.65	0.58	0.61	0.48	0.67	0.29	0.34	0.52
Kharibari Panisali	0.50	0.94	0.31	0.54	0.47	0.59	0.19	0.51
Raniganj Panisali	0.48	0.36	0.50	0.00	0.00	0.10	0.03	0.21

Source: Calculated by the Researcher

The table 3.59 shows block-wise and Gram Panchayat-wise economic development status by showing their Economic Development Index. In the study area block-wise best economic condition is found in Matigara .C.D. Block (0.64) followed by Naxalbari C.D. Block (0.50). The worst economic development condition is found in Kharibari C.D. Block (0.23) and it is followed by Phansidewa C.D. Block (0.46). In Matigara C.D. Block out of the seven economic variables, DI values of three variables; Male Work Participation Rate (X13), Total Main Workers (X15) & Female Main Worker(X17); are 1. That means in these three economic parameters Matigara C.D. Block is in best condition among the four blocks in the study area. Gram Panchayat-wise best economic condition is found in Lower Bagdogra GP (0.85) followed

by Patharghata GP (0.64). The worst economic development condition is found in Raniganj Panishali GP (0.21) and it is followed by Bidhan Nagar I (0.31). In Lowe Bagdogra GP out of the total 7 economic variables 3 variables, Main Worker (X15), Female main worker (X17) and Monthly Household income above 10000 (X18) are in best condition among all the Gram Panchayats. In addition to that DI values of another two economic variables Work participation rate (X12) and Male main worker (X16) are on higher side. The collective status of these four economic variables is the main reason of Lower Bagdogra GP becoming the Gram Panchayat with best economic development status in the study area. In Raniganj Panisali GP DI values of 2 variables, Main Workers (X15) and Male main workers (X16) out of the 7 economic variables, are in worst condition. The DI values of Female main worker (X17) and Monthly Household income above 10000 (X18) are also on the very lower side. And the very poor status of these four economic variables cause the Raniganj Panisali to become the worst economically developed Gram Panchayat among all the 22 GP in the study area. For this study the Gram Panchayats are classified into three groups, Developed, Moderately Developed and Least Developed; according to their value of Eeconomic Development Index. The Gram Panchayats having Economic Development Index Value of greater than 0.60 has been classified as Developed. Gram Panchayats having Index values between 0.45-0.60 have been classified as Moderately Developed and index value with less than 0.45 have been classified as Least Developed. According to this category in the study area only three Gram Panchayats, Maniram (0.63), Ptharghata (0.64) & Lower Bagdogra (0.85) are classified as developed. 10 Gram Panchayats, Gossaipur (0.46), Hetmuri (0.48), Ghoshpukur (0.49), Champasari (0.50), Matigara I (0.50), Kharibari Panisali (0.51), Matigara II (0.51), Buraganj (0.52), Naxalbari (0.59) & Binnabari (0.59) are classified as moderately developed. In the rest 09 Gram Panchayats the economic development condition have been categorized as least among the all Gram Panchayats in the study area.

Table 3.60 Gram Panchayat-wise Economic Development Categories

Economic Development Status	Index Value	GP Name
Developed	>0.60	Maniram, Patharghata, Lower Bagdogra
Moderately Developed	0.45-60	Gossaipur, Hetmuri, Ghoshpukur, Champasari, Matigara I, Kharibari Panisali, Matigara II, Buraganj, Naxalbari, Binnabari,
Least Developed	<0.45	Raniganj Panisali, Bidhan Nagar I, Atharokhai, Jalash Nijamtara, Chathat Bansgao, Hatighisa, Bidhan Nagar II, Upper Bagdogra, Phasidewa

Source: Compiled by the Researcher

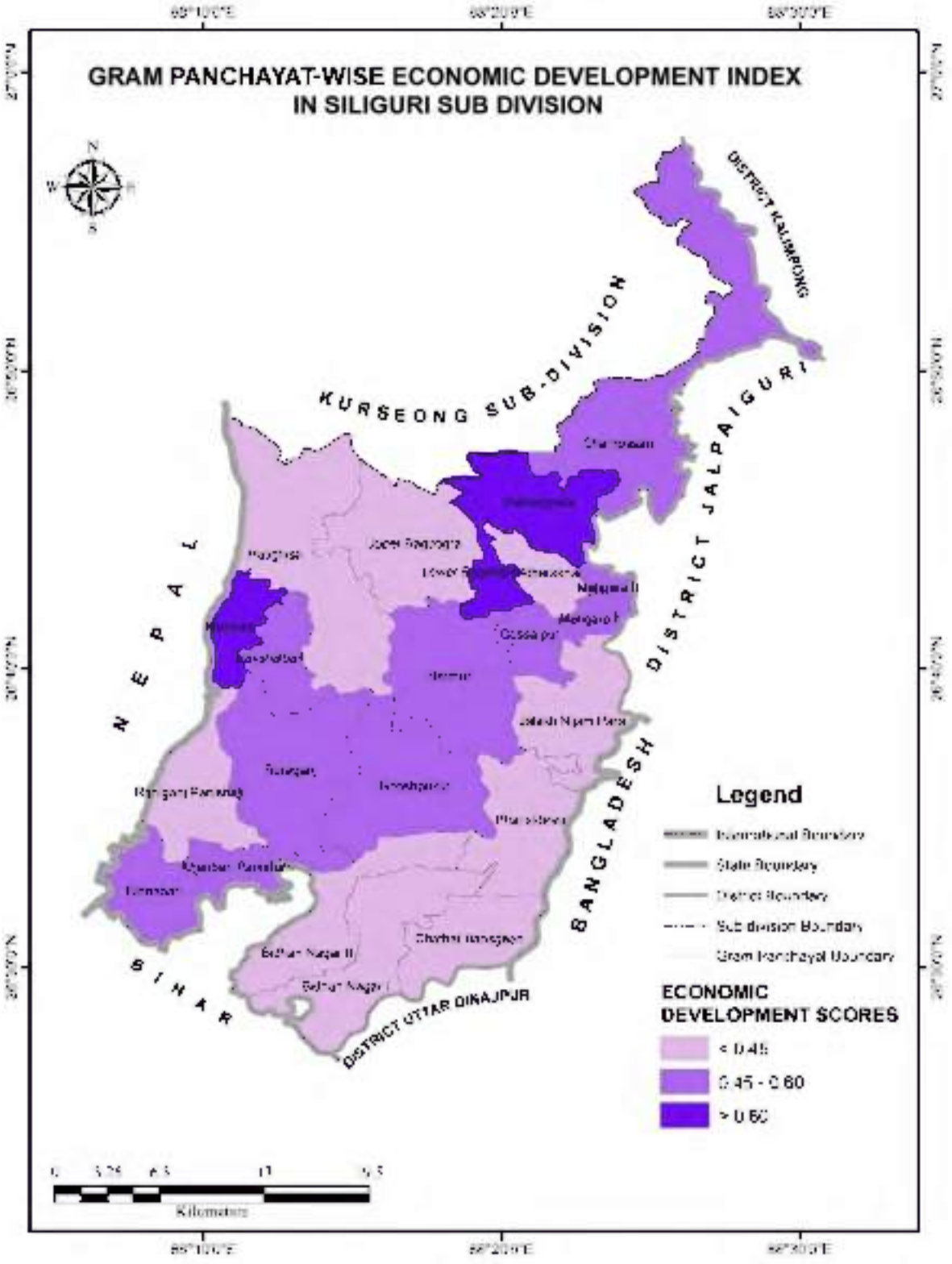
GRAM PANCHAYAT-WISE ECONOMIC DEVELOPMENT INDEX
IN SILIGURI SUB DIVISION
KURSEONG SUB-DIVISION
DISTRICT KALIMPONG
DISTRICT JALPAIGURI
BANGLADESH
NEPAL
SIKKIM
DISTRICT UTTAR DINAJPUR
Legend
ECONOMIC
DEVELOPMENT SCORES
< 0.45
0.45 - 0.60
> 0.60
Kilometers

Fig. 3.46

3.5 Composite Index of Socio-Economic Status

Composite Index of an area reflects the overall socio-economic condition of that area. In this study the Composite Index shows the overall socio-economic development status of tribal population in the study area Siliguri Sub-division. Here, Composite Index has been derived from the Social Development Index (Table 3.21), Housing Development Index (Table 3.45) & Economic Development Index (Table 3.59). These indices have already been calculated earlier in this chapter. For this study Composite Index has been formulated as the mean value of these three base indices (Table 3.61).

So, Composite Index of Socio-Economic Status = $\frac{\Sigma(SDI, HDI, EDI)}{n}$

Where,

SDI means, Value of Social Development Index

HDI means, Value of Housing Development Index

EDI means, Value of Economic Development Index

"n" is number of occurrences. (Here, n = 3)

Table 3.61 Composite Index of Socio-Economic Condition of Scheduled Tribe Population

Name of the Block/GP	Social Development Index	Housing Development Index	Economic Development Index	Composite Index
Matigara	0.68	0.83	0.64	0.72
Champasari	0.47	0.64	0.50	0.53
Matigara I	0.79	0.74	0.50	0.68
Matigara II	0.65	0.62	0.51	0.59
Atharokhai	0.74	0.67	0.35	0.59
Patharghata	0.42	0.52	0.64	0.52
Naxalbari	0.87	0.67	0.50	0.68
Naxalbari	0.64	0.72	0.59	0.65
Upper Bagdogra	0.62	0.44	0.42	0.50
Hatighisa	0.54	0.42	0.42	0.46
Gossaipur	0.26	0.54	0.46	0.42
Lower Bagdogra	0.42	0.94	0.85	0.74
Maniram	0.58	0.59	0.63	0.60
Phansidewa	0.17	0.03	0.46	0.22
Hetmuri	0.44	0.17	0.48	0.36
Chathat Bansgao	0.05	0.73	0.41	0.40

Name of the Block/GP	Social Development Index	Housing Development Index	Economic Development Index	Composite Index
Bidhan Nagar I	0.42	0.30	0.31	0.34
Bidhan Nagar II	0.28	0.28	0.42	0.32
Ghoshpukur	0.46	0.40	0.49	0.45
Jalash Nijamtara	0.18	0.52	0.39	0.36
Phasidewa	0.55	0.66	0.44	0.55
Kharibari	0.31	0.24	0.23	0.26
Binnabari	0.39	0.68	0.59	0.55
Buraganj	0.46	0.41	0.52	0.46
Kharibari Panisali	0.61	0.34	0.51	0.49
Raniganj Panisali	0.28	0.30	0.21	0.26

Source: Calculated by the Researcher

In the table 3.61 Gram Panchayat-wise Composite Index of Socio-Economics status of the study area has been calculated which reflects the true scenario of the socio-economic status of tribal people in the study area. Gram Panchayat-wise best Composit Index value is found in Lower Bagdogra GP (0.74) and the lowest index value is found in Raniganj Panisali (0.26). On the basis of their Composite Index value, the Gram Panchayats have been classified into three categories; Developed, Moderately Developed & Least Developed. The Gram Panchayats with composite index value greater than 0.60 have been categorized as Developed. Gram Panchayats with index value between 0.45 to 0.60 have been categorized as Moderately Developed and the GP with index value less than 0.45 have been fall in the category of Least Developed. According to this division 03 GPs', Naxalbari (0.65), Matigara I (0.68) & Lower Bagdogra (0.740 comes under Developed category. 07 GPs', Raniganj Panisali (0.26), Bidhan Nagar II (0.32), Bidhan Nagar I (0.34), Hetmuri (0.36), Jalash Nijamtara (0.36), Chathat Bansgao (0.40) & Gossaipur (0.42) are in Least Developed category. And the rest 12 Gram Panchayats, Ghoshpukur (0.45), Hatighisa (0.46), Buraganj (0.46), Kharibari Panisali 90.49), Upper Bagdogra (0.50), Patharghata (0.52), Champasari (0.53), Phasidewa (0.55), Binnabari (0.55), Atharokhai (0.59), Matigara II (0.59) & Maniram (0.60) have been categorized as Moderately Developed. In Lower Bagdogra GP the Housing Development Index and Economic Development Index play the key factors to make it the Gram Panchayat with best socio-economic condition of tribal people in the entire Sub-division (Table 3.45 and Table 3.59). And in Raniganj Panisali GP the Social Development Index and Economic Development Index play the key role to make this Gram Panchayat with worst socio-economic condition of tribal people in the entire Sub-division (Table 3.21 and Table

3.59). Among the four C.D. Blocks, the Composite Index value of Matigara C.D. Block (0.72) is highest, followed by Naxalbari C.D. Block (0.68). And the index value is lowest in Phansidewa C.D. Block (0.22), followed by Kharibari C.D. Block (0.26). The very low Social Development Index and Housing Development Index values are the key reason to make Phansidewa C.D. Block stand at the last among the four blocks in the Sub-division (Table 3.21 and Table 3.45). This indicates towards the very poor condition of tribal people in terms of their housing and social development status in this block.

Table 3.62 Gram Panchayat-wise Socio-Economic Categories

Socio-Economic Status	Index Value	GP Name
Developed	>0.60	Naxalbari, Matigara I, Lower Bagdogra
Moderately Developed	0.45-0.60	Ghoshpukur, Hatighisa, Buraganj, Kharibari Panisali, Upper Bagdogra, Patharghata, Champasari, Phasidewa, Binnabari, Atharokhai, Matigara II, Maniram,
Least Developed	<0.45	Raniganj Panisali, Bidhan Nagar II, Bidhan Nagar I, Hetmuri, Jalash Nijamtara, Chathat Bansgao, Gossaipur

Source: Compiled by the Researcher

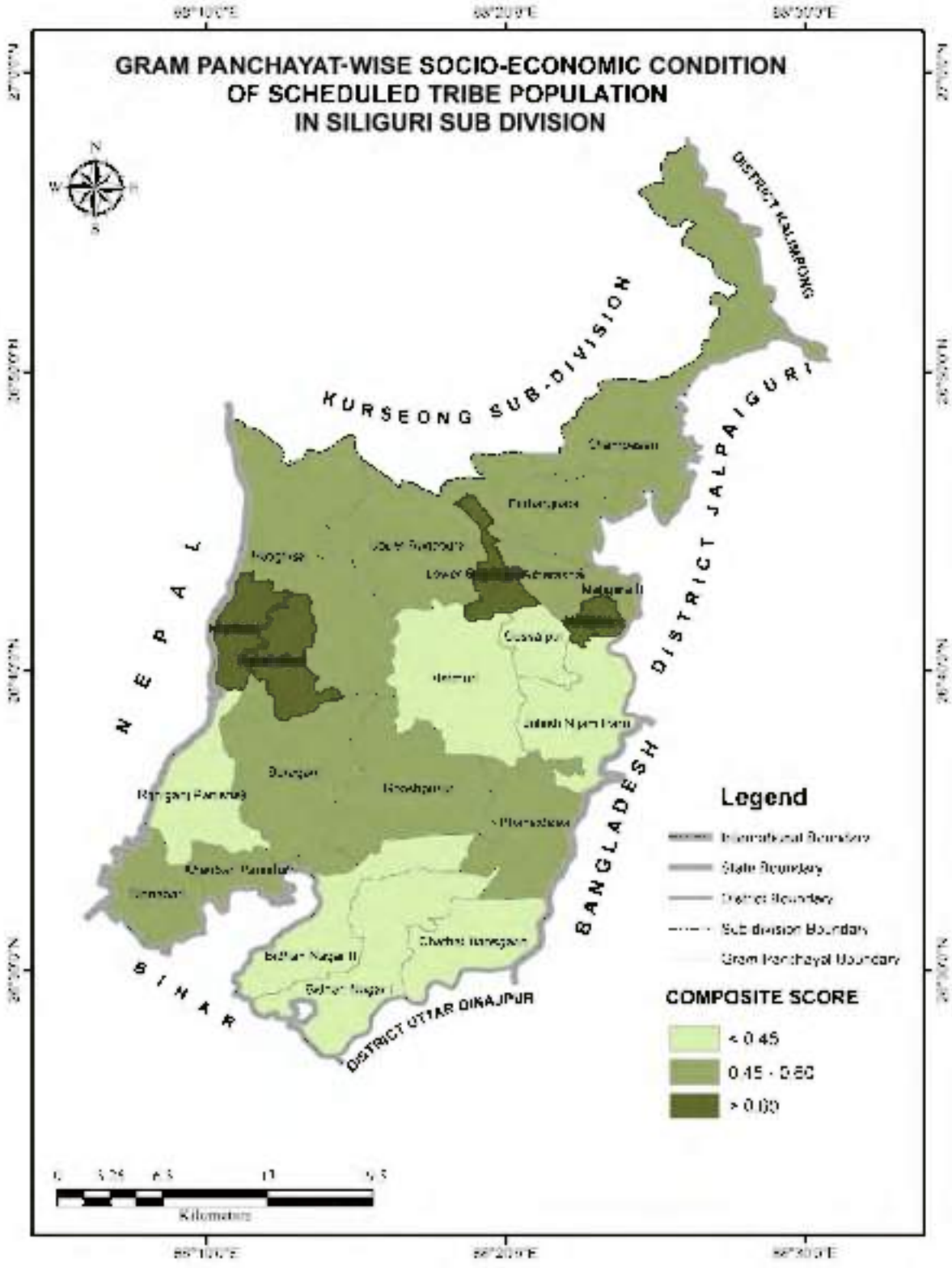
GRAM PANCHAYAT-WISE SOCIO-ECONOMIC CONDITION
OF SCHEDULED TRIBE POPULATION
IN SILIGURI SUB DIVISION
KURSEONG SUB-DIVISION
DISTRICT KALIMPONG
DISTRICT JALPAIGURI
BANGLADESH
NEPAL
BIHAR
DISTRICT UTTAR DINAJPUR
Legend
State Boundary
Sub division Boundary
COMPOSITE SCORE
< 0.45
0.45 - 0.60
> 0.60
Kilometers

Fig 3.47

3.6 Conclusion

The objective of this chapter was to study the socio-economic condition of tribal population in the study area. Through various parameters of socio-economic status, a clear picture on socio-economic condition of tribal population has been derived. The study shows there are few promising and a lots of very alarming social trends present among tribal population in the study area. Sex ratio, youth age percentage and female work participation rate shows the overall positive signs in the study area. Socio-economic condition of rural tribal population in the study area is very much alarming. Literacy rate especially female literacy rate, female age of marriage below 18 years are the two social parameters which need immediate improvements. Apart from these two, uses of latrine in Phansidewa C.D. Block need more attention of the local authorities. Many a households are causing open defecation in spite of having access of latrine facilities in this block. In rural areas most of the tribal households are still using woods and dry leaves as their main source of fuel for cooking. This is causing a negative impact on female health as well as on the environment. Despite of having a high work participation rate, the average monthly income of tribal households are very low. A squeezed circle of work profile is the main reason behind this. A more diversification of working sector is a must needed change in the study area. Female work participation rate is quite promising. Although it is more of a necessity rather than a choice.

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CHAPTER IV

EDUCATIONAL STATUS OF TRIBAL POPULATION

4.1 Introduction

In India the scheduled tribes are the most geographically and socially isolated and economically marginalized community. India advocates inclusive growth but owing to lack of educational development, the scheduled tribes is not becoming the part of this inclusive growth. Post independence a lots of concentrated efforts and initiatives, have been made to uplift the scheduled tribes (Brahmanandam & Bosu, 2016). As education is indispensible for human resource development and imparts knowledge, skill and character; a lots of efforts has been made to make them educationally sound. But after all these, the improvement status of the tribals is not very impressive. Here in this chapter, a critical analysis has been done on educational status of the tribal population in Siliguri Sub-division.

4.2 Literacy Status

4.2.1 Tribal & Non tribal Literacy Status

Literacy rate is a most essential indicator of any country's human development. Historically in India tribal literacy rate has always been far lower than the other communities. It is one of the main reasons behind the poor human development status of tribal population compare to the other communities. As per census 2011, the literacy rate for scheduled tribe population in India is 58.95 percent, which is way lower than the literacy rate of non tribal population (74.29 percent). Even the percentage is much lower than the overall literacy rate in India (74.04 percent). Both in the Darjiling district and Siliguri Sub-division the literacy rate for tribal and non tribal follow the same trend as it follows national scale. Table 4.1 shows the tribal literacy rate in Siliguri Sub-division is 59.99 percent and the literacy rate for non tribal is 78.27 percent. A huge gap in terms of literacy rate between tribal and non tribal is very much prominent. To study the comparative literacy status between tribal and non tribal, Coefficient of Equality has been derived. The mathematical expression for Coefficient of Equality is:

$$\textit{Coefficient of Equality (CoE)} = \frac{Tribal\ \ Literacy\ \ Rate}{Non\ Tribal\ \ Literacy\ \ Rate} \times 100$$

The value of Coefficient of Equality nearer to 100 indicates less inequality in terms of literacy rate between tribal and non tribal population. And a distant value to 100 shows higher inequality.

This can be also interpreted like, the number of tribal literate against every 100 literate non tribal population.

The table 4.1 shows CoE value for the Sub-division is 76.64 which is not very impressive. Block-wise data shows Kharibari C.D. Block has the lowest CoE (74.30) and the highest CoE can be seen in Phansidewa C.D Block (86.22). This indicates that in Kharibari C.D. Block lowest number of literate tribal population against every 100 literate non tribal population can be seen. And in Phansidewa block the number is highest in the Sub-division. Though the non tribal literacy rate in Phansidewa block (67.30 percent) is lowest among all the blocks in the Sub-division. This is why being the most backward block in terms of literacy in the Sub-division the Phansidewa C.D. Block has highest CoE. Analyzing the data further, it can also be seen that the situation is more alarming in rural areas than urban. It is to be noted that in the study area there are 14 urban centers and out of which none belongs to Phansidewa C.D Block. It is prominent that in urban centers literacy percentage of both tribal and non tribal is comparatively higher than rural areas. So, this lack of urban literacy support is one of the main reasons that Phansidewa block gets the tag of the worst overall literacy percentage in the study area.

In rural the tribal literacy rate is 58.53 percent and non tribal literacy rate is 70.51 percent. There is a gap of almost 12 percent point. The CoE value in rural areas (83.00) is far lesser than that of the urban areas (94.51). In all the C.D. Blocks under the study area, the CoE value for urban population is above 90, which is quite good. The data for male and female show the CoE value for male is comparatively higher than the female in the Sub-division. The value of CoE for male is 82.49 and for female it is only 70.67. This shows lesser involvement of tribal females than non tribals in education. It is also to be noted that considering all the parameters as per table 4.1, in Kharibari C.D Block the tribal literacy condition comparing to that of the non tribal population is the worst among all the blocks in Siliguri Sub-division. The literacy rates of tribal and non tribal population in Siliguri MC (Part) are almost same. The tribal literacy rate is 83.97 percent and the non-tribal literacy rate is 86.46 percent. The value of CoE shows for every 100 literate non tribal population there are almost 98 literate tribal population in Siliguri MC (Part). The modernization of tribal population with the other societies, availing the modern infrastructures, better income resources play the key roles for tribal population to match up with non-tribal population in the Siliguri MC (Part) .

Table 4.1 Literacy Status of Tribal and Non-Tribal Population, 2011

Name of the Block	Tribal Literacy rate			Non tribal literacy rate			Coefficient of equality		
	Total	Male	Female	Total	Male	Female	Total	Male	Female
Siliguri Sub-Div.	59.99	69.31	50.99	78.27	84.02	72.16	76.64	82.49	70.67
Rural	58.53	68.09	49.30	70.51	78.19	62.33	83.00	87.09	79.10
Urban	80.60	86.53	74.88	85.28	89.30	81.01	94.51	96.90	92.43
Matigara	64.39	73.78	55.47	76.38	82.91	69.40	84.29	88.99	79.93
Rural	63.06	72.78	53.80	73.90	81.03	66.05	85.34	89.82	81.45
Urban	79.93	85.85	74.58	80.91	86.47	75.26	98.79	99.28	99.10
Naxalbari	61.97	71.51	52.67	78.72	85.27	71.68	78.72	83.87	73.48
Rural	60.02	69.82	50.46	72.79	80.49	64.83	82.45	86.74	77.84
Urban	77.72	85.14	70.48	84.96	90.08	79.21	91.47	94.52	88.99
Phansidewa	58.03	67.26	49.20	67.30	74.87	59.25	86.22	89.83	83.04
Rural	58.03	67.26	49.20	67.30	74.87	59.25	86.22	89.83	83.04
Urban	00	00	00	00	00	00	NA	NA	NA
Kharibari	52.63	62.76	42.61	70.84	79.03	62.21	74.30	79.41	68.49
Rural	52.54	62.68	42.50	69.43	78.02	60.35	75.68	80.33	70.43
Urban	69.89	80.95	60.78	79.79	85.46	73.89	87.60	94.73	82.26
Siliguri MC (Part)	83.97	88.33	79.64	86.46	89.84	82.88	97.12	98.32	96.10

Source: Census of India, 2011

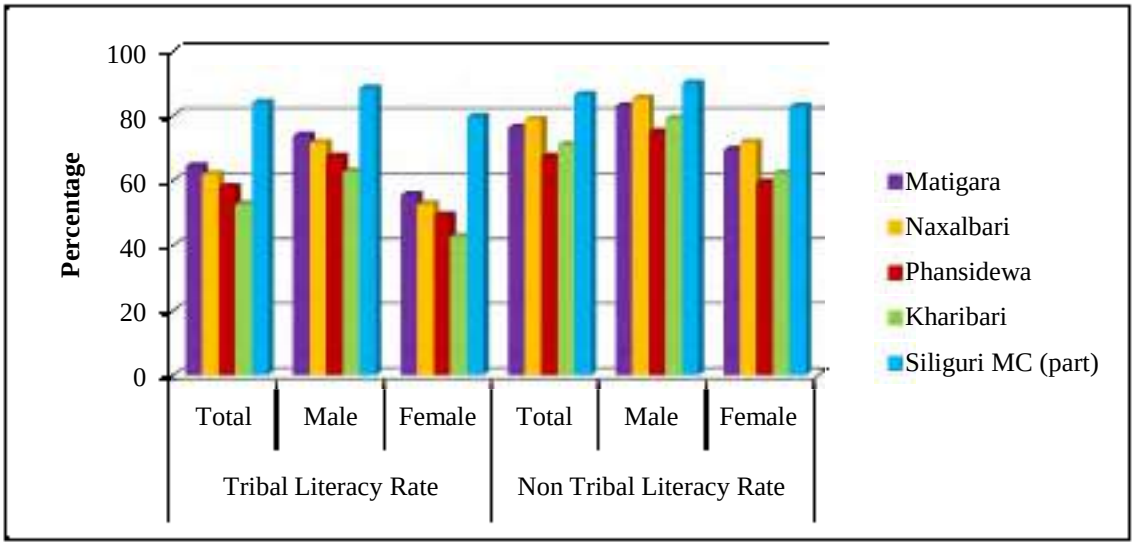

Fig. 4.1: Tribal and Non-Tribal Literacy Rate in Siliguri Sub-division, 2011

4.2.2 Gender Gap in Tribal Literacy, 2001 & 2011

Table 4.2 shows the comparative study of tribal literacy according to census 2001 and 2011. This also indicates the improvement status in tribal literacy from Census 2001 to 2011. To find the gender gap in literacy rate, Gender Parity Index (GPI) has been derived for both the census years. The mathematical expression of GPI is:

$$Gender\ Parity\ Index\ (GPI) = \frac{Female\ \ Literacy\ \ Rate}{Male\ \ Literacy\ \ Rate}$$

The value of GPI nearer to 1 indicates lesser gender gap and GPI nearer to 0 shows higher gender gap in literacy rate.

From table 4.2 it can be seen that overall tribal literacy rate in Siliguri Sub-division has grown up to 59.99 percent in census 2011 from that of the 41.87 percent in 2001. This growth rate is quite commendable. The most important thing is the GPI of 0.56 in 2001 has gone up to 0.74 in 2011. This reflects females are gradually inclining towards education in the study area. In the rural areas this change is showing a prominent mark. The GPI in rural areas in the Sub-division has gone 0.55 to 0.72, a jump of 17 points. The government initiatives and different educational schemes in a mission mode play the major roles to this huge improvement. Sarva Siksha Abhiyan (SSA) is a major catalyst to this improvement. The SSA was launched in 2001-2002 by central government in partnership with the state governments with the objectives of universal access and retention of education, development of educational infrastructures, bridging of genders and different categories gap in education and enhancement of educational level of children. To do so the government has also enacted Right to Educational Act 2009 to happen it possible for every children to access free education up to elementary level in schools (SSA, 2017).Block-wise in Kharibari C.D. Block the highest growth rate of literacy percentage has been observed. The literacy percentage in this block has been grown up to 52.63 percent in 2011 from 33.09 percent in 2001 at a growth rate of 59.05 percent. The highest rural literacy growth rate can also be seen in Kharibari C.D Block (58.77 percent). Interesting fact is only in Matigara C.D.Block the urban tribal literacy rate sees a de-growth in 2011 census from that of 2001. The urban tribal literacy percentage has gone down to 79.93 percent in 2011 from 86.52 percent in 2001. A de-growth of almost 7 percent. The main reason behind this is migration of illiterate tribal population. The urban tribal population of Matigara C.D.Block as per 2001 census was only 160. The number went up to 2004 in 2011 census. This can happen due to migration only. As per 2011 the highest GPI is observed in Matigara C.D. Block (0.75). Although the Kharibari block shows the highest literacy growth, the GPI is still lowest there. The GPI of Kharibari C.D. Block is only 0.68 and this needs to be improved. In Phansidewa and Kharibari C.D. Blocks the female literacy rate is still below 50 percent. In Siliguri MC (Part) the literacy rate has grown up to 88.33 percent in 2011 from 77.35 percent in 2001. The male and female literacy growth rates are almost same. Both grow at a rate of almost 1.10 percent. The GPI of it is 0.90 which is greater than the overall urban tribal literacy rate of the Sub-division.

Table 4.2 Literacy Rate of Scheduled Tribe Population in Siliguri Sub-division, 2001 and 2011

Name of the Block	2001			GPI	2011			GPI
	Total	Male	Female		Total	Male	Female	
Siliguri Sub-div.	41.87	53.49	30.15	0.56	59.99	69.31	50.99	0.74
Rural	40.69	52.48	28.80	0.55	58.53	68.09	49.30	0.72
Urban	76.86	82.89	70.64	0.85	80.60	86.53	74.88	0.87
Matigara	43.51	55.54	31.28	0.56	64.39	73.78	55.47	0.75
Rural	43.11	55.17	30.86	0.56	62.81	66.09	59.90	0.74
Urban	86.52	94.52	77.94	0.82	79.93	85.85	74.58	0.87
Naxalbari	41.77	54.49	28.99	0.53	61.97	71.51	52.67	0.74
Rural	41.05	53.89	28.13	0.52	60.02	69.82	50.46	0.72
Urban	71.94	79.25	64.66	0.82	77.72	85.14	70.48	0.83
Phansidewa	42.08	53.01	31.09	0.59	58.03	67.26	49.20	0.73
Rural	42.08	53.01	31.09	0.59	58.03	67.26	49.20	0.73
Urban	00	00	00	00	00	00	00	00
Kharibari	33.09	45.66	20.37	0.45	52.63	62.76	42.61	0.68
Rural	33.09	45.66	20.37	0.45	52.54	62.68	42.50	0.68
Urban	00	00	00	00	69.89	80.95	60.78	0.75
Siliguri MC(Part)	77.35	82.99	71.52	0.86	83.97	88.33	79.64	0.90

Source: Census of India, 2001 & 2011

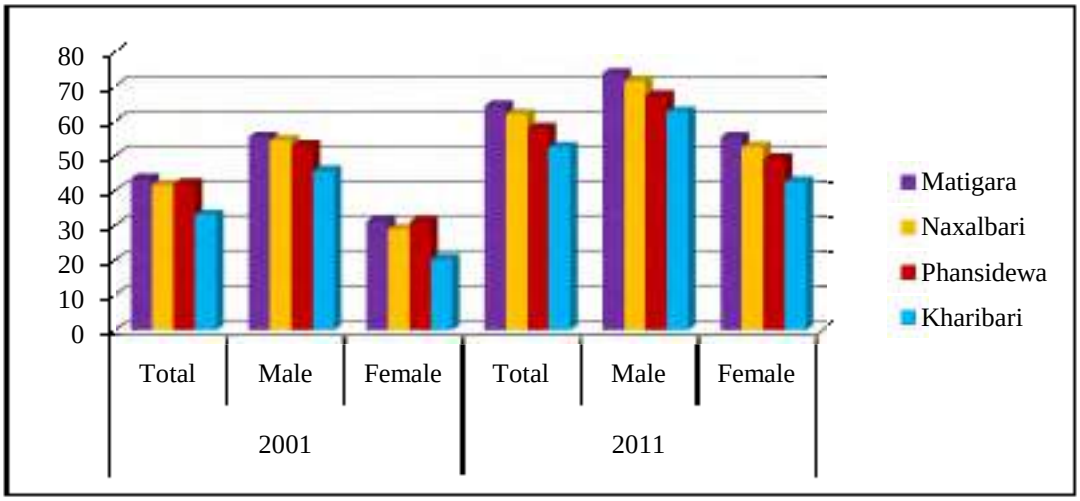

Fig. 4.2: Block-wise Literacy Rate of Scheduled Tribe Population in Siliguri Sub-division 2001 & 2011

4.2.3 Gender Disparity in Tribal Literacy

Table 4.3 and table 4.4 shows the field survey data in the study area for tribal literacy on various parameters. The analysis of these tables helps to understand the literacy status of tribal male female as per rural and urban. And finally this will lead to derive the Modifeid David Sopher's Disparity Index (modified by Prof. Amitabh Kundu and Rao in 1983). The Mathematical expression of this index is:

$$Disparity\ Index\ (DI) = log\frac{x1}{x2} + log\frac{200-x2}{200-x1}$$

Here,

X1 = Male Literacy Rate

X2 = Female Literacy Rate

The value of DI nearer to 1 indicates higher disparity between male and female literacy rate and the value nearer to 0 shows lower disparity of the same.

Table 4.3 reflects that the overall tribal female literacy rate is lower than the tribal male literacy rate in the Sub-division. Only 54.86 percent tribal females are literate in comparison to 65.17 percent male literate in the Sub-division. The Disparity Index shows that in both rural and urban the literacy gap is almost same. In rural the DI value is 0.106 and in urban the index value is 0.107.

Table 4.3 Disparity Index in Literacy Rate of Scheduled Tribe Population

Name	Male	Female	Disparity Index
Rural	63.53	53.48	0.106
Urban	78.05	66.67	0.107
Total	65.17	54.86	0.107

Source: Field Survey 2019-20

The block-wise data shows the highest literacy disparity in Matigara C.D Block (0.157) and the lowest in Kharibari C.D.Block (0.069). The DI index shows that in Atharokhai GP (0.240) highest disparity in male and female literacy can be seen and this will be followed by Patharghata GP (0.210).The lowest literacy disparity between male and female is in Hetmuri (0.023) GP under Phansidewa block and followed by Upper Bagdogra GP (0.025) and Raniganj Panisali (0.029). Although in both Hetmuri and Raniganj Panisali the literacy of male and female are lower than that of the respective literacy percentage of the Sub-division

Table 4.4 Gram Panchayat-wise Disparity in Literacy Rate of Scheduled Tribe Population

Name of the Block/GP	Literacy Rate		Disparity Index
	Male	Female	
Matigara	66.09	51.14	0.157
Champasari	62.28	52.17	0.108
Matigara I	84.21	62.50	0.204

Name of the Block/GP	Literacy Rate		Disparity Index
	Male	Female	
Matigara II	75.00	62.50	0.121
Atharokhai	73.33	50.00	0.240
Patharghata	64.86	45.71	0.210
Naxalbari	67.81	58.26	0.096
Naxalbari	71.79	60.00	0.116
Upper Bagdogra	67.74	65.22	0.025
Hatighisa	67.50	56.10	0.116
Gossaipur	57.14	46.15	0.125
Lower Bagdogra	63.16	53.33	0.104
Maniram	73.33	56.41	0.168
Phansidewa	59.24	50.32	0.098
Hetmuri	57.00	54.84	0.023
Bidhan Nagar I	66.67	49.09	0.187
Bidhan Nagar II	53.73	48.44	0.060
Chathat Bansgao	51.61	40.00	0.143
Ghoshpukur	68.18	53.06	0.156
Jalash Nijamtara	54.55	44.44	0.118
Phasidewa	69.23	50.00	0.201
Kharibari	62.30	55.68	0.069
Binnabari	64.86	52.38	0.131
Buraganj	63.79	55.17	0.090
Kharibari Panisali	70.37	63.64	0.066
Raniganj Panisali	56.52	53.85	0.029

Source: Calculated By the Researcher

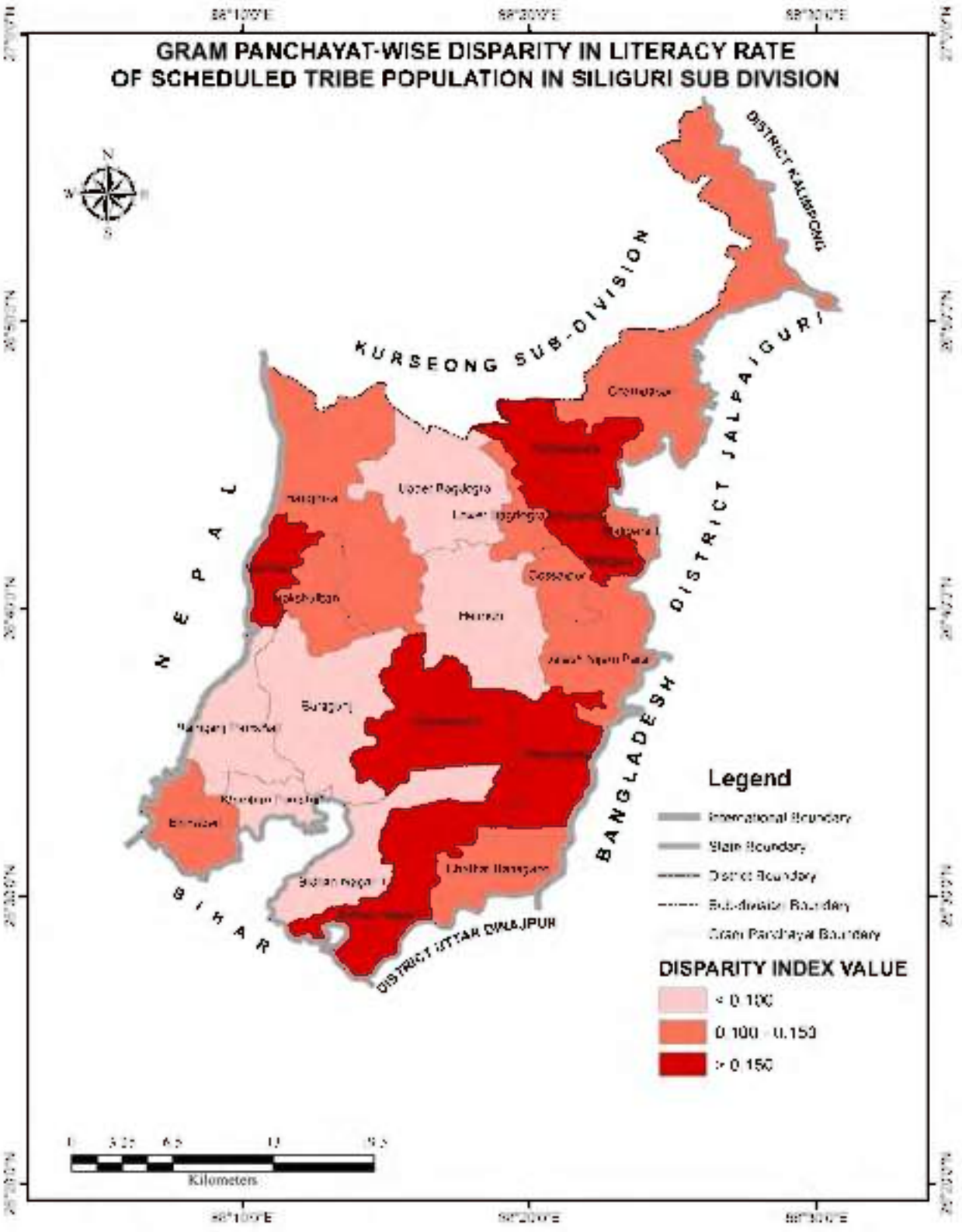
GRAM PANCHAYAT-WISE DISPARITY IN LITERACY RATE
OF SCHEDULED TRIBE POPULATION IN SILIGURI SUB DIVISION
KURSEONG SUB-DIVISION
DISTRICT KALIMPONG
DISTRICT JALPAIGURI
NEPAL
BANGLADESH
BIHAR
DISTRICT UTTAR DINAJPUR
Legend
International Boundary
State Boundary
District Boundary
Sub-division Boundary
Gram Panchayat Boundary
DISPARITY INDEX VALUE
< 0.100
0.100 - 0.150
> 0.150
Kilometers

Fig. 4.3

Now, if the age-wise literacy rate data is analyzed, it reflects a huge improvement in recent times among tribal population. During field survey it has been observed that 91.37 percent of the 7-14 years of age group tribal population is literate. And for population of age group 15-29 years of age the percentage is 82.42 percent. This shows with time literacy consciousness among tribal population is also improving rapidly. In case of tribal female literacy, the improvement is more rapid than male. Table 4.5 shows the literacy percentage for tribal male and female of age group 15-29 years of age are 87.26 percent and 77.70 percent respectively. Whereas the percentage of the same of age group 7-14 years of age are 92.57 percent and 90.00 percent respectively. In urban areas 100 percent of both male and female of age group 7-14 years of age are literate. In rural the percentages of the same age group are 92.20 percent and 89.68 percent respectively for male and female. The data also shows that almost ¾ th of the total tribal literate population is of age group of below 30 years of age. Only around 25 percent of the tribal population equal or above 30 years of age is literate.

Table 4.5 Scheduled Tribe Literacy Rate According to Age Group

Age Group	Rural			Urban			Total		
	Total	Male	Female	Total	Male	Female	Total	Male	Female
7-14	91.01	92.20	89.68	100.00	100.00	100.00	91.37	92.57	90.00
15-29	80.64	85.56	75.97	95.24	98.25	91.67	82.42	87.26	77.70
30-44	40.20	51.26	29.96	57.14	70.00	48.28	41.73	52.71	31.82
45-59	21.98	28.19	14.52	47.54	51.43	42.31	26.65	32.61	19.33
60 & above	9.45	13.70	3.70	37.50	50.00	25.00	11.11	15.58	5.17

Source: Field Survey 2019-20

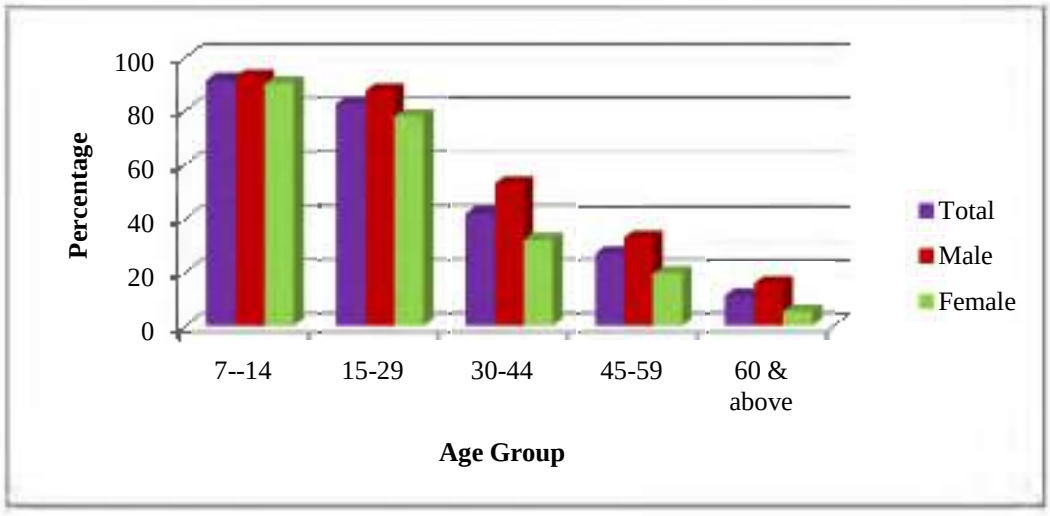

Fig. 4.4: Scheduled Tribe Literacy Rate according to Age Groups

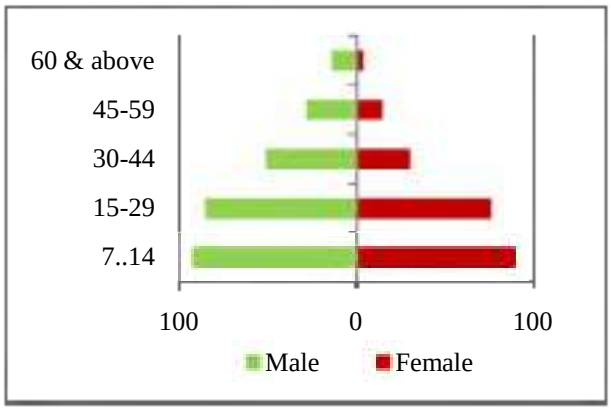

Fig. 4.5: Rural Literacy Rate according to Age Groups

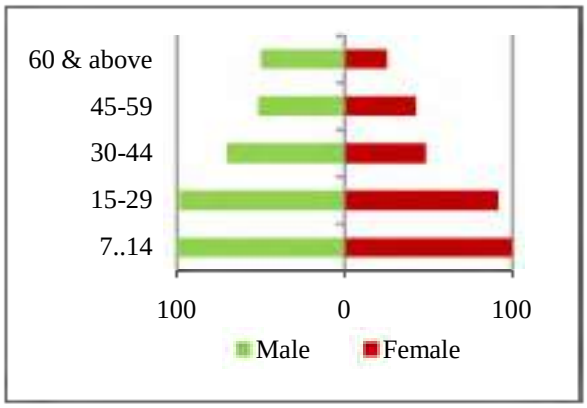

Fig. 4.6: Urban Literacy Rate According to Age Groups

Block-wise data shows (Table 4.6) other than Phansidewa C.D. Block, all other blocks have tribal literacy rate of age group 7-14 years of age, higher than 94 percent. Only in Phansidewa C. D. Block the literacy rate for the same age group is only 84.69 percent. Although consistent improvement have been shown by all the blocks. Table 4.6 shows a rapid literacy rate improvement between different age groups in recent times in all the blocks for age group of 7-14 years of age the female literacy rate is almost equal to male literacy rate but among 30-44 years of age group population the gender gap in literacy is very much prominent this shows a huge improvement towards gender inequality in literacy. People of this sub division are giving equal importance to female literacy with male. Government initiatives like free education to all up to class 8, Mid-day Meal, class-wise scholarships are acting like catalyst to this improvement.

Table 4.6 Block-wise Scheduled Tribe Literacy Rate According to Age Group

Name of the Blocks	7-14			15-29			30-44		
	T	M	F	T	M	F	T	M	F
Matigara	95.35	96.00	94.44	79.01	88.64	69.89	44.72	55.36	35.82
Naxalbari	94.92	96.67	93.10	91.16	96.70	85.56	43.93	50.98	37.50
Phansidewa	84.69	86.00	83.33	76.19	78.81	73.88	37.65	52.33	21.05
Kharibari	94.03	94.44	93.55	80.00	82.86	77.14	34.95	44.44	27.59

Name of the Blocks	45-59			60 & above		
	T	M	F	T	M	F
Matigara	25.71	36.59	10.34	18.75	30.00	0.00
Naxalbari	29.49	39.53	17.14	5.26	5.56	5.00
Phansidewa	13.92	13.89	13.95	2.70	4.17	0.00
Kharibari	17.39	17.24	17.65	10.00	9.09	11.11

Source: Field Survey 2019-20

4.3 Educational Attainment

Educational attainment of an individual has been defined as the highest level of education that the individual has achieved (Census 2011). For operational purpose the highest level has been decided based on highest-level certification by a recognized institution an individual have. Here the levels of education have been classified based on census 2011. It has been categorized into six different categories: (i) Below Primary, (ii) Primary, (iii) Middle, (iv) Secondary, (v) Higher Secondary and (vi) Graduation & above.

Below Primary: An individual who was enrolled in primary level school but didn't complete the primary levels. That means the individual doesn't have the primary pass certificate.

Primary: An individual whose highest-level educational certification is of 4^{th} standard.

Middle: An individual whose highest-level educational certification is of 8^{th} standard.

Secondary: An individual whose highest-level educational certification is of 10^{th} standard.

Higher Secondary: An individual whose highest level of educational certification is of 12^{th} standard.

Graduation & above: An individual who has obtained educational certification of at least UG level.

Table 4.7 record primary data of educational attainment status of tribal population in the study area. It is classified into three parts; educational attainment status of tribal population in rural areas, urban areas and in overall Sub-division. Analyzing the table 4.7 the first thing that anyone can notice is very low percentage of population has educational attainment certification beyond 8^{th} standard i.e middle level education. Only 18 percent tribal population holds educational attainment certificate beyond middle level in the study area. With increasing literacy consciousness in recent times this data gives a hint towards the high percentage of dropout of 15 and above age group population within class 8 or 9. In rural areas only 14.35 percent tribal population has educational attainment certificate beyond class 8. In urban this percentage is comparatively better. Almost 45 percent population has beyond class 8 certification in urban areas. Between male and female the highest educational attainment status don't vary too much. The status of both male and female are almost same. In the study area 20.81 percent male and 15.66 percent female have hold highest educational attainment certificate above middle level. For obvious reasons in urban this percentages are high than in rural. In rural areas this percentage is very alarming for both male and female. Only 16.26 percent male and 12.04 percent female hold highest educational attainment certification above class 8 in rural areas. This indicates

towards a huge dropout percentage in rural areas for male and female both. Table 4.8 shows Gram Panchayat-wise educational attainment status of tribal population. This shows in Phansidewa C.D. Block only 8.43 percent of tribal population have highest educational attainment certificate above middle level. Not only that, in this block for female this percentage is only 6.94 percent (Table 4.10). This data demands special attention of the government on this block.

Table 4.7 Educational Level in Rural and Urban Areas

Educational status	Rural			Urban			Total		
	Total	Male	Female	Total	Male	Female	Total	Male	Female
Below Primary	23.26	21.95	24.85	5.29	6.25	4.05	20.90	19.83	22.20
Primary	36.19	38.21	33.73	22.94	18.75	28.38	34.44	35.58	33.05
Middle	26.20	23.58	29.39	25.88	25.00	27.03	26.16	23.77	29.09
Secondary	8.20	9.59	6.51	18.82	21.88	14.86	9.60	11.25	7.57
HS	4.10	4.39	3.75	18.82	18.75	18.92	6.04	6.33	5.68
Graduation & above	2.05	2.28	1.78	8.24	9.38	6.76	2.86	3.23	2.41

Source: Field Survey 2019-20

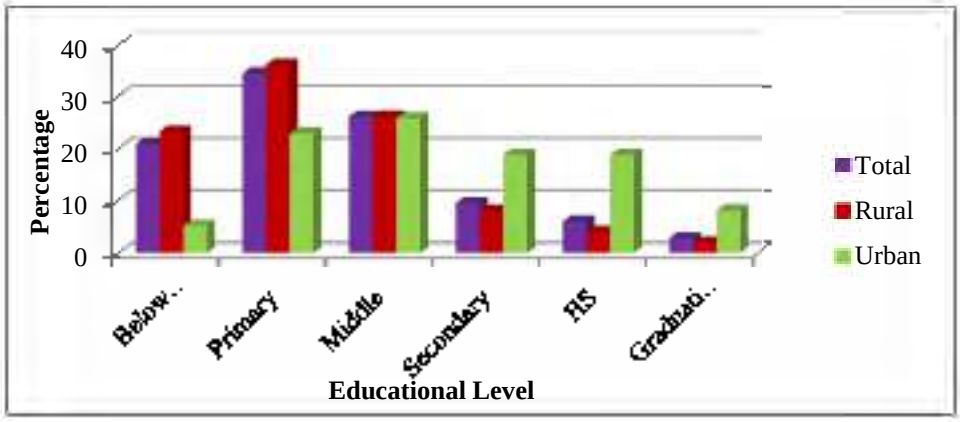

Fig. 4.7: Educational Status of Scheduled Tribe Population

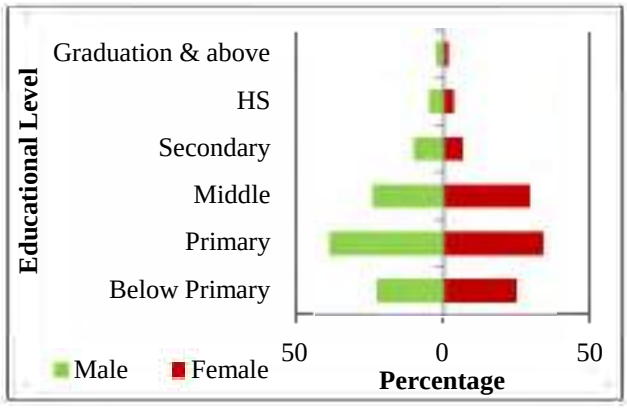

Fig. 4.8: Educational Status of Rural Scheduled Tribe Population

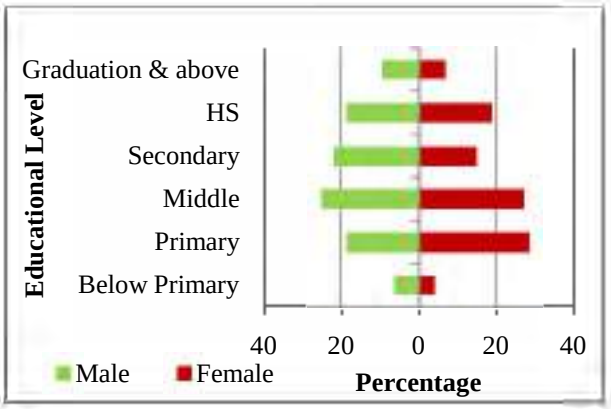

Fig. 4.9: Educational Status of Urban Scheduled Tribe Population

Table 4.8 Gram Panchayat-wise Educational Attainment of Scheduled Tribe Population

Name of the Block/GP	Educational Status of Total Population					
	Below Primary	Primary	Middle	Secondary	HS	Graduation & above
Matigara	16.29	32.58	30.68	11.36	5.68	3.41
Champasari	14.50	37.40	31.30	10.69	3.82	2.29
Matigara I	11.54	23.08	38.46	19.23	7.69	0.00
Matigara II	27.27	45.45	18.18	9.09	0.00	0.00
Atharokhai	12.50	25.00	31.25	12.50	12.50	6.25
Patharghata	20.00	27.50	28.75	10.00	7.50	6.25
Naxalbari	19.52	31.85	31.51	8.90	5.82	2.40
Naxalbari	19.23	17.31	38.46	11.54	9.62	3.85
Upper Bagdogra	20.69	35.63	31.03	8.05	3.45	1.15
Hatighisa	28.00	36.00	20.00	10.00	4.00	2.00
Gossaipur	14.29	35.71	32.14	3.57	10.71	3.57
Lower Bagdogra	20.00	30.00	35.00	10.00	0.00	5.00
Maniram	12.73	34.55	34.55	9.09	7.27	1.82
Phansidewa	29.94	40.70	20.93	5.23	2.33	0.87
Hetmuri	29.63	46.30	18.52	4.63	0.00	0.93
Bidhan Nagar I	27.12	49.15	16.95	6.78	0.00	0.00
Bidhan Nagar II	35.82	35.82	23.88	4.48	0.00	0.00
Chathat Bansgao	14.29	32.14	21.43	14.29	14.29	3.57
Ghoshpukur	35.71	32.14	23.21	3.57	5.36	0.00
Jalash Nijamtara	30.00	40.00	30.00	0.00	0.00	0.00
Phasidewa	25.00	37.50	25.00	0.00	6.25	6.25
Kharibari	26.13	39.19	22.07	8.11	2.70	1.80
Binnabari	21.74	34.78	21.74	15.22	6.52	0.00
Buraganj	18.84	34.78	27.54	11.59	2.90	4.35
Kharibari Panisali	35.00	32.50	20.00	7.50	2.50	2.50
Raniganj Panisali	31.34	50.75	17.91	0.00	0.00	0.00

Source: Field Survey 2019-20

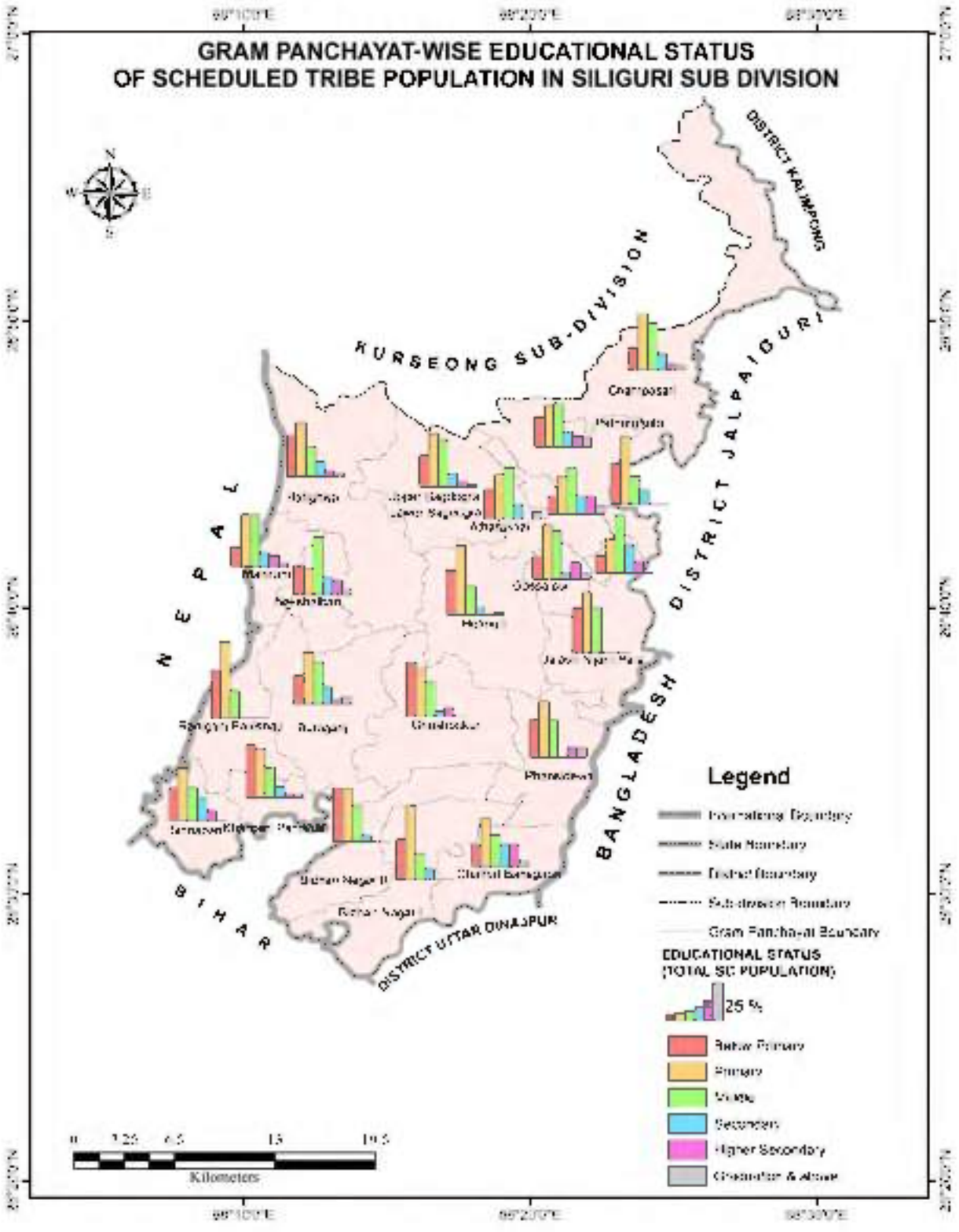
GRAM PANCHAYAT-WISE EDUCATIONAL STATUS
OF SCHEDULED TRIBE POPULATION IN SILIGURI SUB DIVISION
KURSEONG SUB-DIVISION
DISTRICT KALIMPONG
DISTRICT JALPAIGURI
NEPAL
BANGLADESH
BIHAR
DISTRICT UTTAR DINAJPUR
Legend
EDUCATIONAL STATUS
(TOTAL SC PUPULATION)
25 %
Below Primary
Primary
Middle
Secondary
Higher Secondary
Kilometers

Fig 4.10

Table 4.9 Gram Panchayat-wise Educational Attainment of Scheduled Tribe Male

Name of the Block/GP	Educational Status of Male Population					
	Below Primary	Primary	Middle	Secondary	HS	Graduation & above
Matigara	17.76	32.24	26.32	15.79	4.61	3.29
Champasari	15.49	36.62	28.17	15.49	2.82	1.41
Matigara I	6.25	25.00	37.50	25.00	6.25	0.00
Matigara II	33.33	33.33	16.67	16.67	0.00	0.00
Atharokhai	9.09	18.18	27.27	18.18	18.18	9.09
Patharghata	25.00	31.25	20.83	12.50	4.17	6.25
Naxalbari	17.09	35.44	29.75	8.86	6.33	2.53
Naxalbari	21.43	14.29	39.29	10.71	10.71	3.57
Upper Bagdogra	14.29	45.24	26.19	9.52	4.76	0.00
Hatighisa	29.63	37.04	18.52	7.41	3.70	3.70
Gossaipur	12.50	50.00	31.25	0.00	6.25	0.00
Lower Bagdogra	16.67	25.00	41.67	8.33	0.00	8.33
Maniram	9.09	36.36	30.30	12.12	9.09	3.03
Phansidewa	30.65	43.55	16.13	5.91	2.69	1.08
Hetmuri	26.32	54.39	14.04	5.26	0.00	0.00
Bidhan Nagar I	25.00	56.25	12.50	6.25	0.00	0.00
Bidhan Nagar II	36.11	41.67	16.67	5.56	0.00	0.00
Chathat Bansgao	6.25	18.75	31.25	18.75	18.75	6.25
Ghoshpukur	53.33	23.33	13.33	3.33	6.67	0.00
Jalash Nijamtara	16.67	50.00	33.33	0.00	0.00	0.00
Phasidewa	33.33	44.44	11.11	0.00	0.00	11.11
Kharibari	20.17	41.18	23.53	8.40	4.20	2.52
Binnabari	16.67	37.50	25.00	12.50	8.33	0.00
Buraganj	18.92	27.03	29.73	13.51	5.41	5.41
Kharibari Panisali	15.79	31.58	31.58	10.53	5.26	5.26
Raniganj Panisali	25.64	61.54	12.82	0.00	0.00	0.00

Source: Field Survey 2019-20

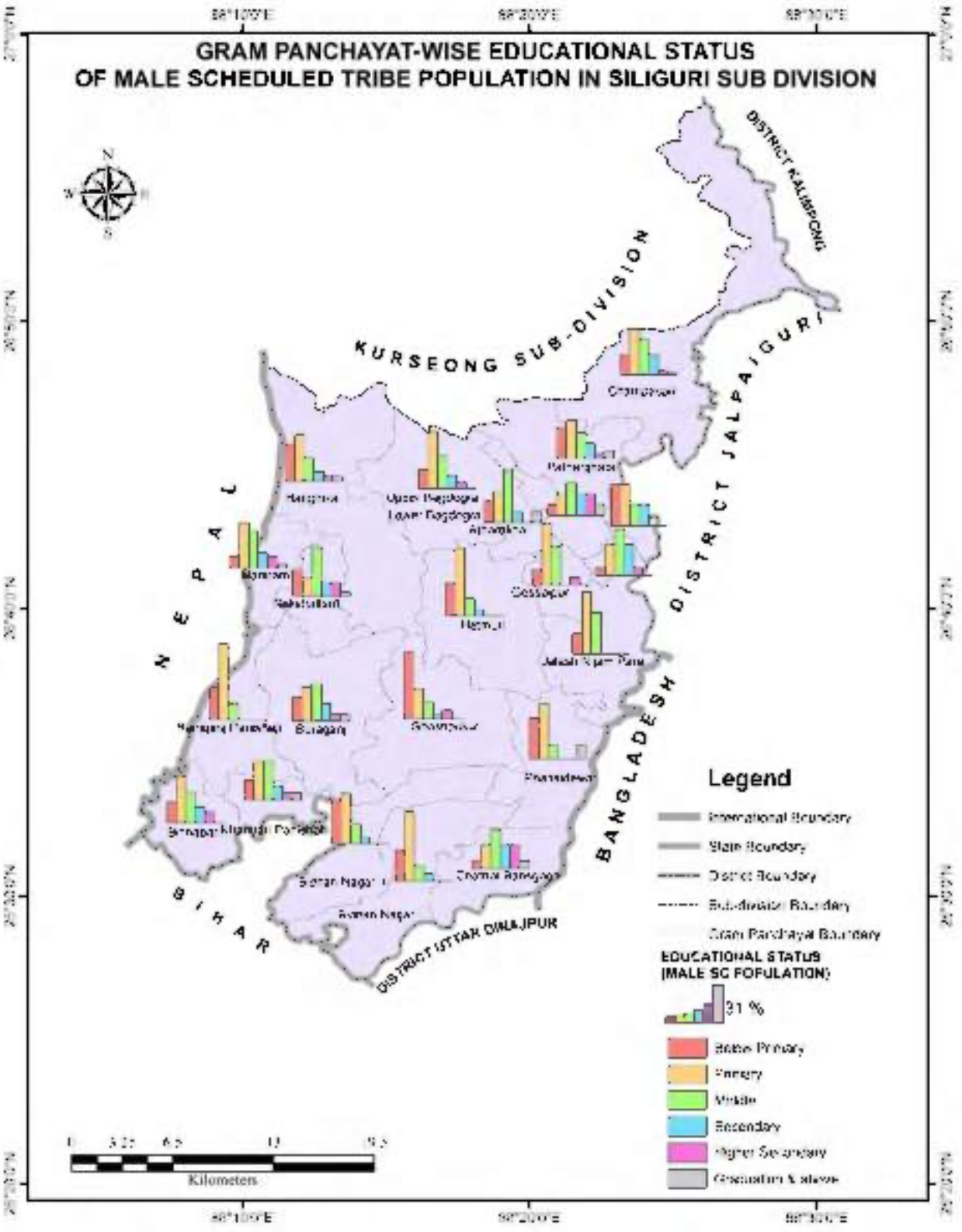
GRAM PANCHAYAT-WISE EDUCATIONAL STATUS
OF MALE SCHEDULED TRIBE POPULATION IN SILIGURI SUB DIVISION
KURSEONG SUB-DIVISION
DISTRICT KALIMPONG
DISTRICT JALPAIGURI
NEPAL
BANGLADESH
BIHAR
DISTRICT UTTAR DINAJPUR
Legend
International Boundary
State Boundary
District Boundary
Sub-division Boundary
Gram Panchayat Boundary
EDUCATIONAL STATUS
(MALE SC POPULATION)
31 %
Below Primary
Primary
Middle
Secondary
Higher Secondary
Graduation & above
Kilometers

Fig 4.11

Table 4.10 Gram Panchayat-wise Educational Attainment of Scheduled Tribe Female

Name of the Block/GP	Educational Status of Female Population					
	Below Primary	Primary	Middle	Secondary	HS	Graduation & above
Matigara	14.29	33.04	36.61	5.36	7.14	3.57
Champasari	13.33	38.33	35.00	5.00	5.00	3.33
Matigara I	20.00	20.00	40.00	10.00	10.00	0.00
Matigara II	20.00	60.00	20.00	0.00	0.00	0.00
Atharokhai	20.00	40.00	40.00	0.00	0.00	0.00
Patharghata	12.50	21.88	40.63	6.25	12.50	6.25
Naxalbari	22.39	27.61	33.58	8.96	5.22	2.24
Naxalbari	16.67	20.83	37.50	12.50	8.33	4.17
Upper Bagdogra	26.67	26.67	35.56	6.67	2.22	2.22
Hatighisa	26.09	34.78	21.74	13.04	4.35	0.00
Gossaipur	16.67	16.67	33.33	12.33	16.67	4.33
Lower Bagdogra	25.00	37.50	25.00	12.50	0.00	0.00
Maniram	18.18	31.82	40.91	4.55	4.55	0.00
Phansidewa	29.11	37.34	26.58	4.43	1.90	0.63
Hetmuri	33.33	37.25	23.53	3.92	0.00	1.96
Bidhan Nagar I	29.63	40.74	22.22	7.41	0.00	0.00
Bidhan Nagar II	35.48	29.03	32.26	3.23	0.00	0.00
Chathat Bansgao	25.00	50.00	8.33	8.33	8.33	0.00
Ghoshpukur	15.38	42.31	34.62	3.85	3.85	0.00
Jalash Nijamtara	50.00	25.00	25.00	0.00	0.00	0.00
Phasidewa	14.29	28.57	42.86	0.00	14.29	0.00
Kharibari	33.01	36.89	20.39	7.77	0.97	0.97
Binnabari	27.27	31.82	18.18	18.18	4.55	0.00
Buraganj	18.75	43.75	25.00	9.38	0.00	3.13
Kharibari Panisali	52.38	33.33	9.52	4.76	0.00	0.00
Raniganj Panisali	39.29	35.71	25.00	0.00	0.00	0.00

Source: Field Survey 2019-20

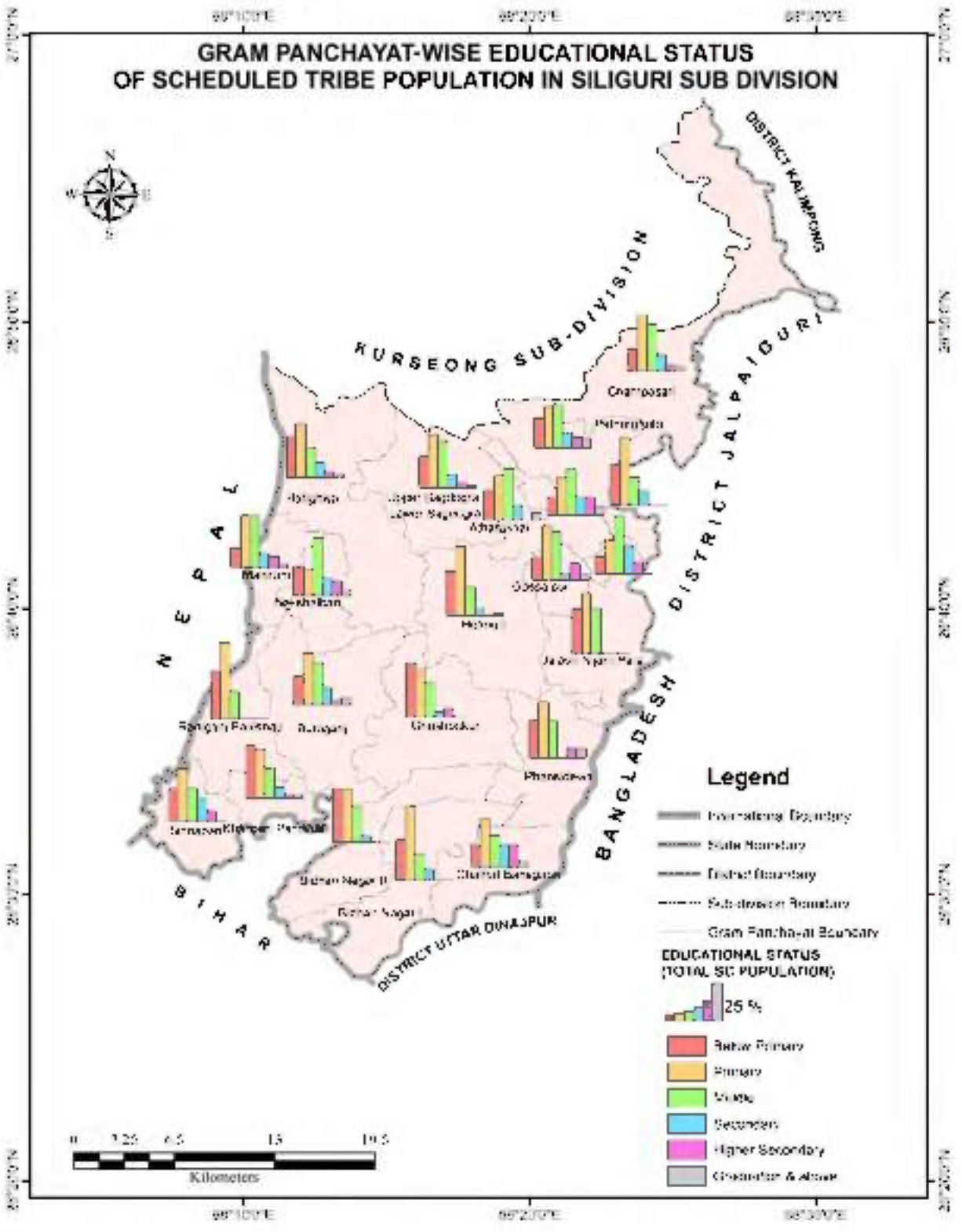
GRAM PANCHAYAT-WISE EDUCATIONAL STATUS
OF SCHEDULED TRIBE POPULATION IN SILIGURI SUB DIVISION
KURSEONG SUB-DIVISION
DISTRICT KALIMPONG
DISTRICT JALPAIGURI
BANGLADESH
NEPAL
BIHAR
DISTRICT UTTAR DINAJPUR
Legend
EDUCATIONAL STATUS
(TOTAL SC PUPULATION)
25 %
Below Primary
Primary
Middle
Secondary
Higher Secondary
Kilometers

Fig 4.12

4.4 Current Educational Status of Children (7-14 Years)

The constitution of India through 86th amendment in 2002 (Article 21-A) adopted the idea of free and compulsory education for age group of 6-14 years of age. This was enacted in the year 2009 as Right of Children to Free and Compulsory Education Act, 2009. This act gives the right to every child to complete his/her education up to elementary level that is up to class 8 for free in the neighborhood school. This act gives a huge boost to Indian elementary education system. This has encouraged guardians to enroll their children in school and let them continue their study, at least up to elementary level. This act also helps to reduce child exploitation mainly child labour. The scheduled tribes being the most under privileged community in India faced huge challenges in terms of literacy. This act with the continuous drive from the government has brought a huge change in tribal literacy in recent times.

Table 4.11 reflects the recent scenario of tribal child education (7-14 years of age) status. 45.32 percent of the total tribal children in the sub division have been pursuing their primary level education and 34.17 percent their middle level. Only 8.63 percent has never attended any school. The table 4.11 also shows that the *never attended school* instances are more frequent for girls than boys. 10.77 percent girls of this age group have never attended any school and for boys the percentage is 6.76 percent. That means one out of every ten girls of this age group is still de-touch from the education system. This needs special attention of the concerned authorities. In urban areas all the tribal population of this age group is going to school. The dropout as well as the *never attended school* category percentage is nil in urban areas. This is a very good thing for this community.

The overall dropout percentage in this age group is 10.79 percent in the Sub-division, which needs to be improved. Interestingly, in this age group the female dropout percentage (7.69 percent) is lower than the male (13.51 percent). The dropout percentage in rural for male (14.18 percent) is almost double than that of the female (7.94 percent) percentage.

Table 4.11 Current Educational Status of Children (7-14 Years)

Educational Level	Rural			Urban			Total		
	T	M	F	T	M	F	T	M	F
Below Primary	46.07	46.81	45.24	27.27	28.57	25.00	45.32	45.95	44.62
Primary to middle	32.58	30.50	34.92	72.73	71.43	75.00	34.17	32.43	36.15
Middle to secondary	1.12	1.42	0.79	0.00	0.00	0.00	1.08	1.35	0.77
Never attend	8.99	7.09	11.11	0.00	0.00	0.00	8.63	6.76	10.77
Drop out	11.24	14.18	7.94	0.00	0.00	0.00	10.79	13.51	7.69

Source: Field Survey 2019-20

4.5 Educational Schemes

The Tribal Development Department runs a good number of educational schemes to provide support to ST students to continue their study. Both central and state governments give financial assistance to tribal students through their individual bank accounts to encourage their studies. In this sub section various educational schemes and its benefits has been discussed.

4.5.1 Pre-Matric Scholarship:

The main objective of this scheme is to provide financial assistance to encourage tribal students to continue their studies after elementary level to secondary level. The beneficiaries of this scheme are running students of class IX and X whose parents/guardians income doesn't exceed Rs. 2.00 lakh p.a.

Hosteller	**Day Scholar**
Rs. 750/- p.m. for 10 months.	Rs. 150/- p.m. for 10 months.
Adhoc Grant of Rs 1000/- p.a.	Adhoc Grant Rs. 750/- p.a.

4.5.2 Post-Matric Scholarship:

This scholarship has been given to tribal students whose family income does not exceed Rs. 2.50 lakh to complete their study after matriculation level. As per their post matriculation course tuition fees and non-refundable fees has been paid by the government and along with that fixed maintenance allowance has been given through their bank accounts.

Group	**Course of Study**	**Maintenance allowance (Rs.p.m)**	
		Hostellers	**Day Scholar**
I	Medical/Engineering/B.Sc(Agri)/M.Phil/P.hd /L.L.M etc.	1200	550
II	B.Pharm/ B.Nursing /L.L.B/Hotel Management/Post Graduate Courses etc.	820	530
III	General courses up to graduate Level.	750	300
IV	Classes XI and XII in 10+2 system Intermediate courses/ITI/Polytechnic Courses	"center">750	230

4.5.3 Up-Gradation of Merit Scholarship:

This scholarship has been given to a fixed number of top 72 students applied per year to mitigate deficiencies in school subjects and in preparation of entrance exams in professional courses like Engineering, Medicine etc.

Grants	Amount
1. Boarding & lodging charge for 10 months	7,000/-
2. Pocket money for 10 months	2,000/-
3. Books & Stationery	2,500/-
4. Honorarium to Principal, expert & other incidental charges	8,000/-
Total :	19,500/-

4.5.4 Ashram Hostel:

Ashram hostels have been set up for tribal boys and girls within the campus of govt. recognized schools. Students of class I-X usually get a chance to enroll them in these hostels subject to availability of seats. Income ceiling of parents/guardians for admission is Rs. 36000/- per annum. Currently 217 such hostels are running with seat capacity of 6234 tribal students. For maintenance the students are given 750/- per month for the whole academic year. In addition to that they are given free lodging in these hostels.

4.5.5 Hostel Grant:

The West Bengal government takes initiative to build hostels in or adjacent to junior and secondary high school campus. The tribal students of class V to X who avails this facility will be given hostel grants for 10 months in a academic year. The hostel grant is 750/- per month. This is credited to the student's individual bank account. Currently in the state total 1522 Jr. and Secondary schools are providing this facility under this initiative.

4.5.6 Sikshashree:

It is also a sole initiative of state government to cut down the dropout percentage within middle level school education. Merging book grant, maintenance grant and other compulsory charges grant, this scheme has been started for class V-VIII. Financial assistance of Rs. 800/- per annum is given. Family income of the beneficiary must not exceed Rs. 250000/- per year. To make this scheme more transparent, the assistance is given through individual bank account only.

4.5.7 Merit Scholarship Scheme:

It is a sole initiative of the state government. As per merit ST students are given scholarships. The monthly scholarship amount varies class-wise. This scheme has been divided into two parts. 1st is scholarship for only ST girl students studying in class V to X. And in 2nd part i.e. for class IX to XII the scholarship has been given to all the students.

Parents/guardian's Income ceiling	V to X	Quota	IX to XII	Parents/guardian's Income ceiling	Quota
	V to VI – Rs.100/- p.m.		Rs.400/- p.m.		
Rs. 60,920/- p.a.	VII to VIII, Rs.125/- p.m.	1038		Rs. 36,000/- p.a.	410
	IX to X – Rs.150/- p.m.				

4.5.8 National Fellowship and Scholarship for Higher Education

This is a Govt. of India initiative to give financial assistance to ST students to pursue their higher studies. There are two parts of this scheme. 1st part is national scholarship for tribal students to pursue their graduate and post graduate degree from 246 premier institutions of India like IITs, AIIMS, IIMs, NIITs etc. This scholarship is given to 1000 top tribal meritorious students whose family income doesn't exceed Rs 6.00 lakh per year. Scholarship amount will includes tuition fees, living expenses and allowances for books and computers. The 2nd part of the scheme is fellowship grant to tribal students to pursue their M.phil and Ph.D from recognized Universities/Institutions/Colleges. For M.phil Rs 25000/- and for Ph.D Rs 28000/- fellowship grant is given. In addition to that contingency, HRA and reading allowance is given with the fellowship grant. 750 tribal students get this scholarship every year and girls and Particularly Vulnerable Tribal Groups (PVTGs) are given priority in this scheme.

4.5.9 National Overseas Scholarship

Govt. of India gives financial assistance to 20 schedule tribe students every year to pursue their post graduate, Ph.D and post doctoral degree from a foreign university/institution/college. Out of these 20 seats 3 seats are reserved for PVTGs. Selection is based on interview based merit list. The scholarship includes tuition fees, annual maintenance allowance of USD 15400, Contingence of USD 1532, poll tax, visa fee, Medical Insurance, cost of air journey and incidental charges. Family income limit has been set to avail this scholarship is at Rs 6.00 lakh per annum.

4.5.10 Kanyashree

Kanyashree is an initiative taken by the Government of West Bengal to improve the status of the girls by assisting financially to the economically backward families with family income not more than Rs. 120000/- per annum so that the economically marginalized families don't arrange the marriage of their girl child before they turn up 18 years. The financial assistance is given in two parts; K1 & K2. In K1 girls of class viii or above with age group between 13 to 18 years are

given annual scholarship of Rs. 750/-. And in K2 an one time grant of Rs. 25000/- is paid to the girl child when she turn 18 years provided that at the time of application they are engaged in an academic part. No married girl is eligible for this scholarship.

4.6 Awareness about Different Schemes

Only launching different schemes will not help the educational development of the tribal people if implementation is not assured. So, need of reality check in terms of implementation and awareness of the schemes that are meant for the betterment of tribal students, is what has been discussed here. In this particular section awareness about the mentioned schemes among the tribal households in the study area has been highlighted. To do so the section has been divided into two parts. In the first part percentage result of benefited households from different educational schemes has been analyzed and in the second part percentage of aware households irrespective of beneficial, has been established. These two percentages in total gives the lucid picture about the overall awareness among the tribal households in the study area.

Table no 4.12 shows the percentage of benefited households from different educational schemes designed for the financial assistance of the tribal students by the government. This shows only 12.45 percent and 8.30 percent households in the study area are benefited by the "Pre-Matric & post Scholarship for ST" scheme respectively. And only 6.23 percent of tribal households in the study area are benefited from the "Sikshashree". During survey it has been observed that awareness about the schemes like "Sikshashree", "Pre-Matric", "Post-Matric" has been developed among the tribals during the last 4-5 years. It is to be noted that though the scheme like "Sikshashree" involves students of class V to VIII and schemes likes "Pre-Matric"& "Post-Matric" involve comparatively higher class students of class IX to X and Class XI to XII respectively, the percentage of benefited households from "Sikshashree" are less than the other two. The main reason behind this out of the conventional trend is lack of awareness of the tribal guardians. During lower ages the students are fully depended upon the guardians to get the DBT (Direct Benefit Transfer) in their accounts. But as the age increases they become self sufficient to complete the procedures. So, lack of awareness of guardians plays a major role here for the schemes designed for lower classes. As the higher studies are very rare among the tribal students in the study area, the beneficial households are also very rare.

Table 4.12 Percentage of Benefited ST Households from Different Educational Schemes

Schemes	Percentage of Benefited Households
Sikshashree	6.23
Pre-Matric Scholarship for ST	12.45
Post Matric Scholarship for ST	8.30
National Fellowship and Scholarship for Higher Education	0.00
National Overseas Scholarship	0.00
Merit Scholarship Scheme:	0.57
Up-Gradation of Merit Scholarship	0.00

Source: Filed Survey 2019-20

Table no 4.13 shows the awareness percentage among the tribal households about the different educational schemes irrespective of beneficial status. Out of the total 530 households that have been surveyed, it has been observed that only about "Mid-day Meal" and flagship schemes of West Bengal government named "Sabuj Sathi" & "Kanyashree", a good percentage of household respondents are aware. About "Mid-day Meal" 94.15 percent household respondents and about "Sabuj Sathi" 82.26 percent respondents are aware. And the percentage for "Kanyashree" is 72.45 percent. Dedicated scholarship schemes even like "Sikshashree"(39.81 percent), "Pre-Matric"(37.92 percent), "Post-Matric"(29.06 percent), "Merit Scholarship"(16.42 percent); those are designed to assist the tribal students for their education up to higher secondary levels, are very less aware among the respondents. The scholarship schemes that are dedicated for higher studies of tribal students are barely known to the respondents. During survey it has been observed that a huge percentage of respondents even heard the scholarship schemes like "National Overseas Scholarship", "Up-Gradation of Merit Scholarship" for the first time. During the whole survey it has been come out very clearly that the schemes (Kanyashree, Mid-day Meal, Sabuj-sathi etc.) of which procedures are initiated and completed by the school authorities it selves, are more successful than the schemes (Pre-Matric & Post Matric Scholarship, Sikshashree, Merit Scholarship Scheme etc.), those need self initiations and to be self done.

Table 4.13 Percentage of Aware Households about Different Educational Schemes

Educational Schemes	Awareness	
	Yes	No
Sikshashree	39.81	60.19
Kanyashree	72.45	27.55
Mid Day Meal	94.15	5.85
Sabuj Sathi	82.26	17.74
Pre-Matric Scholarship for ST	37.92	62.08

Educational Schemes	Awareness	
	Yes	No
Post Matric Scholarship for ST	29.06	70.94
National Fellowship and Scholarship for Higher Education	1.13	98.87
National Overseas Scholarship	0.38	99.62
Merit Scholarship Scheme	16.42	83.58
Hostel Grant	9.81	90.19
Up-Gradation of Merit Scholarship	0.75	99.25

Source: Filed Survey 2019-20

4.7 Educational Awareness

From the above study one thing comes up very clear that although it has been made possible to built literacy awareness among tribal population in the sub division, still now higher level of education is very rare among them. Most of students are not pursuing their HS degree or above. Lack of awareness among tribal parents/guardians may be the main reason behind this. To check the educational awareness a sample survey has been conducted among 530 parents/guardians in the study area. They have been asked questions of four categories. Necessities of Education, Preferences on Educational Levels, Aspects of Education and Awareness about Different Schemes Beneficial for Tribal Education are the four categories. In first category one simple question has been asked to the respondents. Whether education is necessary or not for both male and female. 97.74 percent of the respondents agree to the fact that education is necessary for both. In second category they are asked about their preferences on educational levels up to which they wanted their children to continue their study. For male 32.08 percent and for female 37.36 percent of the total respondents think higher secondary degree of their children would be sufficient. 28.87 percent respondents wish their male child to complete the graduation degree. For female child the percentage is 21.7 percent. And almost 35 percent of the respondents want their children to study as far as the child want. From these two questions it is very much clear that in present day tribal people don't discriminate between male and female education. Initially they think about equal education for both male and female. The third category is all about aspects of education. In this category the respondents have faced four questions. 1st question that they have faced is "is higher level education necessary, only literate is not enough" 71.51 percent of the respondents gave their positive nod to this question and 23.58 percent believe that only literacy is enough. 2nd question they have been asked is "is higher education needed only to get a job?" 70.75 percent of the respondents have said that higher level education is needed only to get a job. 13.58 percent have said no and 15.66 percent are undecided. 3rd question was "is good education provides good employment?" 71.32 percent said yes and only 3.4 percent said no. The

last question was “is language a barrier in school?” In reply almost 1 out of 2 respondents said in early ages this became a huge problem for the children. That’s why most of them lost interest in studies at early ages. With time although they learnt the language but the lost interest didn’t come back. Almost one fifth respondents were clue less about this. .

Table 4.14 Educational Awareness of Respondents

Necessity of Education	**Yes**	**No**	**No Response**
Is education necessary	97.74	0	2.26
For Male	98.49	0	1.51
For Female	98.11	0	1.89
Preferences on Educational Level	**For Male**	**For Female**	
Primary	0.57	0.57	
Secondary	2.83	3.21	
Higher Secondary	32.08	37.36	
Graduation	28.87	21.7	
As much as they want	34.15	35.09	
No Response	1.89	2.08	
Aspects of Education	**Agree**	**Disagree**	**Undecided**
Is higher level education necessary, only literate is not enough	71.51	23.58	4.91
Higher level education needed only for job	70.75	13.58	15.66
Higher level education provides better standard of living	71.32	3.4	22.08
Language is a barrier in school	54.53	26.42	19.06

Source: Field Survey 2019-20

4.8 Conclusion

The objective of this chapter was to analyze the educational status of tribal population in the study area. To do so a critical analysis on tribal literacy rate, disparity index, educational attainment status, current child educational status (7-14) and educational awareness among tribal parents/guardians has been done. Through this analysis some very important points have come up. Some of them are very encouraging and some need more attention. One of the most positive and encouraging data which has come up is with time tribal literacy rate is growing with quiet a pace. The age-wise literacy rate data reflects a clear picture of this status. Another encouraging thing is increasing female literacy rate with time. Age group-wise female literacy rate data gives a clear indication of huge improvement in female literacy rate. The gender gap in literacy rate among early age (7-14 years old) tribal population shows very minimal differences. That shows

improved literacy awareness among the tribal in the study area. Although Phansidewa C. D. Block is still lagging behind from other blocks under this sub division.

The major concern regarding tribal educational status is discontinuation of study mainly after middle level education. Higher study among tribal population is a very rare case in the study area. Even in urban areas only a few people have pursued their graduation degree. During the survey it has been observed that the male students of age group 15-21 are less interested in their studies rather they interested in income generation. The study also reveals that the awareness about the ongoing different educational schemes and scholarships is very less. Even a large no of tribal guardians/parents is ignorant about the flagship schemes of West Bengal government like Kanyashree, Sikshashree. A very high percentage of the tribal parents/guardians are ignorant about the financial assistances those are available for their children to continue their education at higher levels.

As higher level of education is a key factor of a community to address and overcome its social and economic problems and becoming a better and developed community, it is very important for the tribal community of the Siliguri Sub-division to understand the importance of higher level of education. Only high level literacy rate can't help them as community to be developed but higher level education can help them immensely becoming a better and developed community.

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CHAPTER V

CONTROLLING FACTORS OF TRIBAL EDUCATION

5.1 Introduction

Government planners see education as indispensable for helping tribal people cope with national integration. Education will also determine their prosperity, success and security in life. The tribes which remain either deprived of or negligent toward education will suffer the consequence (Mahipal, 1985). The research has already shown the educational status of the tribal population in the Siliguri Sub-division. Now need of the study is to find out the controlling factors that are affecting the tribal educational development. In this chapter the controlling factors will be discussed thoroughly.

Controlling factors can be described as the factors that affect the situation most and for which the overall scenario stands like what it is at present state. In this study the most important challenges those tribal population is facing have been discussed. Mainly due to these challenges the tribal educational status is at grave state.

5.2 Dropout

One of the primary goals of Indian educational system is children must be enrolled in schools and are continuing attending schools means they don't get dropped out. With government initiatives like Sarva Shiksha Abhiyan and Right to Education Act 2009, a high percentage enrollment in primary schools has been achieved (SSA,2017). But dropout is still a scar on Indian education system. As per National Education Policy 2020 dropout after primary and middle level is a huge issue for the educational system. In tribal communities it is even a burning issue and affecting the tribal education the most.

As per National Statistical Office (NSO) a dropout is an "ever-enrolled person" who does not complete the last level of education for which he/she has enrolled and is currently not attending any educational institution (NSO, 2018). In this study considering the educational status of the study area dropout has been calculated classifying level of education into five levels. Primary (Class I-IV), Middle (Class V-VIII), Secondary (Class IX-X), Higher Secondary (Class XI-XII) and Higher Studies beyond class XII. So, if a person has been enrolled at any of this level and has left his study without obtaining the pass certificate of that certain level, has been considered

as dropout. The persons who are still pursuing any of the level of education will not be considered as dropout.

Table 5.1 shows the overall scenario of dropout in the study area. The overall dropout percentage in Siliguri Sub-division is 52.79 percent that means almost 1 out of 2 persons who enrolled themselves for a certain level of education, has left study before completing the level. This is a very alarming statistics that has come up during the field survey. Especially in rural areas the situation is very scathing. Primary data shows 55.44 percent dropout in rural areas and in urban the percentage is 35.29 percent. In rural areas block-wise highest dropout rate can be seen in Phansidewa C.D. Block (61.63 percent). Bidhan Nagar II and Matigara I are the two Gram Panchayats in the study area where dropout rate is above 65 percent.

Table 5.1 Dropout Percentage Distribution

Dropout	Rural	Urban	Total
Male	59.19	39.58	56.54
Female	50.89	29.73	48.19
Total	55.44	35.29	52.79

Source: Field Survey 2019-20

Table 5.2 Gram Panchayat-wise Dropout Percentage

Name of the Block/GP	Drop out			Name of the Block/GP	Drop out		
	Total	Male	Female		Total	Male	Female
Matigara	56.06	59.87	50.89	**Phansidewa**	61.63	65.05	57.59
Champasari	51.15	54.93	46.67	Hetmuri	65.74	68.42	62.75
Matigara II	36.36	50.00	20.00	Bidhan Nagar I	61.02	65.63	55.56
Matigara I	65.38	68.75	60.00	Bidhan Nagar II	65.67	69.44	61.29
Atharokhai	56.25	63.64	40.00	Chathat Bansgao	60.71	62.50	58.33
Patharghata	63.75	64.58	62.50	Ghoshpukur	58.93	63.33	53.85
Naxalbari	52.05	56.33	47.01	Jalash Nijamtara	50.00	50.00	50.00
Naxalbari	59.62	60.71	58.33	Phasidewa	37.50	44.44	28.57
Upper Bagdogra	47.13	54.76	40.00	**Kharibari**	49.55	52.94	45.63
Hatighisa	60.00	62.96	56.52	Binnabari	54.35	62.50	45.45
Gossaipur	32.14	37.50	25.00	Buraganj	44.93	45.95	43.75
Lower Bagdogra	40.00	41.67	37.50	Kharibari Panisali	35.00	42.11	28.57
Maniram	60.00	63.64	54.55	Raniganj Panisali	59.70	58.97	60.71

Source: Field Survey 2019-20

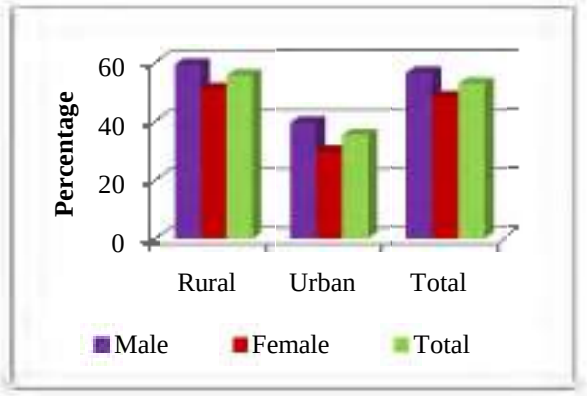

Fig. 5.1: Rural Urban Distribution of Dropout

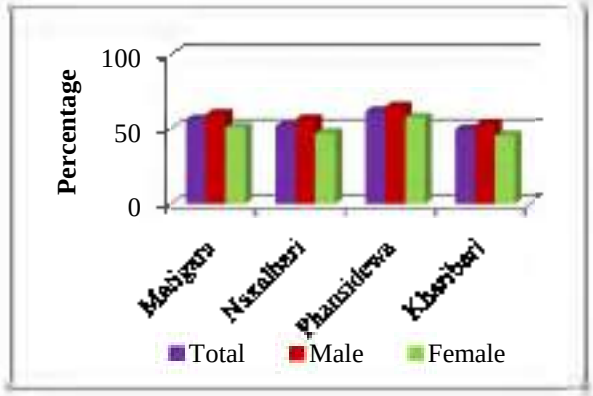

Fig. 5.2: Block-wise Distribution of Dropout

In the study area for both male and female the dropout rates are very high. The male dropout rate is 56.54 percent and for female the rate is 48.19 percent. So, it is clear that in the study area the tribal male dropout rate is higher that the female dropout rate. So, the hypothesis as mentioned in the introduction chapter "***The female dropout rate is higher than the male dropout rate***" is tested here.

Hypothesis: ***The female dropout rate is higher than the male dropout rate.***

Statistical Methods: The phenomenon of 'dropout' is essentially an attribute for which data is generated based on its presence or absence. This type of data usually follows the binomial probability distribution with mean being equal to $n.p$and standard deviation being equal to $\sqrt{npq}$, where p represents the probability of 'success', (in present context it is 'dropout') and q represents the probability of 'failure' i.e., $(1-p)$and n represents the sample size.The 'success' and 'failure' are the complementary events and hence the sum of these two becomes unity i.e., $(p+q)=1$. For hypothesis testing using binomial distribution as the sampling distribution under null, instead of using the mean number of success and its standard deviation, the mean proportion of success and the standard deviation of proportion of success are used as the statistics for computing the test statistic and their computation is done using following formula (Kothari, 2005):

$$\text{Mean proportion of success} = \frac{(n.p)}{n} = p,$$

$$\text{Mean proportion of failure} = q = (1-p), \text{ and}$$

$$\text{Standard Deviation of mean proportion of success} = \sqrt{\frac{p.q}{n}},$$

Where, p = Observed proportion of success,

q =Observed proportion of failure and

n =Sample size

For hypothesis testing with large sample of such data, z-test can be applied presuming the normal approximation of binomial distribution under null since, for large sample, the distribution coincides very closely with normal distribution. In view of verifying the present research hypothesis, two sample z-test has been applied presuming the large sample approximation of binomial distribution under null. If p_1 is the proportion of female dropout and $p_2$is the mean proportion of male dropout, the null and alternative hypothesis could be defined as follows:

$$H_0: p_1 \leq p_2$$

$$H_a: p_1 > p_2$$

As the H_a is right sided, the right sided one tailed test has been applied to determine the rejection area at 5 percent level of significance ($\alpha = 0.05$). The test statistic has been calculated as follows:

$z = \frac{p_1 - p_2}{\sqrt{\frac{p_1 q_1}{n_1} + \frac{p_2 q_2}{n_2}}}$, for heterogeneous population and

$z = \frac{p_1 - p_2}{\sqrt{\frac{p_0 q_0}{n_1} + \frac{p_0 q_0}{n_2}}}$, for homogeneous population;

where, p_1= proportion of success for female dropout and p_2= proportion of success for male dropout. For applying z-test the sample data has to satisfy the condition of (i) normality, (ii) randomness and (iii) independence. In present study, the number of success and that of failure are greater than equal to 10 for each group which ensures the normality assumption; the household has been selected randomly which ensures that the sample data is random and the sampling has been designed using the 'with replacement' method which ensures that the sample data is independent.

The result of z-test: The test result has been shown in Table 5.4 while the Table 5.3 presents the descriptive statistics. It has already been stated that as the H_a is right sided, the right sided one tailed test has been applied to determine the rejection area at 5 percent level of significance ($\alpha = 0.05$). The figures have been calculated for both the heterogeneous population and homogenous population but the output for heterogeneous population only has been shown in the

table while that of homogenous population has not been presented here since there is almost no difference between these two.

It is observed (as shown in Table 5.4) that the computed *z*-statistics for all the selected administrative units (-2.789 for rural, -1.352 for urban and -2.998 for whole Sub-division) do not fall in the rejection region at 5 percent significance level and accordingly the *p*-value for all the statistics is more than α-value. It is, thus, inferred that there is not enough evidence to reject the null hypothesis which states that female dropout rate is less than or equal to male dropout rate and so the null hypothesis is retained. It can be concluded that, in the population dataset, the mean female dropout rate for all administrative units (0.509 for rural, 0.297 for urban and 0.482 for the whole Sub-division) is likely to become either less than or equal to the male dropout rate (0.592 for rural, 0.396 for urban and 0.565 for whole Sub-division). So, the research hypothesis which states that 'female dropout rate is higher than the male dropout rate' is disproved in present research.

Table 5.3 The Descriptive Statistics of Female and Male Dropout

Study Unit	Proportion of female dropout		Proportion of male dropout		Remarks
	Mean	SD	Mean	SD	
Rural	0.509	0.022	0.592	0.020	Calculation has been made with assumption that the observed data follows Binomial Distribution
Urban	0.297	0.053	0.396	0.050	
Sub-division	0.482	0.021	0.565	0.019	

Source: Computed by the Researcher based on primary data.
Note: Standard Deviation has been abbreviated as SD.

Table 5.4 The Result of two Sample z-test Applied to Compare the Female and Male Dropout Rate

Study Unit	z-Statistic	z-Critical	*p*-Value	Inference	Remarks
Rural	-2.789	1.645	0.997	Not Significant	H_0: $p_1 < p_2$ H_1: $p_1 \geq p_2$ p_1= Female dropout rate p_2= Male dropout rate$\alpha = 0.05$
Urban	-1.352	1.645	0.912	Not Significant	
Sub-division	-2.998	1.645	0.999	Not Significant	

Source: Computed by the Reseacher based on primary data.
Note: The z-Critical value has been obtained from z-Distribution table.

General perception of the society is that more females dropout of school than males. But the research shows overall female dropout is less than the male dropout in the study area. The main reason behind tribal male dropout is urge of income generation (Table 5.5). And this is a reason that is consistent with time. Both in the past and present males are considered as bread earner of

the family and they are compelled to leave their studies in midway to support their family financially. But in case of tribal females the main reason in the past used to be the early age marriage. In recent times this trend has been improved immensely. Due to proper monitoring on child marriage, campaigning against child marriage, flagship educational schemes like Kanyashree to encourage female marriage above 18 years by the government creates a lot of awareness among people and that leads the society to curb the dropout rate due to marriage in recent times. *Not interested in studies* is another major reason of dropout for both tribal male and female students. A handsome number of both male and female students get dropped out due to this reason. Although the female dropout percentage due to this reason (21.43 percent) is much lower than that of the male dropout rate (35.32 percent) (Table 5.5).Even social scientists are saying that in recent time in India different studies show female students are often described by educators as "more willing to learn" than their male peers. The overall academic performance of the female students is also better than boys as obvious from class Xth results of various school boards (DNA Report, 8th August 2015). During field survey it has been observed that in recent times comparatively tribal female dropout rate is decreasing to tribal male dropout rate. Among 7-14 years of age group the male dropout rate (13.51 percent) is way higher than the female dropout rate (7.69 percent). So, this current trend of improved female dropout rate has impacted the overall female dropout percentage as a whole and brings down the overall tribal female dropout rate marginally lower than the male counterpart.

Table 5.5 Different Reasons of Dropout

Dropout Reasons	Rural			Urban			Total		
	T	M	F	T	M	F	T	M	F
Transportation Barrier	1.61	1.10	2.33	0.00	0.00	0.00	1.47	1.00	2.14
Required for household work	13.02	2.20	28.29	13.33	2.63	31.82	13.05	2.24	28.57
Required for income	27.33	42.31	6.20	28.33	42.11	4.55	27.42	42.29	6.07
Education cost	8.52	6.59	11.24	21.67	21.05	22.73	9.68	7.96	12.14
Not interested in Study	30.87	37.09	22.09	16.67	18.42	13.64	29.62	35.32	21.43
Repeated Failure	7.07	9.62	3.49	11.67	15.79	4.55	7.48	10.20	3.57
Marriage	10.45	0.00	25.19	8.33	0.00	22.73	10.26	0.00	25.00
Health	1.45	1.10	1.94	0.00	0.00	0.00	1.32	1.00	1.79

Source: Field Survey 2019-20

Along with overall dropout percentage, the early level dropout percentage makes the tribal educational development more obstructive. More than 90 percent dropout occurs within

secondary level. Dropout percentage among tribal population at primary level is 24.78 percent. In middle level another 42.08 percent is added to this. Overall, 66.86 percent tribal dropout occurs within middle level. This is a very negative point for the tribal society in the study area. In rural 1/3rd of female dropout happens in primary levels. But in urban this percentage is only 13.64 percent.

To prove the significance of the reasons of dropout which have been come out during the field survey the Logistic Regression model has been tested here.

Logistic Regression is a statistical model which is use to explain a binary dependent variable. Mathematically a binary logistic model has a dependent variable (Y) with two possible values. the log-odds (the logarithm of the odds) for the value labeled "1" is a linear combination of one or more independent variables (X) ("predictors"); the independent variables can each be a binary variable (two classes, coded by an indicator variable) or a continuous variable (any real value). In the present case the variable in the model dropout is binary dependent variable while the household work, income generation, repeated failure, married and gender are binary independent variable. Distance from school is continuous variable. So, to identify which independent variable (reasons of dropout) are more influencing the binary dependent variable (drop out) the Logistic Regression has been used.

The statistic is calculated using the following formula,

$$P\ (Dropout)=1/(1+e^{-(a+b1X1+b2X2....+bnXn)})$$

Where, independent variable X1, X2,…,Xn explain the probability of dropout.

a and b are the parameters of the models.

Table 5.6 Model Summary

Model Summary			
Step	-2 Log likelihood	Cox & Snell R Square	Nagelkerke R Square
1	899.737	0.497	0.663

Source: Computed by the researcher using SPSS v.23 based on primary data

To find out how much the independent variables are affecting the dependent variable the Nagelkerke R Square test has been applied here. The test statistic gives the value of 0.663, which is more than the value 0.500. So, it can be said that the independent variables are affecting the dependent variable to some significant extent.

Table 5.7 Goodness of Fit of the Statistics

Hosmer and Lemeshow Test			
Step	Chi-square	df	Sig.
1	329.292	8	0.000

Source: Computed by the researcher using SPSS v.23 based on primary data

Now, to find out goodness of fit of the statistical test, Hosmer and Lemeshow test has been done. The test has been applied with 5 percent significance level ($\alpha = 0.05$). The Chi-square value at 8 df for the test has given the value of 329.292 with significance level of 0.000. This shows, overall the model is not well fitted and explains little about the variable. But all the variables are significantly explaining the dependent variable (Table 5.8).

Table 5.8 Result of the Logistic Regression

Result of Logistic Regression									
		B	S.E.	Wald	df	Sig.	Exp(B)/Odd Ratio	95 percent C.I.for EXP(B)	
								Lower	Upper
Step 1[a]	Distance from School	0.107	0.014	57.422	1	0.000	1.113	1.082	1.144
	Whether engaged in Household Work(1)	2.549	0.339	56.652	1	0.000	12.789	6.586	24.833
	Whether invoved in earning (1)	2.174	0.235	85.739	1	0.000	8.791	5.549	13.928
	Repeated Failure(1)	1.133	0.202	31.409	1	0.000	3.104	2.089	4.612
	Whether got married(1)	1.148	0.326	12.368	1	0.000	3.152	1.662	5.975
	Gender(1)	2.365	0.350	45.650	1	0.000	10.645	5.360	21.139
	Constant	-5.192	0.397	170.844	1	0.000	0.006		

Source: Computed by the researcher using SPSS v.23 based on primary data

Result of logistic regression model shows the probability of occurrence of dependent variable due to independent variable. Here in this case, If the distance from school increases by 1 unit there is more tendency toward happening of drop out (1) by a factor of 1.113 (sig value 0.000). Engagement of household work increases by 1 unit probability of drop out (1) increases by a factor of 12.789. If the Involvement in earning increases by 1 unit, tendency towards happening of dropout increases by a factor of 8.791. If Repeated failure and got married these two factors increases with 1 unit the probability towards dropout increases by the factor of 3.104, 3.152 and Drop out is more likely to happen for male drop out students by a factor of 10.645. All the variable are significant with 5 percent significance level at 1 degree of freedom.

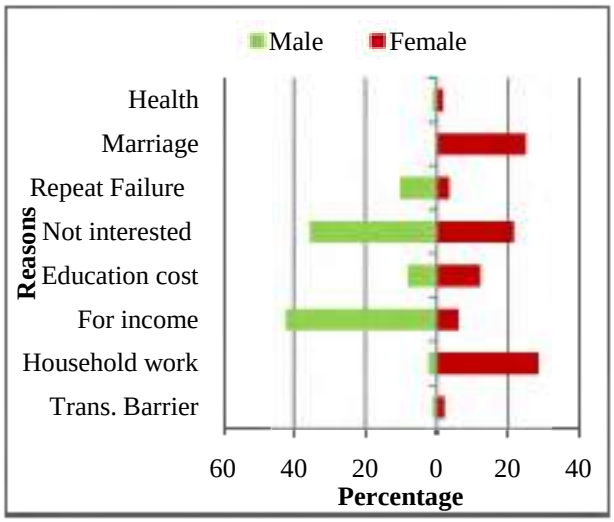

Fig. 5.3: Reasons of Dropout of Scheduled Tribe Population

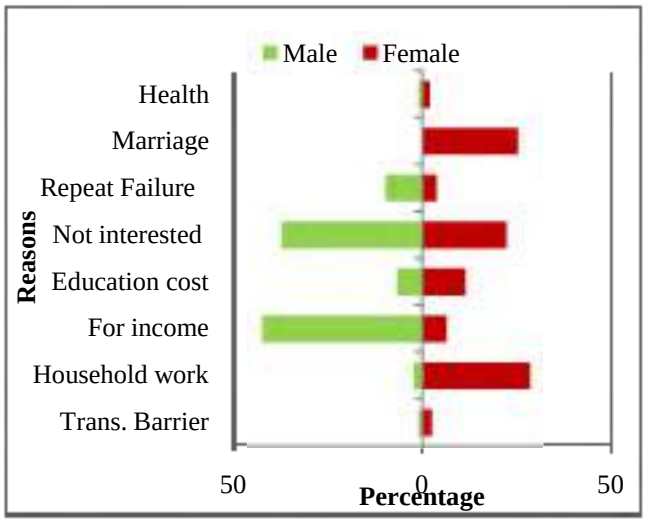

Fig. 5.4: Reasons of Dropout in Rural Areas

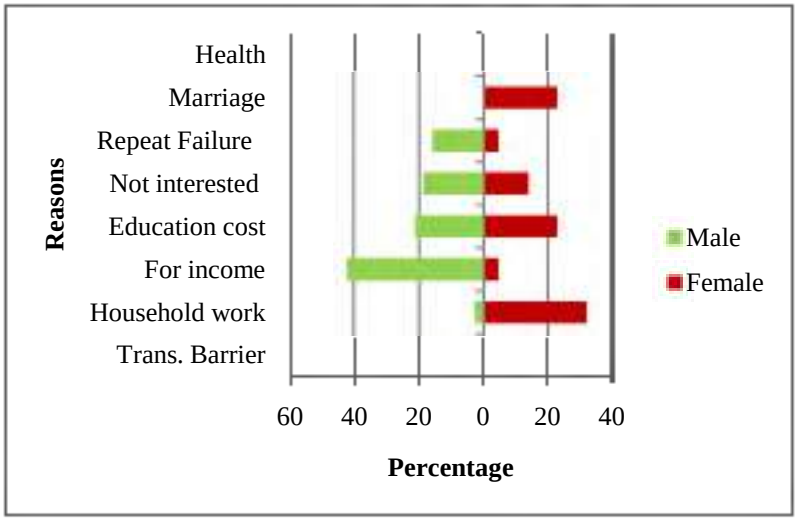

Fig. 5.5: Reasons of Dropout in Urban Areas

Table 5.9 Dropout Percentage at Different Educational Levels

Educational Levels	Rural			Urban			Total		
	T	M	F	T	M	F	T	M	F
Primary	26.21	23.35	30.23	10.00	7.89	13.64	24.78	21.89	28.93
Middle	42.93	42.86	43.02	33.33	34.21	31.82	42.08	42.04	42.14
Secondary	22.99	25.00	20.16	33.33	36.84	27.27	23.90	26.12	20.71
Higher Secondary	7.07	7.97	5.81	20.00	18.42	22.73	8.21	8.96	7.14
Higher Studies	0.80	0.82	0.78	3.33	2.63	4.55	1.03	1.00	1.07

Source: Filed Survey 2019-20

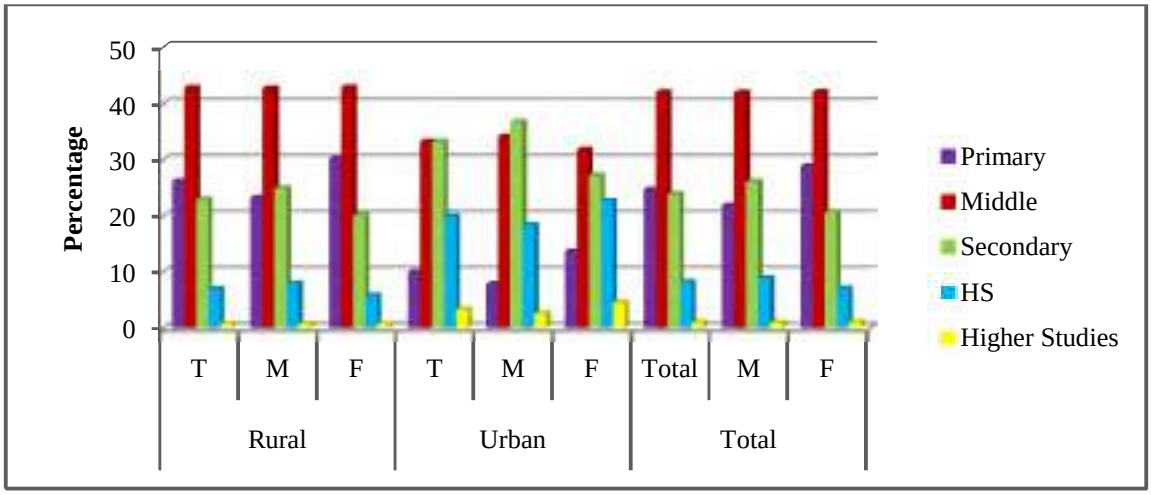

Fig. 5.6: Dropout Percentage at Different Educational Levels

5.3 Financial Challenges

The tribal communities are the most poverty sicken and exploited in India (Mukherjee, 2009). The tribal population in the study area is no exception to that. Field survey data shows 71.70 percent tribal households have monthly income not more than Rs. 10000/-. Even 21.51 percent tribal households have monthly income within Rs. 5000/- (Table 3.56). And due to this financial crunch, the tribal students face lack of resources in their education. During field survey, it has come up that due to the financial sickness of the households the children remain illiterate too. The study shows 43.21 percent of total illiteracy is caused by this financial sickness of the household (Table 5.10). Not only this, even they get a chance to enroll themselves in schools, they can't continue their studies for lack of resources. And as a result, they lag behind compared to other students and find their studies more complicated. Thus, they lose interest in studies and get dropout in the midway According to the field respondents, 9.68 percent of total dropout is caused by the education cost that they havn't afford due to their poor financial status (Table 5.5).

5.4 Early Age Employment

This is a consequence of financial challenges that are being faced by tribal population in the study area. It is mainly a factor to the male education status of this community. Low household income compels the early age male population to get engaged in employment and earn for the family. This results in high dropout percentage for males within secondary level of education (90.05 percent) (Table 5.9). This is why higher education is very rare among tribal male population. The research shows, 42.29 percent of total male dropout is due to the reason of "*Required for Income Generation*" (Table 5.5).

5.5 Early Age Household Responsibilities

For females this is a major issue. Due to financial challenges every member of a tribal household is treated as a source of income generation for the household. That is why work participation rate among tribal women (39.12 percent) is also high (Table3.47). Although during field survey it has been observed that females of 15 years or more age group is involved in income generation. Child labour is very rare among the tribal population in the study area. The major female work participation rate can be seen among 30-44 years of age group (Table 3.54). And in this scenario the early aged female member has to take care of the household responsibilities. In addition to that they have to take care of their younger siblings too. And that is why most of the female students who are pursuing their middle or secondary level education are also taking up the household responsibilities. This gradually leads towards their irregular attendance in schools and finally dropped out of schools. The primary data shows, 28.57 percent (Table 5.5) of total female dropout is due to this reason. During field survey it has been observed that due the lack of awareness the tribal praents tend to send their children to schools at comparatively higher age than other society does. At times due to the household pressure some of this batch of tribal girls never get a chance to go to schools and they remain illiterates. The primary data shows, 15.27 percent of total female illiteracy is caused by the "*early age household responsibility"* (Table 5.10). This affects the higher level of female educational attainment status as well as overall educational status of tribal population.

5.6 Language and Cultural Barriers

Tribal population has their own cultural history and language which are entirely different from the other societes and these become a significant barrier for their educational upliftment. In the study area the tribal population speaks in *Sandri* language which is a script less language. During survey it has observed that most of the tribal children speak only in their mother tongue in the houses. As a result, in schools they have to accustom with a language that seems to be an alien language to them. Thus, they lose interest in studies from the very beginning. In the study area 54.53 percent tribal parents/guardians think that language is a major problem for their children in schools (Table 4.14). The primary data reveals, a large no of tribal students has got dropped out from schools due their lack of interest in studies. 29.62 percent of total tribal dropout in the study area is caused by this reason (Table 5.5). Culturally tribal people are way different from the other communities. And that is why they try to contaminate themselves in their own world. They don't try to collaborate with other cultures. Hence in schools also the tribal students create their own

circles and from very early age they find themselves foreigners to the others. This creates lack of confidence among them to pursue their studies. The lack of interest has also caused failure in studies and repeated failure (7.48 percent) leads them to get dropout from schools too (Table 5.5).

5.7 Health Issue

The tribal population is historically mainly depends upon the Mother Nature for their survival. For their illness also they depend on nature. They use different herbs and plants for their medication. They are even unaware of most of the modern medical facilities. In most of the cases they treat themselves in houses rather going to the hospitals. Medical issues to tribal students often take longer time to recover. Often, they mix up some minor psychological problems with their superstitious believes. These lead the student irregular in schools. Sometimes it causes of getting drop out from school. Primary data shows 1.32 percent tribal students get dropped out of schools due to their health issues (Table 5.5). Sometimes very early age health issue also leads the tribal children to get refrain from enrollment in schools (0.35 percent) and they remain illiterates.

5.8 Lack of Motivation

There is a saying "*Home is the First School of Every Child*." But for tribals in most of the cases this phrase doesn't work. In most of the cases it has been observed that the student of the family is a first or second generation school going population. These students don't get any type of parental support in their studies at homes; rather the parents are incapable to help them. Hence, at very early age the child with minimum resources, lack of parental support, language problem, cultural barriers lose interest in study. If someone still continue its study after all these barriers lack of awareness makes the situation tougher for them. Government has started a lot of initiatives to encourage the tribal students for higher level of studies. Different types of educational schemes, financial assistances are there to encourage them for higher level of studies. In addition to this many NGOs' are there who are working for the tribal education in tea garden areas. But the tribal students as well as parents are ignorant about the facilities which are available for their higher level of education. This lack of awareness makes them feel deprived by the society. Gradually they lose motivation to continue their studies. And it is essential to have that motivation for attainment of higher level of education (Rani, 2007). With financial sickness the situation then compeled them to leave their studies and help their family at early ages. During field survey, it has been observed that many tribal population has become illiterate (35.78

percent) due to the lack of awareness about the importance of education of their parents (Table 5.10).

Table 5.10 Different Reasons of Illiteracy

Reasons of Illliteracy	Rural			Urban			Total		
	T	M	F	T	M	F	T	M	F
Transportation Barrier	11.21	9.35	12.70	9.38	7.41	10.81	11.07	9.21	12.55
Household Work	9.19	2.27	14.74	15.63	7.41	21.62	9.67	2.63	15.27
Poverty	43.32	50.14	36.05	40.63	48.15	35.14	43.12	50.00	35.98
Lack of Awareness	35.89	37.96	36.05	34.38	37.04	32.43	35.78	37.89	35.77
Health	0.38	0.28	0.45	0.00	0.00	0.00	0.35	0.26	0.42

Source: Field Survey 2019-20

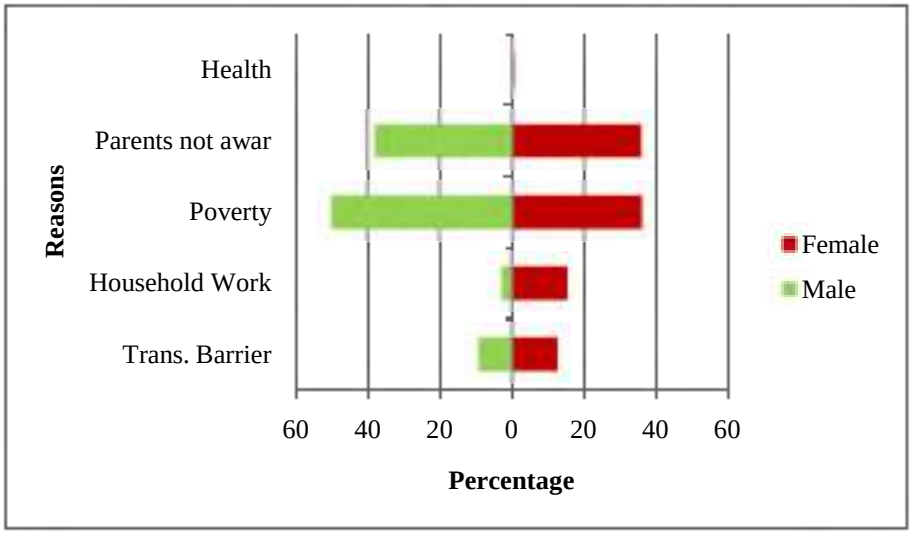

Fig. 5.7: Reasons of Illiteracy

5.9 Conclusion

In this chapter the researcher has prominently focused on the factors that are controlling the tribal education. The problems which are hindering the educational development of tribal population have been discussed. This shows ailing economic condition, distinct and primitive cultural followings are the main controlling factors of tribal education. Although government has taken a lot of initiatives but still an ample scope of educational development is there. Government as well as the society needs to be more punctilious towards tribals and their problems to help them grow as a better educationally developed community.

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CHAPTER VI

RELATION BETWEEN EDUCATION AND ECONOMIC CONDITION OF TRIBAL POPULATION

6.1 Introduction

Education in every sense is the fundamental framework of development. A nation can't achieve any sustainable economic development without substantial educational development. Education enriches the knowledge and increase the productivity of the human resources. This century is the age of human capital. A nation with educationally enriched human workforce can develop faster. (Ozturk, 2001). Among tribal population education plays the most important role towards their economic status. Poor educational development causes the poverty sicken economic status of tribal people in the study area. If the educational status of this community can be improved, it can lead this towards the economic development too.

In this chapter the relationship between education and economic condition of tribal population in the study area has been critically analyzed. To do so the research mainly finds the relationship between education, employment and income opportunities among tribal population. Here, employment indicates the different employment sectors i.e occupational sectors. The study finds how with the educational attainment status the engagement in different employment sectors changes among the tribal population in the study area. The research also shows the changes of income opportunities or income levels with different levels of education among the tribal people.

6.2 Education and Employment

Education is a main contributor to diversification of employment sectors of a community. In the study area the tribal people are mainly concentrated in the tea garden areas. So, it is obvious for them to engage in the plantation sector generation-wise. Most of the tribal household members are associated with this sector generation by generation, mostly as plantation labourers. The table 6.1 clearly shows that with higher levels of education the tribal people are diversifying by profession. With higher level of education people are associating more with business and service sector. Illiteracy has been a major issue among tribal population in the study area for a very long period. Majority of the illiterate people are with no choice but to become a plantation labour or work as agricultural labourers . Some of them with changing times now work as daily labour in some construction sites or in some industries. But besides these they are left with no option. The

primary data shows 76.33 percent of the illiterate tribal people work as either plantation worker or as agricultural labourer. In the study area tribal people with own agricultural land is a very rare scenario. Only 2.56 percent illiterate tribal population counts as cultivator. So, overall 76.33 percent illiterate tribal population is associated with agricultural sector. Only 23.03 percent of the illiterate tribals are associated with the labour sector other than agriculture. During survey it has been observed that people with higher attainment levels are coming out of the shell of agriculture and labour sectors and testing their opportunities in business and services. The data shows tribal people with secondary level of education have percentage share of 51.81 percent in business and service sectors comparing only 5.04 percent, 11.01 percent and 19.02 percent having educational attainment levels of below primary, primary and middle level respectively. The field survey also shows nil participation in agricultural sector of the tribal people with Higher Secondary and above level educational status.

Table 6.1 Educational Level and Employment Category

Educational Level	Agricultural & Plantation Worker	Daily Labour	Business & Services
Illiterate	76.33	23.03	0.64
Below Primary	76.26	18.71	5.04
Primary	54.19	34.80	11.01
Middle	46.20	34.78	19.02
Secondary	10.84	37.35	51.81
HS	0.00	6.25	93.75
Graduation	0.00	0.00	100.00

Source: Calculated By the Researcher

6.3 Education and Income

With the diversification of employment sectors income opportunities increases too. As the educational status of the tribal population increases the distribution of monthly income in higher income categories also increases. The table 6.2 shows 97.66 percent of the illiterate tribal population of the study area has monthly income is not more than Rs. 5000/-. The reason behind this is most of the illiterate people work as plantation or other daily labourer and the average daily income from this employment sector is more or less Rs 150-175. But a substantial percentage of tribal people with higher secondary or above educational status have monthly income greater than Rs 5000/- or even greater than 10000/-. This is due to the employment sectors to which the tribal people having the mentioned educational status are associated with. 30.43 percent of the graduate tribal population has monthly income greater than Rs. 10000/-. But up to middle level of educational attainment status tribal people barely have the income

opportunities of more than Rs 10000/- per month. This shows a clear positive relation between education and income opportunities.

Table 6.2 Educational Level and Income

Educational level	Upto 1000	1001-5000	5001-10000	above 10000
Illiterate	5.76	91.90	2.34	0.00
Below Primary	2.16	92.09	5.75	0.00
Primary	2.64	81.06	16.30	0.00
Middle	1.09	74.46	23.91	0.54
Secondary	0.00	49.40	43.37	7.23
HS	0.00	18.74	65.63	15.63
Graduation	0.00	4.35	65.22	30.43

Source: Calculated by the Researcher

From the above two points it is very clear that educational level has positive contribution towards the both employment as well as income opportunities. And this clearly concludes the relationship between education and overall economic condition of tribal people in the study area. So, the hypothesis as mentioned in the Introduction chapter ***"Employment and income opportunities of tribal people are related to the level of education"*** is tested here.

Hypothesis: ***Employment and income opportunities of tribal people are related to the level of education.***

Statistical method

Two separate hypothesis tests are required to verify the present research hypothesis – one is for analyzing the relationship between income opportunities and education levels while other is for analyzing the association between employment and education level. The comparison of mean income across the educational group has been used here to capture the income.

Analyzing the association between employment opportunities and education

Since both the variables, here, are categorical the magnitude of association has been measured by means of Contingency coefficient and Chi-square test has been applied to judge the significance of association between variables (occupational group and education level).

Contingency coefficient is a measure of association based on chi-square. The value ranges between 0 and 1, with 0 indicating no association between the row and column variables and values close to 1 indicating a high degree of association between the variables. The maximum value possible depends on the number of rows and columns in a table.

The Chi-Square Test has been conducted, here, to test the null hypothesis that two attributes – occupational order and education level – are independent or not associated while the alternative hypothesis states that they are associated. The test has been applied on fulfillment of following conditions: (i) observation has been collected on random basis (ii) all observations are independent i.e., no respondent appears twice and (iii) no group contains less than 10 items.

The test statistic has been calculated as follows:

$$\chi^2 = \sum \frac{(O_{ij} - E_{ij})^2}{E_{ij}}$$

where,

O_{ij} = observed frequency of the cell in the i^{th} row and j^{th} column

E_{ij} = expected frequency of the cell in i^{th} row and j^{th} column.

The critical value is determined by using the chi-square distribution for a given significance level with degree of freedom = $(c - 1)(r - 1)$, where c is the number of columns and r is the number of rows and the inference is drawn accordingly.

The result of χ^2 Test

The test has been applied at 5 percent significance level ($\alpha = 0.05$). The result shows that test statistic ($\chi^2 = 477.490$, df = 4) falls in the rejection region at 5 percent level of significance ($p < 0.05$). So, the null hypothesis is rejected. It can be, thus, concluded that there is enough evidence to say that employment opportunity and education level are associated with each other with the magnitude of association in terms of contingency co-efficient being 0.54.

Table 6.3 Cross tabulation of Occupational Group and Educational Level

			Occupational Group			Total
			Agriculture & Plantation	**Labour**	**Business and Service**	
Education Level	**Illiterate & Below Primary**	Frequency	464	134	10	608
		Expected Frequency	357.9	162.9	87.2	608.0
	Primary & Middle	Frequency	208	143	60	411
		Expected Frequency	241.9	110.1	59.0	411.0
	Secondary &above	Frequency	9	33	96	138
		Expected Frequency	81.2	37.0	19.8	138.0
Total		Frequency	681	310	166	1157

		Occupational Group			Total
		Agriculture & Plantation	Labour	Business and Service	
	Expected Frequency	681.0	310.0	166.0	1157.0

Source: Computed by the researcher using SPSS v. 23 based on primary data.

Table 6.4 Result of Chi-Square Test

Test Statistic	Value	Degree of Freedom	Asymptotic Significance (2-sided)
Pearson Chi-Square	477.490[a]	4	0.000

a. 0 cells (0.0 percent) have expected Frequency less than 5. The minimum expected Frequency is 19.80.

Source: Computed by the researcher using SPSS v. 23 based on primary data.

Table 6.5 Result of Contingency Coefficient

Symmetric Measures			
		Value	Approximate Significance
Nominal by Nominal	Contingency Coefficient	0.540	0.000
N of Valid Cases		1157	

Source: Analysis by Researcher using SPSSv. 23 based on Primary Data.

Analyzing the relationship between income and education

Mean income for different educational level has been taken as the measures for income opportunity and accordingly the analysis has been done by means of comparing mean income across different educational level.

One-way ANOVA is the powerful test for comparing the mean income across different educational groups since the variable in question (income) is a metric variable while the other variable is a grouping variable (educational group) with more than two groups. But here, in the present case, Kruskal-Wallis *H* Test, the non-parametric counter part of the One-way ANOVA, has been used since the sample data violets the assumption of normality which is required for application of ANOVA.The only condition for applying Kruskal-Wallis test is that the sample data has to be independent which is ensured in the present case by the fact that the sample data has been collected using random sampling with replacement method i.e., none of the respondent appears more than once either within or between the groups.

Kruskal-Wallis *H* Test has been conducted, here, to test the null hypothesis that mean income in seven educational groups come from identical population against the alternative hypothesis that means of these population are not equal. Symbolically these can be expressed as follows:

$$H_0: \mu_1 = \mu_2 = \mu_3 \ldots\ldots = \mu_7$$

$$H_a: \mu_1 \neq \mu_2 \neq \mu_3 \ldots\ldots \neq \mu_7$$

where, μ is the mean income and 1, 2,…7 refer to educational groups. The data are ranked either in ascending or descending order as if they constitute a single group and the test statistic *H* is calculated as follows:

$$H = \frac{12}{n(n+1)} \sum_{i=1}^{k} \frac{R_i^2}{n_i} - 3(n+1)$$

where, $n = n_1 + n_2 + \cdots + n_k$ (in present context, k = 1, 2,…7) and R_i^2 is the sum of the ranks assigned to n_i observations in the i^{th} group. When the sample size is five or more for each group and the null hypothesis is true, the test statistic *H* approximately follows the chi-square distribution with (k – 1) degree of freedom and the limit of acceptance or rejection region is determined accordingly at a given significance level.

The Result of Kruskal-Wallis *H* Test

The test was applied at 5 percent significance level ($\alpha = 0.05$) to test the null hypothesis that mean income across seven educational groups are equal against the alternative hypothesis that mean income across the groups are not equal. The test statistic (H = 273.833) falls in the rejection region at 5 percent significance level ($p < 0.05$) and hence null hypothesis is rejected. The table 6.6 shows that the mean income is least for illiterate group (Rs. 3155.97) and it increases as the order of education level increases reaching its maximum for the education group of 'graduation and above' (Rs. 11152.17). So, it can be concluded that there is enough evidence to say that income of people significantly increases as the order of their education level increase starting from 'illiterate' to 'graduation and above'.

Table 6.6 Mean and Standard Deviation of income across the Educational Groups and the Rank Assigned to Sample Data for performing Kruskal-Wallis *H*-test

Education Level	N	Mean Rank	Mean Income (Rs.)	Standard Deviation of Income (Rs.)
Illiterate	469	475.59	3155.97	1086.222
Below Primary	139	460.95	3203.60	1067.396
Primary	227	558.48	3740.09	1655.515
Middle	184	667.27	4366.30	1913.300
Secondary	83	898.38	6554.22	3615.694
HS	32	1039.61	9031.25	4902.168
Graduation and above	23	1104.09	11152.17	5886.106
Total	**1157**	**----**	**4034.01**	**2558.474**

Source: Computed by the researcher using SPSS v.23 based on primary data.

Table 6.7 The Result of Kruskal-Wallis *H* -test

Test Statistics[a,b]	
	Income
Kruskal-Wallis H	273.833
df	6
Asymp. Sig.	0.000
a. Kruskal Wallis Test	
b. Grouping Variable: Education Level	

Source: Analysis by the researcher using SPSS v. 23 based on primary data.

The above two statistical tools establish the relationship between employment opportunities and income opportunities with different educational levels of tribal people in the study area. The first statistical tool **'χ^2 Test'** establishes a clear relation between employment opportunities and level of education of tribal people. It shows with increasing educational levels the employment opportunities are being diversifying. Higher level of education is creating opportunities of employment for the tribal people in the study area other than plantation worker and daily labourer. With higher level attainment certificate, they are working in service sectors or running their own businesses. But without higher level of education the tribal people are left with no choice but working as plantation worker or daily labourer. The second statistical tool **'Kruskal-Wallis *H* Test'** establishes the relation between income opportunities with level of education of tribal people. It clearly shows with increasing level of education the opportunities of higher income are also increasing. These two tests combined portrays a clear relationship between level of education with employment and income opportunities. Generally, the illiterate tribal people or

the tribals having educational level of less than middle level are with no option but to do what they are doing generation-wise, working as a plantation worker or as daily labourer and in these two sectors income opportunities are very low and depriving too. But when they have educational level of secondary and above they are trying for the different service sectors or running their own business or even if they work in some tea garden or factory, their educational level are being valued with their inome.

6.4 Conclusion

The objective of the study is to find out the relationship between education and economic condition of tribal people of the study area. With the statistical methods it has been proven that clearly there is a positive relationship between education and economic condition. With higher level of education people explore their opportunities in diversified employment sectors and get themselves engaged in different professions. In a result this increases the income opportunities and helps the tribal people of the study area to stand themselves as better economically developed individuals.

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CHAPTER VII

SUGGESTIONS AND CONCLUSION

7.1 Introduction

The constitution of India directs to promote special attention and care regarding tribal education. Apart from the constitution different commissions and committees have been formed time to time for educational development as well as overall development of tribal communities in India. Many corrective measures have been taken by the government in course of time to address the problems regarding tribal educational development. Changes do have come but a lot of problems still to address. The research has correctly shown the current educational status of tribal population in Siliguri Sub-division. In this chapter a summarize scenario of the tribal educational status has been discussed. Through this some major problems of tribal education have been identified and suggestive measures to address the problems have also been recommended.

7.2 Major Findings

7.2.1 Social Context

1. The concentration of tribal population in the study area is mainly tea garden centric. Most of the tribal population belongs to rural areas of the Sub-division. The tribal population follows equality among male and female. As a result, the sex ratio among the tribals in the study area is very high (1029) (Table 3.1). Out of the total tribal population 57.33 percent is below 30 years of age (Table 3.5). This indicates towards a very young tribal society.

2. The literacy rate among the tribal population in the study area still stands very low (60.09 percent). Female literacy rate is only 54.86 percent (Table 3.11). The literacy rate among 7-14 years of age group is 91.37 percent and among 15-29 years of age group it is 82.42 percent (Table 4.5). This reflects an improved literacy rate in recent times. The government has succeeded in awakening the importance of literacy for tribal children indiscriminant to male and female in recent times. But this also implies to the huge illiteracy among tribal population above 30 years of age.

7.2.2 Economic Context

1. The tribal household income in the study area is very low. Total 71.70 percent of tribal household lives with a monthly household income not more than rupees 10000. Even 21.51 percent of the total tribal households running their households with monthly income not more

than rupees 5000 (Table 3.56). Though the research shows Work Participation Rate (WPR) of tribal population is on higher side (48.74 percent). So, this indicates towards a very low per capita income of the tribal population.

2. Female WPR is also very high for the tribal population (35.70 percent) comparing to the WPR of overall female population (19.56 percent) in the study area (Census, 2011). The study also shows the female work participation rate in rural areas (40.83 percent) is way higher than that of the urban areas (23.73 percent) (Table 3.47). The main reason behind this high female WPR in rural is the engagement of tribal females in plantation work; mainly due to the high demand of female workers for plucking in tea garden industry.

3. The research shows majority of the tribal workers are engaged with the plantation sector (53.24 percent). 19.19 percent of total tribal workers are also engaged as daily labourer mainly in some construction associated work. This is main reason behind their low per capita income. Very few tribal workers are engaged with privatet (9.42 percent) or government (1.82 percent) sectors. (Table 3.50). The study shows majority of these percentages are seen in urban areas.

7.2.3 Educational Context

1. The scenario of higher level of educational attainment status among tribal students is not at all satisfactory. The main reason behind this is huge dropout percentage. Early age dropout emerges as a burning issue to tribal educational development. Despite of all the government initiatives the dropout percentage still stands at very high level. The research indicates towards overall 52.79 percent tribal dropout rate in the Sub-division (Table 5.1). Going against the general perception, the research also shows higher male dropout percentage than female.

2. A critical analysis on dropout and its possible reasons among tribal students have been done by the researcher. The possible reasons have been classified separately for male and female students. For both male and female *Not Interested in Studies* comprises a substantial percentage dropout. Out of total dropout 29.62 percent is due to loss of interest in studies (Table 5.5). During field survey the researcher has observed that language plays a major role to this reason. Majority of the tribal students have been dropped out due to language problem in schools at very early age. Although among male students this percentage is higher than the female students.

3. For females the other main reasons of being dropped out from schools are *Household work and Marriage.* 28.57 percent dropout among females is due to need of their assistance in household works (Table 5.5). It has been found that in majority cases when both the parents are

involves in working sectors and younger siblings are there to look after, the elder child of the family gets dropped out. Marriage is another issue that influences the early age dropout from schools. This causes 25 percent of the total female dropout (Table 5.5). The research indicates that near about 38 percent tribal girls are victims of child marriage in the study area (Table 3.9). This is a real concern to female educational development as well as the overall development of tribal female population. The study also shows with higher level of education the child marriage percentage drops significantly.

4. The main reason behind male dropout is the urge of employment. As the economic conditions of the tribal households in the study area are poverty sicken, a small increase in monthly household income matters most. Majority of the tribal population is associated with the plantation work or work as a daily labourer (Table 3.50). Their educational or technical knowledge is very limited. With this very limited knowledge their circle of employment opportunities gets shrunken. As a result income opportunities left with limited resources for the tribal people. The study also shows that with higher level education tribal people have able to increase the scope of income.

5. The lack of awareness about their rights and benefits makes the life of the tribal people in the study area more obstructive. During the survey it has been observed that a large number of tribal people still don't even have the caste certificate. And due to this they are being deprived of many benefits. Not only this a large number of parents still don't know about many government flagship schemes designed to assist the tribal students to continue their studies (Table 4.13). This ignorance is also playing a major role towards the unsatisfactory educational development of tribal people.

7.2.4 Special Emphasis

The study reflects that among the four blocks in the study area the tribal community in Phansidewa C.D. Block is the most underdeveloped in the Sub-division. Most of the socio-economic and educational indicators in the primary data show the backwardness of the tribal people in this block. For example, Inspite of having the highest no of government educational institutions (436) in this block, the literacy rate (54.78 percent) (Table 3.12), educational attainment above middle level (8.43 percent) (Table 4.8) for tribal people is the lowest among all the blocks in the Sub-division. Dropout rate (61.63 percent) among tribal students is also highest in this block (Table 5.2). It has been found during survey that girl child marriage is a huge problem in this block. 43.79 percent tribal women is a victim of child marriage (Table 3.10).

Majority of the tribal people in this block depends on plantation sector for their source of income (72.53 percent) (Table 3.51). This is the highest among all the blocks in the study area. As a result, highest percentage of lower income (less than Rs. 10000/-) households are also found in this block (Table 3.57). So, special attention of the government is needed to the block particularly.

7.3 Suggestive Measures

The Government of India has set a goal "Ensure Inclusive and Equitable Quality Education and Promote Life Long Learning Opportunities for All by 2030" to achieve a global sustainable education development. Universal high-quality education is the best way to develop and maximizing the country's rich resource of talents. In this journey the tribal education is going to be a key factor. Without a substantial educational development of tribal people, it is impossible for the nation to achieve the determined goal. In order to achieve a substantial development in tribal education in the study area the researcher has recommended some suggestive measures. The measures have been categorized into two parts, Economic Development Measures and Educational Development Measures. As the poor economic condition of the tribal people in the study area is a major influence to the early age dropout percentage, it is a duty of the researcher to find out some corrective measures that will help the tribal people to increase the income opportunities; so that as a result early age dropout percentage will drop significantly. After all, without minimum economic development a community will not get the motivation for educational development.

7.3.1 Economic Development Measures

The majority of the tribal population in the study area is associated with the tea plantation sector. As per Government of West Bengal approved minimum wage (at the time of field survey) for a tea garden worker is Rs 176/- per day. But during survey it has been noted that many tribal tea garden workers are still getting lower than the government approved rate. Some of them even get Rs 125/- per day. Recently in January 2021 the Government of West Bengal has approved 15 percent hike on the minimum daily wage to make it Rs. 202/- per day for a tea garden worker. The government should ensure the implementation of government approved rate on ground level in the Sub-division. The government should also ensure the yearly basis increment of minimum wage of the tea garden workers.

Cinchona plantation is a unique sector that has been found mainly in hilly areas of West Bengal. The minimum wage that has been given to the worker associated with this sector is Rs 257/- per day. Whereas the daily wage of the tea garden worker is Rs 202/-. The researcher thinks there should be a parity of minimum daily wage in both the major as well as unique plantation sectors of the district. The minimum government approved rate for tea garden worker should be same as the cinchona plantation worker i.e. Rs 257/- per day.

Tea garden sector demands a substantial percentage of female workforces mainly at the time of plucking. That is why a substantial percentage of tribal female population is associated with the tea garden sector. Besides of the demand of female workforce as the earning by the male adults of the family is not sufficient to run a family, the adult female members are compelled to go out and earn for their family. As a result, the burdens of household works come on the young female member of the family. The responsibility to look after the younger siblings also comes on the young elder one. This leads the female students towards being dropped out. To contain the female dropout due to this reason the researcher proposes two proposals, one is to set up compulsory crèche at every tea garden by the tea garden managements. Government should ensure enforcing strict laws that every tea garden must have a crèche facility. Second is to promote community-based household industry among tribal women. The Anandadhara and Tribal Development Department should take the initiatives to promote community-based household industry among tribal women in the study area. Both the departments must work more efficiently and systematically to provide them proper training, finance and marketing platforms. In this way the tribal women can assist their family financially and along with that they can also take care of their household duties too.

The over dependency on tea garden sector makes the tribal population an economically weaker section in the study area. And the financial sickness accelerates the early age dropout among the tribal children. To overcome the financial sickness, they have to diversify their working sectors. To do so the researcher proposes convergence of other departments like agriculture, horticulture, sericulture, fishery department, animal husbandry department etc. with MGNREGA to create community-based income opportunities throughout the year. The local bodies must take special responsibilities to implement this proposal. In this way investing 100 working days a tribal community can earn for throughout the year and solve their household economic problems.

7.3.2 Educational Development Measures

With the existing educational system, the researcher has identified some hindrances towards the tribal educational development and to deal with the challenges some suggestive measures have been recommended below.

7.3.2.1 Enhancement of Awareness

Lack of awareness is a major problem towards the educational development of tribal people in the study area. During field survey it has been found that many parents/guardians are ignorant about many educational schemes those are designed by the government to assist their children financially to continue their studies at least up to school levels. Due to this lack of knowledge many students do not get benefited from the schemes. This leads them to feel deprived and demotivated. During the survey it has been observed that students are mostly benefited by those schemes of which application procedures are initiated and completed by school authority itself. But when the students have to apply by self initiatives from outside, they are comparatively being more deprived of those schemes. For example, the flagship scheme likes *Kanyashree* benefited more tribal girls than the *Pre-Matric or Post-Matric scholarship* does in a same class. As in case of *Kanyashree* the school authority completes all the procedures at school level on behalf of the students but a student has to complete all the procedures on his own to get the *Pre-Matric or Post-Matric Scholarship.* Even many students don't get benefited from another flagship scheme *Sikshashree* due to the same reason. To find out solutions to overcome this challenge the researcher recommends two suggestive measures. First, awareness camp should be organized in every school class-wise to aware the tribal students about different educational schemes designed for them monthly basis. The school authority has to take this initiative to get the tribal students benefited by different educational schemes. And the second recommendation is just like *Kanyashree,* for each and every scheme the school has to take the initiative so that every tribal student gets every benefit for which he/she is eligible for. The complete procedure will be initiated and completed by school authority itself on behalf of the students.

7.3.2.2 Developing Interest

Often it has been seen that tribal students have dropped out of school at early age due to their loss of interest on studies. There are two reasons of this have emerges in this research. First is the lingual problem among tribal students. Tribal people have their own language and often it has been seen that most of these languages have no script. These tribal languages are different from the state language. In the study area the majority of the tribal people use *Sadri*as their mother tongue. But in schools the medium is mostly Bengali. The problem starts from the very base level education. From their first days of schooling they find the school language as foreign

language. It creates a communication gap between teachers and students. And most of the time due their language problem the tribal students remain as non participated in class. Often this non participation is misunderstood as their weakness in studies and teachers also get less attentive to them. Thus, the tribal students get demotivated and loss interest in studies. This gradually leads to dropout. To solve this language problem the researcher recommends adapting a unique method of teaching for tribal students at very early stage of their education. *Anganwadi* centers will play the most vital role in this method. First, government should ensure cent percent enrollment of children aging 3-6 years at *Anganwadi* centers of their respective villages. Different reports say that human brain develops 85 percent of it within the age of 6years and the learning skills of new things are at its pick during this age. So, 3-6 years are very important to learn a new language for these children. The first lesson of the formal languages will start at the *Anganwadi* centers with a playful way. The *Anganwadi* teachers will start to teach them the formal language not by the conventional grammatical way but with the common words with which they are familiar to their day to day life. A lot of reports say, the children of this age group take interest only on those things which are physically visible to them. So, with these very common words they connect themselves very easily and will take interest on the new language. The teachers will ensure that the learning of the new language must start with pictorial charts so that they can identify the words visually. The *Anganwadi* teachers of the study area also must ensure that they should learn some very common words those are used very frequently in daily life in local tribal language. This will help them to connect with the children. In these three years at the *Anganwadi* centers, the main focus should be the fluency in speaking and writing of the formal language.

The second reason for which the tribal students are losing interest on studies at early age is that they are finding the formal educational system in schools irrelevant and no use of it in their day to day life. To tackle this problem researcher suggests adaption of a schooling system where along with formal education technical training, sports, cultural activities like dance, musicand extra curriculum activities will hold similar importance. NCC can be a very useful tool to integrate them with the other societies and to create job opportunities also. The technical trainings from class 6 or 7 will help them to feel the importance of study in their daily life in near future. Also, with this kind of trainings their income opportunities in future will be expanded. Sports and other curriculum activities can make their school life joyful and engaging. The tribal people are very much connected with music, dance in their traditional life. So, cultural activities can play a bridge between their tradition and schooling system. A joyful and play-school like environment in primary and first two years of middle level of education will grow interest and love among them on the schooling system and this eventually help them to continue their schooling. Besides this motivational cum counseling classes by the tribal teachers, scholars or

any other established tribal personalities in schools can also motivate them to attain higher level education.

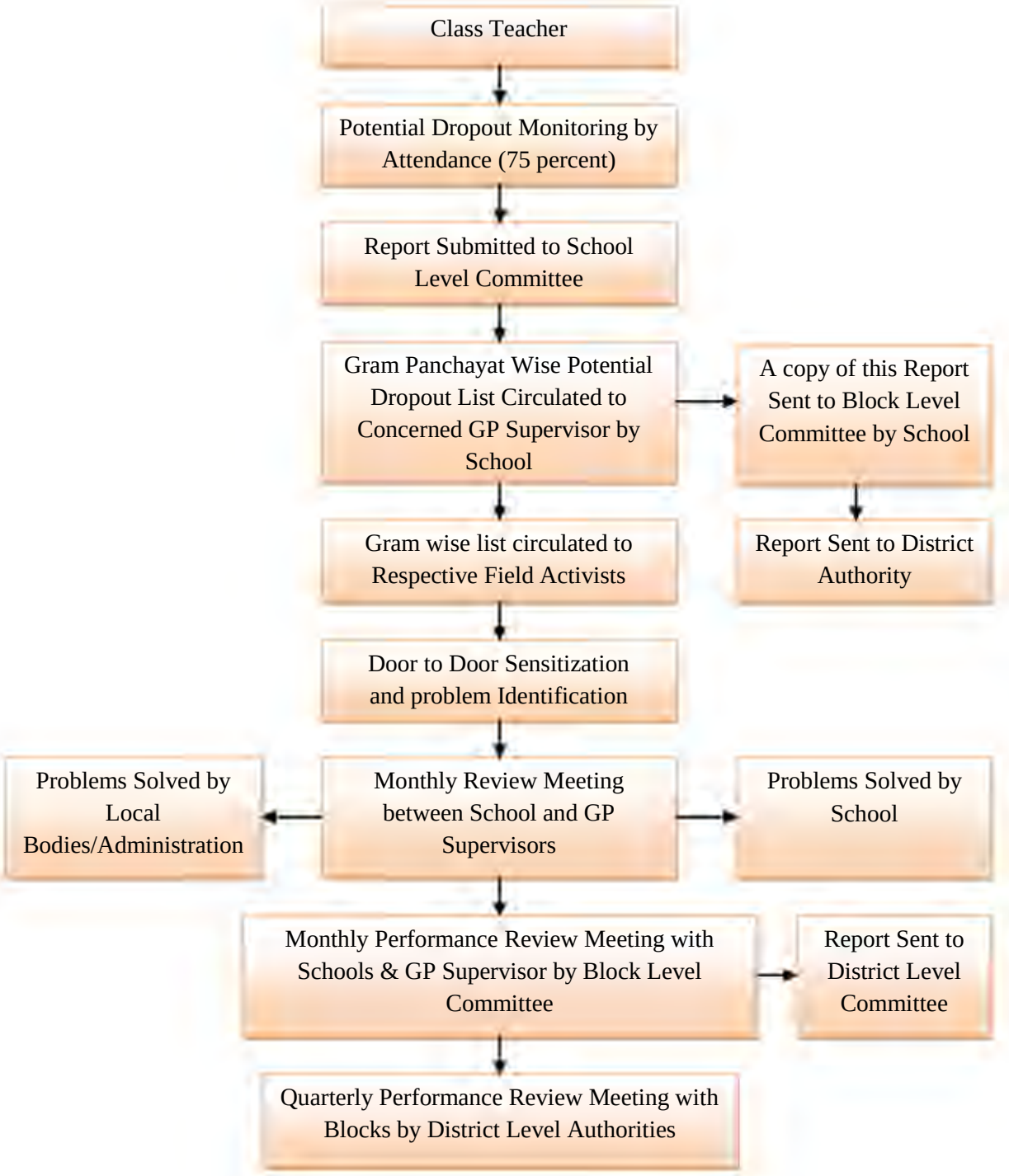
7.3.2.3 Monitoring System

National Education Policy 2020 has given a lot of importance on monitoring system. Monitoring is a key factor to tribal education. With proper monitoring a potential dropout can be identified. Not only that every student can avail every benefit of which they are eligible for. Also, student-wise problem identification will be possible with this. The researcher thinks with proper monitoring system overall educational development of tribal people in the study area can be possible. To do so researcher proposes a framework of monitoring system through which she thinks student-wise monitoring can be possible. This framework will also assist to implement the earlier suggestive measures that the researcher has recommended.

The name of the framework is *Systematic Monitoring and Sensitization Program for Tribal Educational Development* (SMS Program for Tribal Educational Development). The framework works in collaboration of administration with schools. First a school level committee headed by the head of the institution has to be set up. In this committee there shall be at least one scheduled tribe (if there is any) teacher. At local body level there will be two local field activists (one male and one female), preferably belongs to tribal communities, for each village in a Gram Panchayat. These field activists will play the most important role in this framework. They will work at grass root level. Their reach will be upto the extent of the most marginalized tribal people of the village. In every Gram Panchayat there will be a supervisor, under whom these field activists will work. To monitor and review the performance of schools and supervisors block level committee will be formed. It will be headed by the BDO of respective block. Further to review the performance of each block a district level committee will be formed under the headship of District Magistrate.

Fig: 7.1 Flow Diagram of Different Committee for Systematic Monitoring and Sensitization Program for Tribal Educational Development

Systematic Monitoring and Sensitization Program for Tribal Educational Development



Source: Introduced by the Researcher

Fig 7.2 Flow Diagram of the Framework of Systematic Monitoring and Sensitization Program for Tribal Educational Development

The main motive of this framework is to ensure that every child must complete at least high school level education. To do so systematic monitoring and sensitization has no alternatives. In this framework the monitoring starts from the classroom. A class teacher will submit a monthly attendance report of shortlisted tribal students of a class whose monthly attendance percentage is below 75 percent to the school level committee. These shortlisted students will be called the *potential dropouts.* The school level committee then segregates the report Gram Panchayat-wise and sent the list of potential dropout students to concerned GP Supervisor. A copy of that list will also be sent by the school level committee to block level committee for further correspondent. After receiving lists of potential dropout students from all the schools the block level committee then sends a compiled list to district level committee. Now the GP supervisor segregates the potential dropout list as village and handed over to the respective field activists of the villages. Now the field activists perform a door to door intensive visit to the house of those potential dropout students and find out the real cause behind his low attendance in school. During this visit the field activists also sensitize the tribal family about the importance of education. Thus, after visiting the houses of all those shortlisted students the field activists submit a report to the GP supervisor stating the actual cause of low attendance. A monthly review meeting will be held between the school level committee and GP supervisor. In this meeting the both of them jointly will review the causes of the low attendance student-wise and shortlist those actual potential dropout students. Now the problems of those real potential dropout students will be categorized and solved into two levels; 1) problems related to school will be solved by school and 2) problems related to other than school will be solved by administrative levels. In this review meeting the improvement regarding the previous month's list will also be analyzed. To review the performance of the schools and GP supervisors a monthly performance review meeting will be held by the block level committee with schools and GP supervisors. After analyzing the performance, the performance review sheet will be sent to district level committee for their note. The district level committee will be analyzing the performance of each block under the district quarterly basis.

The job profile of these field activists is not limited to only this. They will perform many other important works. One of the most important works of them is to keep proper monitoring on *Anganwadi* centers. As suggested earlier that *Anganwadi* will play the most key role to eradicate the language hindrance among tribal people. And to do so cent percent children's attendance of age group 3-6 years is mandatory. The field activists will ensure this. With proper monitoring and sensitization of tribal household they will make sure that cent percent children of this age

group must be at *Anganwadi* centers of respective villages. The field activists also ensure cent percent enrollment in primary, middle, secondary and higher secondary levels of eligible students in their respective villages. A smooth transition between educational levels of all the tribal students in their respective villages will be a responsibility of the field activists.

The researcher thinks this *Systematic Monitoring and Sensitization Program for Tribal Educational Development* will be very helpful to develop overall educational status of the tribal population in the study area.

7.4 Conclusion

The study area Siliguri Sub-division is the resident of 146432 tribal people which is 15.04 percent of the total population of the Sub-division. As similar to the other tribal groups the tribal community of this Sub-division is also carrying a rich very own cultural heritage. The cultural heritage is more prominent in rural areas than in urban. Tea garden is an integral part of the tribal people in this Sub-division. Most of the tribal's life revolves around the tea gardens. Women enjoy a higher status in the tribal society. In this study area there is no exception to that. Culturally tea gardens required a high percentage of women workers. So, women in this study area contribute at a high rate to a household income. Although just like most of the other tribal societies tribal community of this Sub-division is being deprived and marginalized socio-economically. Their ignorance to education and lack of awareness are main reasons behind their primitiveness. Without educational development no community can uplift them to high. This is true for the tribal community of this study area too. Their educational backwardness is creating hindrance to their overall development. The research finds some major factors to the educational primitiveness of the tribal people in the study area. An elaborate analysis has also been done on those. Some suggestive measures have been recommended to address the problems too. Educational development of tribal people not only necessary to stand them with higher educational attainment certificates, but it is the foundation stone of their overall development. Only proper educational process that can help the tribal people to blend with the modern societies from their very early ages. Not only this, in bigger picture only educational development can open up a broad pathway of better employment opportunities, better income opportunities, better lifestyle and make them better social respondents. Finally, as without addressing the hindrances of its marginalized and deprived people a nation's progress can't take place in its true sense (Sen, 1999). So, government should emphasis on the true implementation of its designed schemes to address the problems of tribal people. But it is also to say that only

initiatives of government can't do this. Collective compassionate efforts by the government institutions, the society and the tribal community itself can achieve the desired development status of the tribal people.

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PLATES

Plate 1. Tribal Housing Condition in Maniram GP

Plate 2. Kutcha House in Chathat Bansgao GP

Plate 3. Semi Pukka House in Atharokhai GP

Plate 4. Tribal House with Bamboo Wall in Jalash Nijamtara GP

Plate 5. House with Tin Roof in Matigara I GP

Plate 6. Pakka House in Lower Bagdogra GP

Plate 7. Latrine Facility under Mission Nirmal Bangla in Champasari GP

Plate 8. Household with Latrine Facility in Hetmuri GP

Plate 9. Drinking Water Facility in Patharghata GP

Plate 10. Drinking Water Facility in Binnabari GP

Plate 11. Drinking Water Facility in Lower Bagdogra GP

Plate 12. Water Facility in Gossaipur GP

Plate 13. Separate Kitchen Facility in Matigara II GP

Plate 14. Wood Used for Cooking Fuel in Buraganj GP

Plate 15. Pathetic Transportation Condition in Raniganj Panisali GP

Plate 16. Drainage System in Tea Garden Area in Upper Bagdogra GP

Plate 17. Household Industry Using Bamboo in Kharibari Panisali GP

Plate 18. Tea Garden in Bidhan Nagar II GP

Plate 19. Tribal Concentration in Patharghata GP

Plate 20. Female Plantation Worker in Hetmuri GP

Plate 21. Female Head of the Family in Naxalbari GP

Plate 22. Tribal Family Associated with Government Sector in Phansidewa GP

Plate 23. Interaction with a Daily Labour in Lower Bagdogra GP

Plate 24. Mech Tribal Woman Running Stationary Shop in Maniram GP

Plate 25. Anganwari Centre in Buraganj GP

Plate 26. Early Age Dropout Students in Hetmuri GP

Plate 27. First Generation School Going Tribal Family in Bidhan Nagar I

Plate 28. Illiterate Tribal Family in Chathat Bansgao GP

Plate 29. Primary School in Atharokhai GP

Plate 30. Primary School in Matigara I GP

Plate 31. Tribal Child Still not Attending Anganwari in Buraganj GP

Plate 32. Victim of Child Marriage Ghoshpukur GP

Plate 33. Shishu Siksha Kendra in Matigara II GP

Plate 34. Tribal Student in Binnabari GP

Plate 35. Primary School in Lower Bagdogra GP

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APPENDICES

Appendix- I Population Details and Headship

Name of the Block/GP	Household	Population			Headship	
		Total	Male	Female	Male	Female
Matigara	46	187	98	89	37	9
Champasari	65	248	122	126	54	11
Matigara I	12	40	22	18	10	2
Matigara II	6	18	9	9	5	1
Atharokhai	7	28	17	11	6	1
Patharghata	39	159	81	78	31	8
Naxalbari	105	496	251	245	89	16
Naxalbari	15	84	41	43	12	3
Upper Bagdogra	29	140	66	74	25	4
Hatighisa	21	89	45	44	18	3
Gossaipur	14	55	29	26	11	3
Lower Bagdogra	7	38	23	15	6	1
Maniram	19	90	47	43	17	2
Phansidewa	148	714	356	358	115	33
Hetmuri	45	220	111	109	33	12
Bidhan Nagar I	25	113	53	60	23	2
Bidhan Nagar II	29	150	76	74	21	8
Chathat Bansgao	15	68	36	32	12	3
Ghoshpukur	22	114	54	60	15	7
Jalash Nijamtara	5	21	12	9	5	0
Phasidewa	7	28	14	14	6	1
Kharibari	90	424	211	213	76	14
Binnabari	17	94	43	51	11	6
Buraganj	27	128	65	63	25	2
Kharibari Panisali	15	67	29	38	14	1
Raniganj Panisali	31	135	74	61	26	5
Bhimram CT	18	88	44	44	15	3
Siliguri MC (Part)	40	159	85	74	34	6

Source: Field Survey 2019-20

Appendix- II Marital Status of the Population

Name of the Block/GP	Marital Status		Unmarried		Widow	Separated		Widower
	Male	Female	Male	Female		Male	Female	
Matigara	128	131	109	88	23	1	0	13
Champasari	66	68	50	47	11	0	0	6
Matigara I	13	12	7	5	1	0	0	2
Matigara II	6	6	3	2	1	0	0	0
Atharokhai	6	6	10	3	2	0	0	1
Patharghata	37	39	39	31	8	1	0	4
Naxalbari	127	124	120	97	24	0	0	4
Naxalbari	24	23	17	13	7	0	0	0
Upper Bagdogra	32	31	32	38	5	0	0	2
Hatighisa	24	23	20	16	5	0	0	1
Gossaipur	11	11	18	12	3	0	0	0
Lower Bagdogra	11	11	12	3	1	0	0	0
Maniram	25	25	21	15	3	0	0	1
Phansidewa	177	169	164	155	34	1	0	14
Hetmuri	55	49	52	49	11	0	0	4
Bidhan Nagar I	29	28	24	29	3	0	0	0
Bidhan Nagar II	37	38	35	30	6	0	0	4
Chathat Bansgao	17	16	16	12	4	1	0	2
Ghoshpukur	25	25	25	27	8	0	0	4
Jalash Nijamtara	8	7	4	2	0	0	0	0
Phasidewa	6	6	8	6	2	0	0	0
Kharibari	109	105	93	95	13	0	0	9
Binnabari	24	27	19	21	3	0	0	0
Buraganj	36	30	29	30	3	0	0	0
Kharibari Panisali	17	18	9	17	3	0	0	3
Raniganj Panisali	32	30	36	27	4	0	0	6
Bhimram CT	22	23	22	15	5	0	1	0
Siliguri MC (Part)	42	42	40	24	8	0	0	3

Source: Field Survey 2019-20

Appendix- III Age-Sex Composition

Name of the Block/GP	0-6		7-14		0-15		15-29	
	Male	Female	Male	Female	Male	Female	Male	Female
Matigara	21	23	25	18	46	41	88	93
Champasari	8	11	12	9	20	20	41	50
Matigara I	3	2	0	1	3	3	7	8
Matigara II	1	1	1	1	2	2	2	2
Atharokhai	2	1	0	1	2	2	10	3
Patharghata	7	8	12	6	19	14	28	30
Naxalbari	18	15	30	29	48	44	91	90
Naxalbari	2	3	4	3	6	6	18	17
Upper Bagdogra	4	5	11	10	15	15	20	29
Hatighisa	5	3	4	7	9	10	14	13
Gossaipur	1	0	8	3	9	3	10	12
Lower Bagdogra	4	0	2	1	6	1	5	3
Maniram	2	4	1	5	3	9	24	16
Phansidewa	42	44	50	48	92	92	118	134
Hetmuri	11	16	13	11	24	27	38	42
Bidhan Nagar I	5	5	12	11	17	16	14	21
Bidhan Nagar II	9	10	12	6	21	16	23	29
Chathat Bansgao	5	2	3	7	8	9	14	11
Ghoshpukur	10	11	4	10	14	21	21	21
Jalash Nijamtara	1	0	2	1	3	1	4	4
Phasidewa	1	0	4	2	5	2	4	6
Kharibari	20	28	36	31	56	59	70	70
Binnabari	6	9	8	6	14	15	13	15
Buraganj	7	5	13	15	20	20	19	16
Kharibari Panisali	2	5	5	6	7	11	9	14
Raniganj Panisali	5	9	10	4	15	13	29	25
Bhimram CT	2	3	3	1	0	0	21	19
Siliguri MC (Part)	4	4	4	3	0	0	36	29

Field Survey 2019-20

Appendix- III cont. Age-Sex Composition

Name of the Block/GP	30-44		45-59		15-59		60 & above	
	Male	**Female**	**Male**	**Female**	**Male**	**Female**	**Male**	**Female**
Matigara	56	67	41	29	185	189	20	12
Champasari	27	34	23	16	91	100	11	6
Matigara I	6	3	4	3	17	14	2	1
Matigara II	4	3	0	2	6	7	1	0
Atharokhai	0	3	4	2	14	8	1	1
Patharghata	19	24	10	6	57	60	5	4
Naxalbari	51	56	43	35	185	181	18	20
Naxalbari	4	9	11	8	33	34	2	3
Upper Bagdogra	13	15	12	10	45	54	6	5
Hatighisa	15	14	4	3	33	30	3	4
Gossaipur	5	4	3	5	18	21	2	2
Lower Bagdogra	8	6	1	3	14	12	3	2
Maniram	6	8	12	6	42	30	2	4
Phansidewa	86	76	36	43	240	253	24	13
Hetmuri	31	24	12	12	81	78	6	4
Bidhan Nagar I	16	18	3	3	33	42	3	2
Bidhan Nagar II	16	15	11	12	50	56	5	2
Chathat Bansgao	7	7	3	3	24	21	4	2
Ghoshpukur	12	10	4	7	37	38	3	1
Jalash Nijamtara	2	1	1	3	7	8	2	0
Phasidewa	2	1	2	3	8	10	1	2
Kharibari	45	58	29	17	144	145	11	9
Binnabari	8	12	5	6	26	33	3	3
Buraganj	16	20	8	5	43	41	2	2
Kharibari Panisali	4	8	6	3	19	25	3	2
Raniganj Panisali	17	18	10	3	56	46	3	2
Bhimram CT	4	8	13	11	0	0	1	2
Siliguri MC (Part)	16	21	22	15	0	0	3	2

Field Survey 2019-20

Appendix IV Total Number of Rooms

Name of the Block/GP	No. of room			
	1	**2**	**3**	**≥4**
Matigara	10	61	45	13
Champasari	2	30	26	7
Matigara I	1	5	4	2
Matigara II	1	4	1	0
Atharokhai	1	3	3	0
Patharghata	5	19	11	4
Naxalbari	12	58	27	8
Naxalbari	1	7	5	2
Upper Bagdogra	4	13	10	2
Hatighisa	4	14	2	1
Gossaipur	1	4	7	2
Lower Bagdogra	0	6	1	0
Maniram	2	14	2	1
Phansidewa	24	88	32	4
Hetmuri	8	26	11	0
Bidhan Nagar I	4	14	6	1
Bidhan Nagar II	5	19	4	1
Chathat Bansgao	2	8	4	1
Ghoshpukur	3	16	2	1
Jalash Nijamtara	1	3	1	0
Phasidewa	1	2	4	0
Kharibari	12	53	22	3
Binnabari	1	6	8	2
Buraganj	4	21	1	1
Kharibari Panisali	2	8	5	0
Raniganj Panisali	5	18	8	0
Bhimram CT	1	6	7	4
Siliguri MC (Part)	3	14	17	6

Field Survey 2019-20

Appendix V Type of Floor and Roof

Name of the Block/GP	Floor			Roof				
	1.Kutchha	2.Pucca	3.Mixed	1.Thatched	2.Tiled	3.Tin	4.Wood	5.concrete
Matigara	38	50	41	3	6	116	0	4
Champasari	22	26	17	1	4	58	0	2
Matigara I	3	2	7	0	0	11	0	1
Matigara II	2	1	3	0	0	6	0	0
Atharokhai	1	4	2	0	0	6	0	1
Patharghata	10	17	12	2	2	35	0	0
Naxalbari	27	33	45	6	5	87	1	6
Naxalbari	1	8	6	0	3	11	1	0
Upper Bagdogra	11	5	13	1	1	25	0	2
Hatighisa	3	9	9	2	1	16	0	2
Gossaipur	6	3	5	0	0	14	0	0
Lower Bagdogra		3	4	0	0	6	0	1
Maniram	6	5	8	3	0	15	0	1
Phansidewa	54	35	59	5	4	138	0	1
Hetmuri	14	6	25	2	2	41	0	0
Bidhan Nagar I	8	0	17	0	0	25	0	0
Bidhan Nagar II	12	8	9	2	2	25	0	0
Chathat Bansgao	3	10	2	0	0	15	0	0
Ghoshpukur	13	9	0	1	0	21	0	0
Jalash Nijamtara	1	1	3	0	0	4	0	1
Phasidewa	3	1	3	0	0	7	0	0
Kharibari	29	20	41	2	1	83	2	2
Binnabari	9	7	1	0	1	15	1	0
Buraganj	10	7	10	0	0	25	1	1
Kharibari Panisali	3	3	9	0	0	14	0	1
Raniganj Panisali	7	3	21	2	0	29	0	0
Bhimram CT	2	10	6	0	2	14	0	2
Siliguri MC (Part)	7	22	11	1	3	31	1	4

Field Survey 2019-20

Appendix VI Type of Wall

Name of the Block/GP	Wall					
	1.Bamboo	2.Wood	3.Brick	4.Plaster	5.Clay	6.tin
Matigara	13	3	58	37	5	13
Champasari	8	2	28	18	2	7
Matigara I	0	0	6	6	0	0
Matigara II	3	0	1	0	0	2
Atharokhai	0	0	4	3	0	0
Patharghata	2	1	19	10	3	4
Naxalbari	21	3	55	18	4	4
Naxalbari	1	1	6	6	1	0
Upper Bagdogra	6	0	15	6	0	2
Hatighisa	6	1	9	3	1	1
Gossaipur	0	0	13	0	1	0
Lower Bagdogra	2	0	3	2	0	0
Maniram	6	1	9	1	1	1
Phansidewa	31	3	71	19	10	14
Hetmuri	11	2	21	3	5	3
Bidhan Nagar I	8	1	14	0	2	0
Bidhan Nagar II	4		15	3	1	6
Chathat Bansgao	2	0	5	7	0	1
Ghoshpukur	6	0	5	5	2	4
Jalash Nijamtara	0	0	4	1	0	0
Phasidewa	0	0	7	0	0	0
Kharibari	23	4	46	11	6	
Binnabari	2	0	6	8	1	0
Buraganj	9	1	13	2	2	0
Kharibari Panisali	3	1	10	1	0	0
Raniganj Panisali	9	2	17	0	3	0
Bhimram CT	1	1	7	9	0	0
Siliguri MC (Part)	1	1	17	21	0	0

Field Survey 2019-20

Appendix VII Latrine Electric and Drinking Water Facility

Name of the Block/GP	Latrine			Electricity		Drinking water		
	1.Private	2.Common	3.Open field	Electric	Others	1.Within Premises	2.Near Premises	3.Away
Matigara	121	2	6	123	6	50	67	12
Champasari	61	1	3	60	5	28	35	2
Matigara I	12	0	0	12	0	11	1	0
Matigara II	6	0	0	6	0	3	3	0
Atharokhai	6	1	0	7	0	2	5	0
Patharghata	36	0	3	38	1	6	23	10
Naxalbari	90	3	12	99	6	67	17	21
Naxalbari	15	0	0	15	0	11	4	0
Upper Bagdogra	23	1	5	28	1	14	4	11
Hatighisa	14	2	5	20	1	6	8	7
Gossaipur	13	0	1	12	2	11	0	3
Lower Bagdogra	7	0	0	7	0	7	0	0
Maniram	18	0	1	17	2	18	1	0
Phansidewa	107	7	34	126	22	71	60	17
Hetmuri	24	5	16	37	8	20	18	7
Bidhan Nagar I	18	0	6	22	3	6	15	4
Bidhan Nagar II	18	2	10	26	3	9	14	6
Chathat Bansgao	15	0	0	14	1	12	3	0
Ghoshpukur	20	0	2	16	6	14	8	0
Jalash Nijamtara	5	0	0	5	0	3	2	0
Phasidewa	7	0	0	6	1	7	0	0
Kharibari	69	8	13	82	8	48	41	1
Binnabari	15	0	3	17	0	13	3	1
Buraganj	19	3	4	25	2	11	16	0
Kharibari Panisali	14	0	1	12	3	4	11	0
Raniganj Panisali	21	5	5	26	4	20	11	0
Bhimram CT	18	0	0	18	0	13	5	0
Siliguri MC (Part)	38	2	0	40	0	29	11	0

Field Survey 2019-20

Appendix VIII Fuel Used for Cooking

Name of the Block/GP	Fule Used for Cooking				
	LPG	**Kerosene**	**Wood**	**LPG with other**	**Other**
Matigara	39	6	46	33	5
Champasari	18	4	22	19	2
Matigara I	5	1	2	3	1
Matigara II	3			3	
Atharokhai	4	0	2	1	0
Patharghata	9	1	20	7	2
Naxalbari	23	7	48	25	2
Naxalbari	2	1	6	6	0
Upper Bagdogra	5	1	17	5	1
Hatighisa	7	3	7	4	0
Gossaipur	2		7	4	1
Lower Bagdogra	4	0	1	2	0
Maniram	3	2	10	4	0
Phansidewa	25	6	97	12	8
Hetmuri	2	1	38	3	1
Bidhan Nagar I	8	3	9	2	3
Bidhan Nagar II	3		22	2	2
Chathat Bansgao	5	0	7	2	1
Ghoshpukur	2	0	19	0	1
Jalash Nijamtara	1	2	0	2	0
Phasidewa	4	0	2	1	0
Kharibari	16	7	53	11	3
Binnabari	3	2	11	1	0
Buraganj	7	3	10	6	1
Kharibari Panisali	2	1	9	2	1
Raniganj Panisali	4	1	23	2	1
Bhimram CT	13			5	
Siliguri MC (Part)	27			13	

Field Survey 2019-20

Appendix IX Female Age of Marriage

Name of the Block/GP	Age of Marriage of Female				
	<18	**18-21**	**22-25**	**26-29**	**>29**
Matigara	44	51	24	7	5
Champasari	20	32	10	4	2
Matigara I	2	5	3	1	1
Matigara II	3	1	2	0	0
Atharokhai	0	4	1	0	1
Patharghata	15	13	8	2	1
Naxalbari	44	47	21	8	4
Naxalbari	6	15	1	1	0
Upper Bagdogra	16	7	5	1	2
Hatighisa	8	9	4	2	0
Gossaipur	3	2	3	3	
Lower Bagdogra	2	5	3	0	1
Maniram	9	9	5	1	1
Phansidewa	74	63	24	7	1
Hetmuri	21	19	7	1	1
Bidhan Nagar I	13	10	5	0	0
Bidhan Nagar II	17	15	6	0	0
Chathat Bansgao	7	4	3	2	0
Ghoshpukur	13	12	0	0	0
Jalash Nijamtara	3	1	1	2	0
Phasidewa	0	2	2	2	0
Kharibari	47	37	16	4	1
Binnabari	16	8	2	0	1
Buraganj	10	15	5	0	0
Kharibari Panisali	7	3	5	3	0
Raniganj Panisali	14	11	4	1	0
Bhimram CT	6	11	5	1	
Siliguri MC (Part)	12	16	9	3	2

Field Survey 2019-20

Appendix X Literate Population

Name of the Block/GP	Literate	
	Male	**Female**
Matigara	152	112
Champasari	71	60
Matigara I	16	10
Matigara II	6	5
Atharokhai	11	5
Patharghata	48	32
Naxalbari	158	134
Naxalbari	28	24
Upper Bagdogra	42	45
Hatighisa	27	23
Gossaipur	16	12
Lower Bagdogra	12	8
Maniram	33	22
Phansidewa	186	158
Hetmuri	57	51
Bidhan Nagar I	32	27
Bidhan Nagar II	36	31
Chathat Bansgao	16	12
Ghoshpukur	30	26
Jalash Nijamtara	6	4
Phasidewa	9	7
Kharibari	119	103
Binnabari	24	22
Buraganj	37	32
Kharibari Panisali	19	21
Raniganj Panisali	39	28
Bhimram CT	33	28
Siliguri MC (Part)	63	46

Field Survey 2019-20

Appendix XI Educational Status

Name of the Block/GP	Below Primary		Primary		Middle	
	Male	Female	Male	Female	Male	Female
Matigara	27	16	49	37	40	41
Champasari	11	8	26	23	20	21
Matigara I	1	2	4	2	6	4
Matigara II	2	1	2	3	1	1
Atharokhai	1	1	2	2	3	2
Patharghata	12	4	15	7	10	13
Naxalbari	27	30	56	37	47	45
Naxalbari	6	4	4	5	11	9
Upper Bagdogra	6	12	19	12	11	16
Hatighisa	8	6	10	8	5	5
Gossaipur	2	2	8	2	5	4
Lower Bagdogra	2	2	3	3	5	2
Maniram	3	4	12	7	10	9
Phansidewa	57	46	81	59	30	42
Hetmuri	15	17	31	19	8	12
Bidhan Nagar I	8	8	18	11	4	6
Bidhan Nagar II	13	11	15	9	6	10
Chathat Bansgao	1	3	3	6	5	1
Ghoshpukur	16	4	7	11	4	9
Jalash Nijamtara	1	2	3	1	2	1
Phasidewa	3	1	4	2	1	3
Kharibari	24	34	49	38	28	21
Binnabari	4	6	9	7	6	4
Buraganj	7	6	10	14	11	8
Kharibari Panisali	3	11	6	7	6	2
Raniganj Panisali	10	11	24	10	5	7
Bhimram CT	2	1	7	8	8	8
Siliguri MC (Part)	4	2	11	13	16	12

Field Survey 2019-20

Appendix XII Educational Status and Drop out

Name of the Block/GP	Secondary		HS		Graduation & above		Dropout	
	Male	Female	Male	Female	Male	Female	Male	Female
Matigara	24	6	7	8	5	4	91	55
Champasari	11	3	2	3	1	2	39	28
Matigara I	4	1	1	1			11	5
Matigara II	1	0	0	0	0	0	3	1
Atharokhai	2	0	2	0	1	0	7	2
Patharghata	6	2	2	4	3	2	31	19
Naxalbari	14	12	10	7	4	3	89	63
Naxalbari	3	3	3	2	1	1	17	14
Upper Bagdogra	4	3	2	1	0	1	23	18
Hatighisa	2	3	1	1	1		17	13
Gossaipur	0	1	1	2	0	1	6	3
Lower Bagdogra	1	1	0	0	1	0	5	3
Maniram	4	1	3	1	1	0	21	12
Phansidewa	11	7	5	3	2	1	121	91
Hetmuri	3	2	0	0		1	39	31
Bidhan Nagar I	2	2	0	0	0	0	21	15
Bidhan Nagar II	2	1					25	20
Chathat Bansgao	3	1	3	1	1	0	10	7
Ghoshpukur	1	1	2	1	0	0	19	14
Jalash Nijamtara	0	0	0	0	0	0	3	2
Phasidewa	0	0	0	1	1	0	4	2
Kharibari	10	8	5	1	3	1	62	48
Binnabari	3	4	2	1	0	0	15	10
Buraganj	5	3	2	0	2	1	17	14
Kharibari Panisali	2	1	1	0	1	0	8	7
Raniganj Panisali	0	0	0	0	0	0	22	17
Bhimram CT	7	4	6	5	3	2	12	8
Siliguri MC (Part)	14	7	12	9	6	3	26	14

Field Survey 2019-20

Appendix- XIII Distribution of Working Population

Name of the Block/GP	Employed		Main worker		Marginal worker	
	Male	Female	Male	Female	Male	Female
Matigara	149	87	132	59	17	28
Champasari	76	38	69	23	7	15
Matigara I	13	5	11	4	2	1
Matigara II	5	3	5	2	0	1
Atharokhai	8	3	7	2	1	1
Patharghata	47	38	40	28	7	10
Naxalbari	144	92	129	56	15	36
Naxalbari	26	12	23	9	3	3
Upper Bagdogra	35	26	30	15	5	11
Hatighisa	23	18	20	11	3	7
Gossaipur	15	10	13	7	2	3
Lower Bagdogra	14	7	13	6	1	1
Maniram	31	19	30	8	1	11
Phansidewa	211	164	156	94	55	70
Hetmuri	65	50	44	35	21	15
Bidhan Nagar I	30	28	19	13	11	15
Bidhan Nagar II	46	43	36	24	10	19
Chathat Bansgao	20	13	16	6	4	7
Ghoshpukur	34	23	29	12	5	11
Jalash Nijamtara	8	3	6	1	2	2
Phasidewa	8	4	6	3	2	1
Kharibari	122	89	94	47	28	42
Binnabari	25	20	22	14	3	6
Buraganj	38	29	33	14	5	15
Kharibari Panisali	19	14	15	9	4	5
Raniganj Panisali	40	26	24	10	16	16
Bhimram CT	24	12	22	10	2	2
Siliguri MC (Part)	47	16	42	14	5	2

Field Survey 2019-20

Appendix- XIV Distribution of Occupational Structure

Name of the Block/GP	Cultivator		Agricultural labourer		Plantation Worker		Industry Worker	
	Male	Female	Male	Female	Male	Female	Male	Female
Matigara	1	0	4	0	68	72	4	0
Champasari	1	0	2	0	39	34	2	0
Matigara I	0	0	0	0	4	3	0	0
Matigara II	0	0	0	0	2	2	0	0
Atharokhai	0	0	0	0	0	2	0	0
Patharghata	0	0	2	0	23	31	2	0
Naxalbari	18	2	8	8	29	44	7	0
Naxalbari	5	0	5	2	2	3	2	0
Upper Bagdogra	1	0	0	1	11	12	3	0
Hatighisa	0	0	0	0	13	17	1	0
Gossaipur	1		0	0	3	7	1	0
Lower Bagdogra	3		0	0	0	0	0	0
Maniram	8	2	3	1	0	5	0	0
Phansidewa	3	1	1	1	132	140	9	0
Hetmuri	1		0	0	43	48	5	0
Bidhan Nagar I	0	0	0	0	26	24	0	0
Bidhan Nagar II	0	0	0	0	34	40	2	0
Chathat Bansgao	2	1	0	1	2	7	0	0
Ghoshpukur	0	0	0	0	22	17	1	0
Jalash Nijamtara	0	0	1	0	3	2	0	0
Phasidewa	0	0	0	0	2	2	1	0
Kharibari	6	3	2	0	65	64	3	1
Binnabari	4	3	1	0	5	10	2	0
Buraganj	0	0	0	0	26	23	1	1
Kharibari Panisali	1	0	1	0	7	8	0	0
Raniganj Panisali	1	0	0	0	27	23	0	0
Bhimram CT	3	1	2	1	0	0	2	0
Siliguri MC (Part)	0	0	0	0		2	2	1

Field Survey 2019-20

Appendix-XV Distribution of Occupational Structure

Name of the Block/GP	Daily labourer		Business		Private sector		Govt. Sector	
	Male	Female	Male	Female	Male	Female	Male	Female
Matigara	27	10	2	0	33	3	4	0
Champasari	12	3	0	0	18	1	1	0
Matigara I	4	1	0	0	2	1	1	0
Matigara II	1	1	0	0	1	0	0	0
Atharokhai	3	1	1	0	2	0	1	0
Patharghata	7	4	1	0	10	1	1	0
Naxalbari	34	19	10	5	18	2	3	1
Naxalbari	5	1	1	0	4	1	2	1
Upper Bagdogra	9	8	4	1	5	1	0	0
Hatighisa	3	1	2	0	1	0	0	0
Gossaipur	5	3	0	0	2	0	0	0
Lower Bagdogra	8	5	2	1	0	0	0	0
Maniram	4	1	1	3	6	0	1	0
Phansidewa	41	15	4	3	12	2	3	1
Hetmuri	15	1	1	1	0	0	0	0
Bidhan Nagar I	3	3	0	0	1	0	0	0
Bidhan Nagar II	7	2	2	1	1	0	0	0
Chathat Bansgao	6	3	0	0	5	1	1	0
Ghoshpukur	6	3	1	1	2	1	2	1
Jalash Nijamtara	3	1	0	0	1	0	0	0
Phasidewa	1	2	0	0	2	0	0	0
Kharibari	30	13	5	2	8	3	1	1
Binnabari	7	3	0	1	6	1	0	1
Buraganj	5	3	3	0	1	1	1	0
Kharibari Panisali	7	4	1	1	1	1	0	0
Raniganj Panisali	11	3	1	0	0	0	0	0
Bhimram CT	8	4	1	0	6	3	1	1
Siliguri MC (Part)	17	4	4	1	15	4	4	1

Field Survey 2019-20

Appendix XVI Monthly Income per Household

Name of the Block/GP	Income per HH			
	< 5000	**5001-10000**	**10001-15000**	**>15000**
Matigara	26	69	22	12
Champasari	6	43	9	7
Matigara I	7	2	2	1
Matigara II	1	4	0	1
Atharokhai	3	2	1	1
Patharghata	9	18	10	2
Naxalbari	23	46	23	13
Naxalbari	2	6	2	5
Upper Bagdogra	6	11	10	2
Hatighisa	4	14	2	1
Gossaipur	2	9	2	1
Lower Bagdogra	1	1	3	2
Maniram	8	5	4	2
Phansidewa	33	81	22	12
Hetmuri	12	24	6	3
Bidhan Nagar I	4	19	2	0
Bidhan Nagar II	8	12	6	3
Chathat Bansgao	1	9	3	2
Ghoshpukur	6	11	2	3
Jalash Nijamtara	2	2	1	0
Phasidewa	0	4	2	1
Kharibari	23	45	16	6
Binnabari	1	8	6	2
Buraganj	4	15	6	2
Kharibari Panisali	7	5	2	1
Raniganj Panisali	11	17	2	1
Bhimram CT	3	8	2	5
Siliguri MC (Part)	6	17	7	10

Field Survey 2019-20

Appendix XVII Educational Awareness and Educational Schemes

Necessity of Education	**Yes**	**No**	**No Response**
Is education necessary	518	0	12
For Male	522	0	8
For Female	520	0	10
Preferences on Educational Level	**For Male**	**For Female**	
Primary	3	3	
Secondary	15	17	
Higher Secondary	170	198	
Graduation	153	115	
As much as they want	181	186	
No Response	10	11	
Aspects of Education	**Agree**	**Disagree**	**Undecided**
Is higher level education necessary, only literate is not enough	379	125	26
Higher level education needed only for job	375	72	83
Higher level education provides better standard of living	378	18	117
Language is a barrier in school	289	140	101
Educational Schemes	**Awareness**		
	Yes	**No**	
Sikshashree	211	319	
Kanyashree	384	146	
Mid Day Meal	499	31	
Sabuj Sathi	436	94	
Pre-Matric Scholarship for ST	201	329	
Post Matric Scholarship for ST	154	376	
National Fellowship and Scholarship for Higher Education	6	524	
National Overseas Scholarship	2	528	
Merit Scholarship Scheme	87	443	
Hostel Grant	52	478	
Up-Gradation of Merit Scholarship	4	526	

Field Survey 2019-20

Appendix XVIII Educational Level and Occupational Structure

Educational Level	Agricultural & Plantation Worker	Daily Labour	Business & Services
Illiterate	358	108	3
Below Primary	106	26	7
Primary	123	79	25
Middle	85	64	35
Secondary	9	31	43
HS	0	2	30
Graduation	0	0	23

Field Survey 2019-20

Appendix XIX Educational Level and Income Category

Educational level	Upto 1000	1001-5000	5001-10000	above 10000
Illiterate	27	431	11	0
Below Primary	3	128	8	0
Primary	6	184	37	0
Middle	2	137	44	1
Secondary	0	41	36	6
HS	0	6	21	5
Graduation	0	1	15	7

Field Survey 2019-20

Appendix.XX Questionnaire

Date.....Sl.No. of the household…….....Block……Gram Panchayat.....Village……

1. Demographic Information

Sl. No. 1.Respondent	Name	Head/Relationship with Head	Age	Sex M/F	Marital status M/U/D/W	Age at marriage	Types of disability if any	Caste certificate Y/N
2								
3								
4								
5								
6								
7								
8								
9								
10								
12								

2. Educational Information

Sl No.	Education level (LIT/ILL/LEVEL)			Drop out Y/N (mention the age/class)		Reason for Drop out 1.School too far away 2.Transport not available 3.Required household work 4.Required for income 5.Education cost 6.no proper school facilities 7.Not interested in study 8.Repeat failure 9.Marriage 10.Other(specify)	Reason for not entering school	Languages known 1.speak 2.Speak & read 3.Speak read write				Mention stream or any technical education (B.A,BSC BBA B.COM B.ED etc)
				Age	Cls			Beng	Eng	Hindi	Other	
	Lit	Ill	Level									
1Respondent												
2												
3												
4												
5												
6												
7												
8												
9												
10												
12												

3. Occupational Detail

Sl No.	Main occupation	Income (Monthly)	Pvt/Govt	1.Permanent 2.Temp 3.Dailywager 4.contractual	Working Days	Secondary Occupation	Income (monthly)	Pvt/Gov.	1.Permanent 2.temp 3.Daily wager 4.contractual	Working Days	Monthly income	Reason for not working	Bank/PO account Y/N
1(Respondent)													
2													
3													
4 5													
6													
7													
8													
9													
10													
12													

Total Income:

5. Religion: Hindu/Muslim/Christian

6. Caste: Gen/SC/ST/OBC

7. Mother tongue:

8. Language used for communication:

9. Place of Origin: Within this village/ outside (specify)

10. If migrant, reason for migration:

11. Year of migration:

12. House: Own/Rented/provided by employer

13. Homestead land:

14. Land for Agriculture:

15. Income from agriculture:

16. Type of agriculture: own Land/Labour/lease

17. No. of rooms:

18. Types of House a. Storey: 1/2/3

b. Floor: Pucca/Kuchcha/Mixed

c. Roof: Thatched (khar)/Tiled/Asbestos/Tin/Wood/pucca

d. Wall: Bamboo/Brick/wood/plaster/clay

19. Kitchen: a. Present/ Absent

b. Separate/Attach/Outside the house

20. Latrine: Private (separate/attached)/ common (type…….) /open field

21. Bathing facilities: within premises/ outside premises

22. Lighting: Y/N. Type: Electricity/Kerosene/Other specify…….

23. Provision of sewage: Y/N

24. Drinking water: a. within premises/ near the premises/ away

b. well/tube well/pump/public tap dist……. /other (specify)……

25. Dumping of solid waste: open field outside house/ municipality

26. Waste water connected to: closed drainage/ open drainage

27. **Asset**

a. Bicycle: Y/N

b. Motorcycle: Y/N

c. car: Y/N

d. Agriculture related transport: Y/N (Mention

e. Radio: Y/N

f. Tv Y/N

g. News paper: Y/N

h. Refrigerator: Y/N

i.Mobile:Y/N

j. Landline: Y/N

k. Computer: Y/N

l. Internet access: Y/N

m. Fuel used: Gas/Coal/Wood/Kerosene/Cow dung/ other specify

n. Ration card: Yellow/Red/White

o. Family: APL/BPL

p. Family type: join/Nuclear

q. Livestock status:

28. **Expenditure pattern**

	Amount per month		Amount per month		Amount per month
Food		Medical		Social events	
cloth		Electricity		savings	
Education		Transport		other	

29. Educational Details:

A. Is education necessary? Strongly Agree/ Agree/ Undecided/ Disagree/ strongly disagree Why?

a. for Girl: Y/N **Reason**

b. for Boy: Y/N **Reason**

B. Why you send your children to school? For education /Mid day mill/for better future/better person

C. How much education is needed ? (for children/for me)
   a. Girl : Primary/secondary/HS/Graduation/PG/technical education/as much as they want
      Reason:

   b. Boy: Primary/secondary/HS/Graduation/PG/technical education/as much as they want
      Reason:

D. Is higher education needed only for jobs? Strongly Agree/ agree/ undecided/ disagree/ strongly disagree **Reason**

E. Do you think education can give better standard of living: Strongly Agree/ agree/ undecided/ disagree/ strongly disagree **Reason**

F. Higher education is necessary/ only literate is enough **Reason**

G. Do you think village schools are giving good education Strongly Agree/ agree/ undecided/ disagree/ strongly disagree
Reason

H. Is there any language problem in schools Strongly Agree/ agree/ undecided/ disagree/ strongly disagree

Reason

C. Do you know this scheme (√/×):	*Do you know*	*Getting any*
Sikshashree		
Kanyasree		
MidDay meal		
Pre matric scholarship		
Post matric scholarship		
Scholarship for Higher education for St		
National overseas scholarship		
Up gradation of merit scholarship.		

I. Getting any facilities or scholarship related to education (Name)…….
Details…….
Utilization of scholarship:……
J. Problem faced for getting any educational facilities……

30. <u>Working Details:</u>

A. Do you think good education will provide good employment? Strongly Agree/ agree/ undecided/ disagree/ strongly disagree
Reason

B. What should be the role of a woman? Why?
a. House wife b.Working C.Both **Reason:**

C. Do you know about different Govt schemes?	*Do you know*(√/×)	*Getting any*
Pradhanmanti Awaas Yojana (PAY)		
MGNREGA self help group		
National Old Age Pension Scheme		
Gitanjali(State govt house pay)		
Krishivata		
Kisan credit card loan		
Mission Nirmal Bangla(bathroom)		
Pradhan mantra jandhan yojna		

D. Problem faced for getting any working facilities…….

31. Health details:

A. Treatment at: Govt. Hospital/Pvt. Hospital/Health centre/other (specify)……
B. Type of health problem:

C. Health problem in children:

D. Any Health facilities available or getting any facilities:……..

Details……

32. Fertility details:

A. Age of first pregnancy: other:

B. Child delivery: Pvt Hospital/Govt hospital/Home/Other (specify)

C. Get any facilities during pregnancy: Iron folic acid supplement/tetanus/**cash**/Other (specify)

D. Facilities after pregnancy:……..

E. Any Infant death:…….Reason……. ……..

F. Maternal death Y/N During delivery/ after delivery reason……..
G. Children general vaccination Y/N
H. Children getting facilities from angawari centre: Y/N ……..
I. Frequently going to anganwari centre regularly/ occasionally for child care/ preschool education
J. Any contraceptive measures used: Y/N
K. Number of future children: 1 / 2 Prefer: Girl or Boy: Why?

33. Other details:

A. Any case of domestic violence: Y/N Physical abuse/Mental abuse

Response of victim:…….

B. Dowry takes during marriage: Y/N Type: Cash/Furniture/other
C. Attitudes towards dowry:
D. Any kind of addiction: smoking/drinking/Drugs/Others (specify)
E. In your opinion what should be the age of Marriage? Why?
   a. Girl Below 18/ Above 18/ above 25 **Reason**
   b. Boy Below 18/ Above 18/ above 25 **Reason**

   c. Do you think family planning is important? Y/N

      Why? .....
   d. Family planning (what should be the size of a family?): 1child/2children/3children
   e. Who takes most of the decision in family? Husband/Wife/both

34. Units	Within Village (√/×)	Less than 1 km	1-5	More than 5km
Anganwari				
Primary school				
Middle school				
Secondary School				
High school				
College				
Govt. hospital				

Which school they send their children?

Distance from home……Km.

Other problems faced by the family
1.
2.
3.

Problem in the area
1.
2.
3.

Any suggestion
1.
2.
Comment of the interviewer:

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Educational Status and Dropout among Tribal woman: A case Study of Naxalbari C. D. Block, Darjiling District, West Bengal

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Abstract: Education is the primary instrument for the improvement of quality of life of every human being. Those who have remained backward and underprivileged over year can be empowered by education to assert their rights and to fulfill their rightful places in the society. Scheduled tribes in India are considered as the weakest section of the society and the truth remains that a large number of tribal women has not acquired basic education. The present paper is designed to analyse the spatial variation in gender disparity, literary status and dropouts among the tribal woman of Naxalbari C. D. Block, Darjeeling district of West Bengal.

Key words: Literacy, Disparity, Educational level, Dropout.

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I. INTRODUCTION

Indigenous population is the most marginalised in India. The Constitution of India has recognised certain ethnic groups and named them as the scheduled tribes. Scheduled tribes are predominantly the indigenous population of India that the government has identified as socially and economically backward. Scheduled tribes in India are considered as the weakest section of the society in regards to socio-economic and socio-demographic factors like poverty, illiteracy, lack of healthcare facilities, basic hygiene, etc. These tribes are in desperate need of special protection to fight against exploitation and violation of rights. Despite the protection given to the indigenous population by the Constitution of India in 1950, to this day, the scheduled tribe remains the most underdeveloped ethnic groups in India. (Agrawal, 2010)

The tribal community of India has been subjected to countless forms of impoverishment. This is especially prevalent among tribal women. Although they are isolated from the main stream of national life, they are not always kept away from the impact of new transitions happening in our civilization every day. The truth remains that a large number of tribal women has not acquired basic education. Education is regarded as a potential instrument of every individual. (Panda, 2013). It is mandatory for the national development and is correlated with the productivity and quality of one's life. In an effort to empower them, there should be an urgency to provide opportunities which will enable them to acquire leadership qualities for economic self-reliance and social transformation. The present paper is designed to analyse the spatial variation in gender disparity, literary status and dropouts among the tribal woman of Naxalbari C. D. Block, Darjeeling district of West Bengal.

Study Area

Naxalbari C.D. Block, an administrative division of Siliguri sub-division under Darjiling district of West Bengal, has been selected as the study area. The study area lies between 26° 38’ 20’’ N to 26° 48’38’’ N latitude and 86 22’ 33’’E 88 10’9’’ E to longitude. Naxalbari C.D. Block is a part of western Dooars bounded by the Mirik and Kurseong C. D. Blocks on the North, Matigara C.D. Block on the East, Phansidewa and Kharibari on the South. Naxalbari C.D. Block has an area of 181.88 sq km. It has 6 gram panchayats consisting 94 villages and 6 census towns. Gram Panchayats under Naxalbari C.D. Block are Gossaipur, Hatighisa, Lower Bagdogra, Maniram, Naxalbari and Upper Bagdogra.

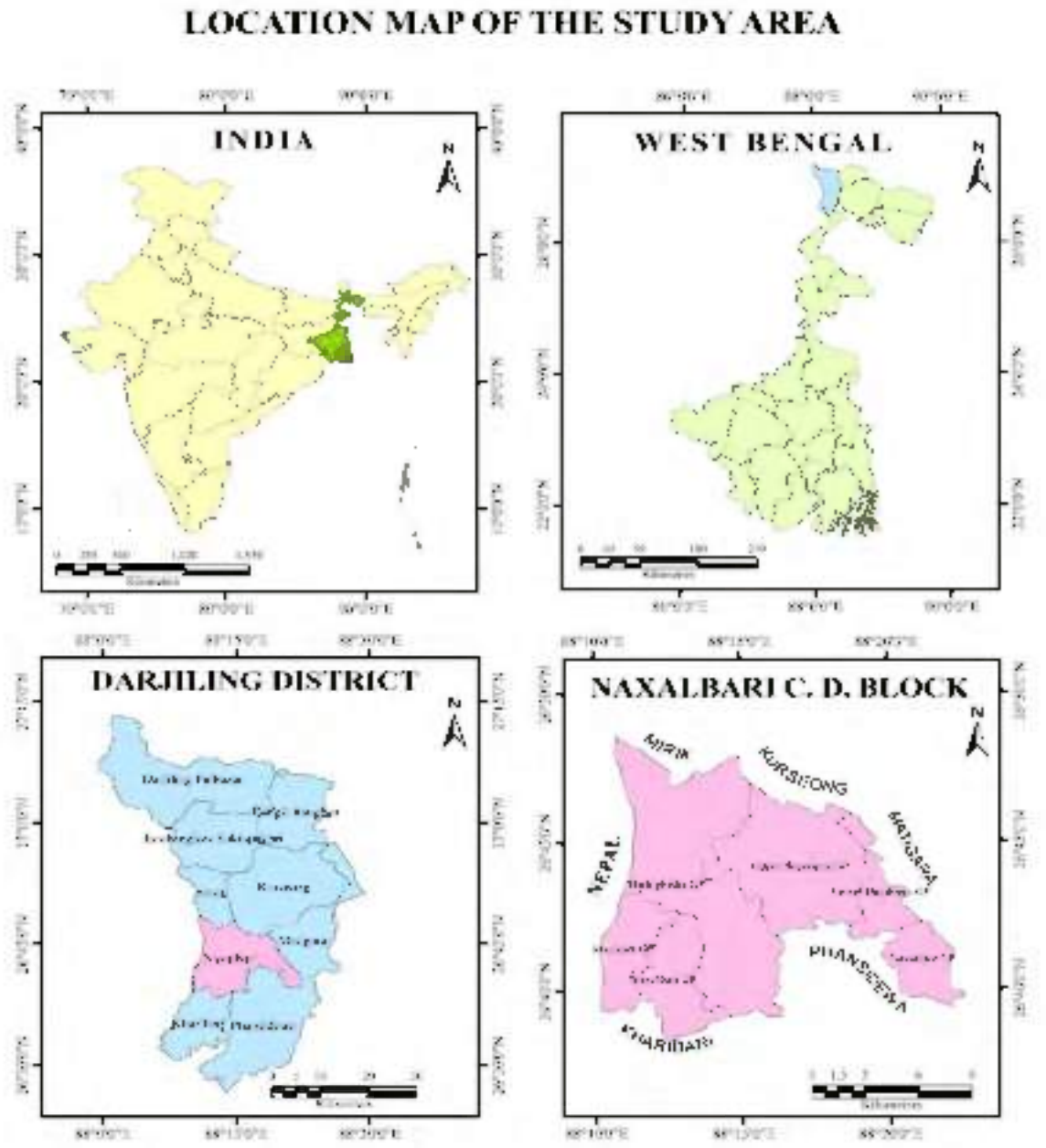


Fig. 1

Objectives

The basic objectives of this study are

1. To study the literacy rate and gender disparity among tribal.
2. To study the educational status of tribal women.
3. To find out the reasons behind dropout among tribal women.
4. To study the relationship between different educational level and dropout with lower age of marriage among tribal women.

II. METHODOLOGY

The study is based on both primary and secondary data. Secondary data have been obtained from Census of India 2011 and other relevant published and unpublished documents. Primary data have been collected from a few selected villages through household surrey. Out of 94 villages under 6 gram panchayats in Naxalbari C. D. Block there are 78 habitat villages. 10% Sample Villages (8 villages) are considered for Survey and from which 15% Sample Households are selected from each village. Total numbers of 135 Households have been surveyed.

To analyze the educational status, few statistical techniques have been used. Sopher's Disparity index modified by Kundu and Rao has been used to compute Gender Disparity.

$$DI = \text{Log}(X1/X2) + \text{Log}(200-X2/200-X1)$$

Where, DI is Gender Disparity Index, X1 is Male Literacy Rate, X2 is Female Literacy Rate.
Regression Analysis and Scatter Plot have been drawn to show the relation between Educational Level, Dropout and Age of Marriage.

Literacy Rate

Literacy rate for tribal population in India is 58.96%, in West Bengal it is 57.92%, in Darjiling District it is 74.69% and in the study area it is 61.97% which is higher than the national and state average but lower than the district average. Table No 1 shows the Male-Female tribal literacy rate in India, West Bengal, Darjiling District and the study area. Gender gap in literacy rate in every level is quite prominent.

Table No 1. Tribal Literacy Rate in India, West Bengal, Darjiling District & Naxalbari C. D. Block 2011

Name	M	F	T
India	68.53	49.35	58.96
West Bengal	68.16	47.71	57.92
Darjiling District	81.5	67.16	74.26
Naxalbari C. D. Block	71.51	52.67	61.97

Source: Census of India 2011

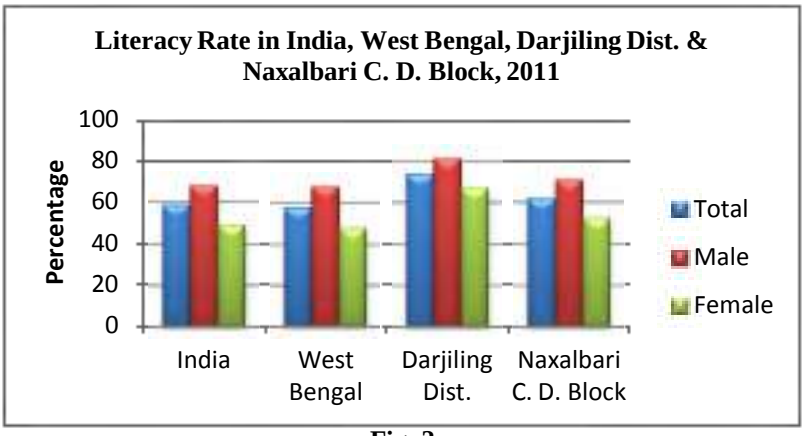


Fig .2

There is a difference between rural-urban tribal literacy rate in Naxalbari C. D. Block. Tribal literacy rate in urban area of this block is 77.72% where in rural area it is only 60.02%. In urban area female tribal literacy rate is 70.48% and male tribal literacy rate is 85.14% where in rural area male tribal literacy is 69.82% and female tribal literacy rate is only 50.46%.

Table No 2. Rural Urban Distribution of Literacy Rate in Naxalbari C. D. Block 2011

Name	Total	M	F
Rural	60.02	69.82	50.46
Urban	77.72	85.14	70.48

Source: Census of India 2011

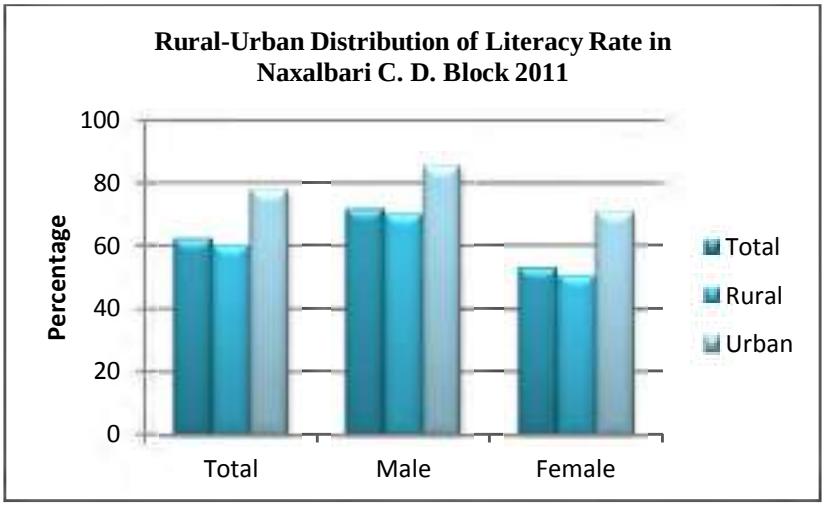


Fig. 3

Educational Status and Disparity in Naxalbari C. D. Block

The Table No. 3 is showing the gram panchayat wise literacy rate for tribal population. It can be found that tribal literacy rate is highest in Nakshalbari gram panchayat (64.47%), followed by Lower Bagdogra (63.17%). These gram panchayats are nearer to different urban centers.. A large number of schools are concentrated and nearer to the Nakshalbari, Upper and Lower Bagdogra gram panchayats. A large number of communication facilities is also available in these gram panchayats. The lowest tribal literacy rate is found in Maniram gram panchayat (56.82%) and followed by Hatighisa (58.77%). The tribal population of these areas are mostly engaged in the construction and tea sector. These two gram panchayats completely belong to rural areas and does not have any census town. Gender disparity is also present in every gram panchayat. Highest gender disparity is found in Gossaipur (0.300), followed by Upper Bagdogra (0.282) and Maniram (0.277). Lowest Disparity index is found in Hatighisa (0.107) and followed by Naxalbari (0.160).

Table No 3. Gram Panchayat Wise Literacy Rate and Disparity Index in Naxalbari C. D. Block

Name of the GP	Literacy Rate			Disparity Index
	total	M	F	
Naxalbari	64.47	72.15	56.16	0.160
Hatighisa	58.77	63.79	53.57	0.107
Upper Bagdogra	60.51	73.75	46.75	0.282
Lower Bagdogra	63.17	64.71	41.67	0.259
Gossaipur	60.81	74.36	45.71	0.300
Maniram	56.82	75.61	48.65	0.277

Source : Primary Survey 2019-20

Different educational level is an important parameter to know the educational status in different communities. In the study area it is seen that for tribal people percentage of elementary level (below primary to middle level) education is quite high in comparison with the percentage of class 9 to graduation level and keeping parity with this female education level percentage is also high at elementary level. Highest percentage of Below Primary level education for female is found in Gossaipur GP (56.25%). In case of Primary level, highest female education percentage is found in lower Bagdogra (40.00%) and for Middle level the percentage is highest in Maniram (44.44%). Highest Secondary level female education percentage is found in Gossaipur GP (31.25%). From Table No 4 it is seen that the total H.S and Graduation level education percentage is very low for the tribal population under Naxalbari C.D Block. In case of female percentage for the same educational level i.e. from H.S to Graduation the scenario gets even worse. The highest female education for H.S level and Graduation level can be seen in Naxalbari GP and the percentages are only 12.20% & 2.44% respectively. In Lower Bagdogra and Maniram GP the percentage of same education level for female is 0.00%. In five out of the six gram panchayats under Naxalbari C.D. Block the Graduation level education percentage for female is 0.00%. Therefore, it can be said that higher level of education is not present among tribal women.

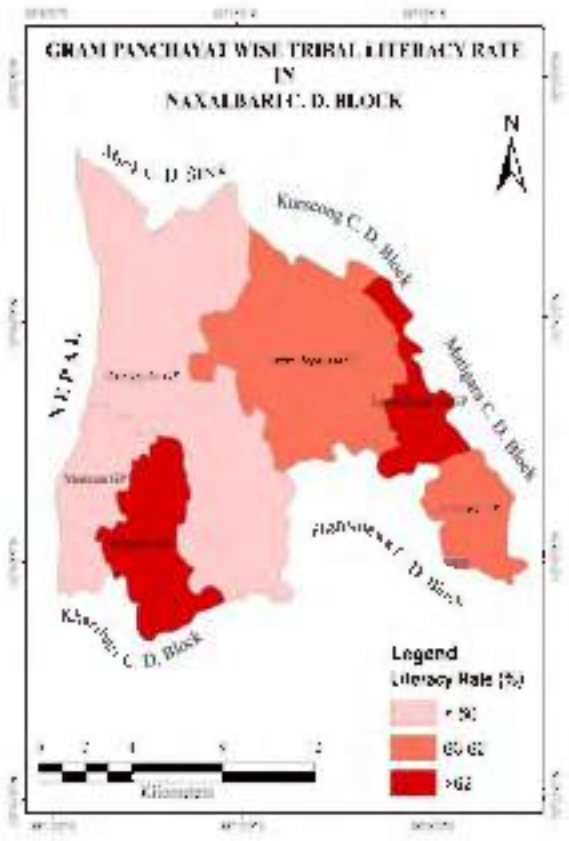


Fig.4

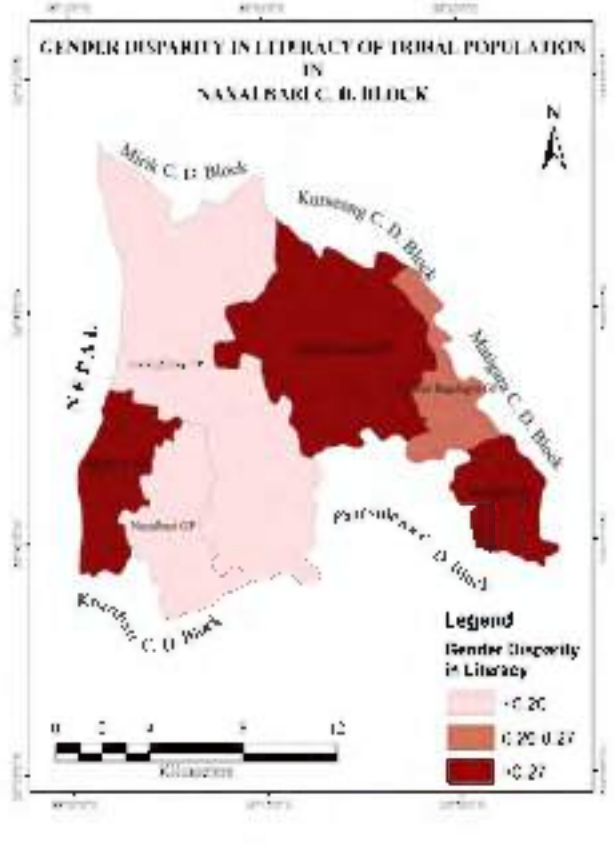


Fig.5

Table No 4. Gram Panchayat Wise Educational Level in Naxalbari C. D Block

Name of the GP	Below Primary %			Primary %			Middle %		
	total	M	F	total	M	F	total	M	F
Naxalbari	14.14	17.54	9.76	21.21	19.30	24.39	24.24	19.30	31.71
Hatighisa	30.43	32.43	30.00	24.64	21.62	30.00	23.19	24.32	23.33
Upper Bagdogra	22.11	20.34	25.00	20.00	25.42	13.89	18.95	16.95	22.22
Lower Bagdogra	25.00	27.27	40.00	25.00	18.18	40.00	37.50	45.45	20.00
Gossaipur	33.33	20.69	56.25	28.89	24.14	25.00	24.44	20.69	18.75
Maniram	16.00	9.68	27.78	26.00	32.26	27.78	30.00	22.58	44.44
Name of the GP	Secondary%			HS %			Graduate %		
	total	M	F	total	M	F	total	M	F
Naxalbari	20.20	26.32	12.20	15.15	17.54	12.20	3.03	3.51	2.44
Hatighisa	17.39	13.51	23.33	5.80	8.11	3.33	1.45	2.70	0.00
Upper Bagdogra	16.84	22.03	8.33	10.53	11.86	8.33	1.05	1.69	0.00
Lower Bagdogra	12.50	9.09	20.00	6.25	9.09	0.00	0.00	0.00	0.00
Gossaipur	20.00	13.79	31.25	8.89	10.34	6.25	0.00	0.00	0.00
Maniram	16.00	22.58	5.56	6.00	9.68	0.00	2.00	3.23	0.00

Source : Primary Survey 2019-20

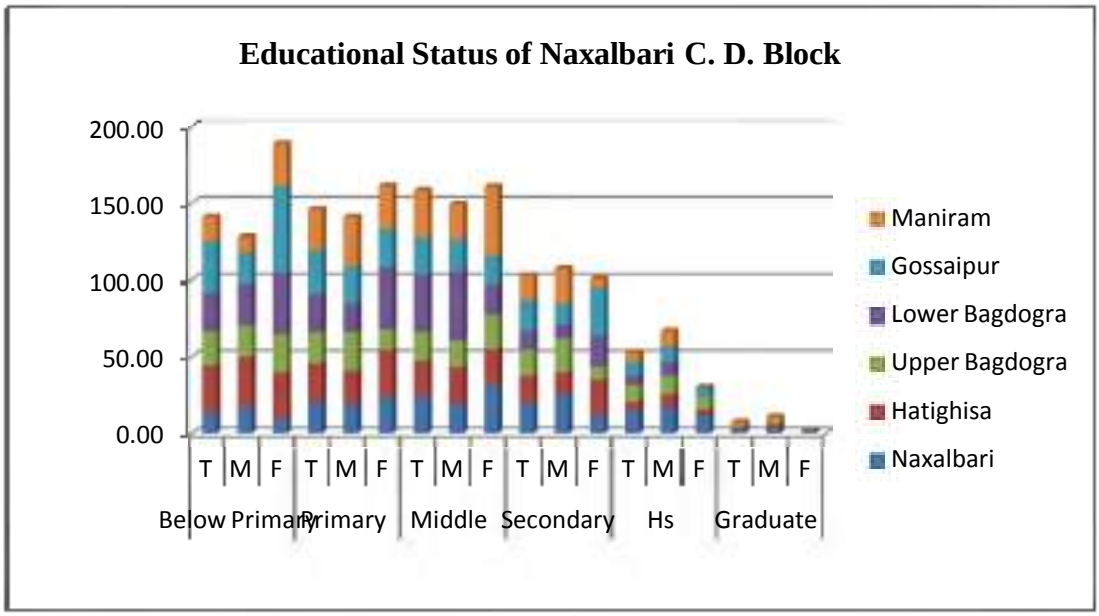


Fig. 6

Dropout among Tribal Women in Naxalbari C. D. Block

From Table No 5, it is seen that the Lower Bagdogra GP among the six gram panchayats under the study area has the highest dropout percentage (68.75%) and Naxalbari GP has the lowest dropout percentage (42.42%). Though in case of female dropout percentage, Hatighisa tops the list with 56.67% and Gossaipur is at last with 43.75%. It is also shown in Table No 5 that except in Hatighisa, male dropout percentage is higher than the female one for all the gram panchayats under the study area.

Table No 5. Percentage of Dropout in Naxalbari C. D. Block

Name of the GP	Drop out %		
	total	M	F
Naxalbari	42.42	51.22	48.78
Hatighisa	57.97	43.33	56.67
Upper Bagdogra	58.95	52.78	47.22
Lower Bagdogra	68.75	54.21	45.79
Gossaipur	57.78	56.25	43.75
Maniram	54.00	55.56	44.44

Source : Primary Survey 2019-20

The Table No 6 is showing the dropout percentage in different educational levels. Dropout percentages in Primary and Middle educational levels are higher for female than that of the male dropout percentages. Highest female dropout percentage in Primary level is found in Lower Bagdogra that is 56.67 % and lowest is found in Maniram and Nakshalbari GP (25% in each GP). In case of Middle level, highest female dropout percentage is found in Upper Bagdogra i.e.41.18% and lowest in Gossaipur (28.57%). In Secondary level, dropout percentage of male tribal population is higher than the female one. From Table No 4 & Table No 6 it can be seen that though the percentage of Secondary level education for female in Hatighisa, Lower Bagdogra & Gossaipur are higher than that of the male percentage, the Secondary level education dropout percentage for female in those same GPs' are lower than that of the male one.

Table No 6. Gram Panchayat Wise Dropout in Different Educational Level in Naxalbari C. D. Block

Name of the GP	Primary			Middle			Secondary		
	total	M	F	total	M	F	total	M	F
Naxalbari	21.43	18.18	25.00	21.43	13.64	30.00	38.10	40.91	35.00
Hatighisa	35.00	30.43	41.18	32.50	30.43	35.29	17.50	21.74	11.76

Upper Bagdogra	23.21	20.51	29.41	32.14	28.21	41.18	32.14	35.90	23.53
Lower Bagdogra	36.36	25.00	56.67	27.27	25.00	38.33	18.18	25.00	5.00
Gossaipur	23.08	15.79	42.86	26.92	26.32	28.57	26.92	31.58	14.29
Maniram	18.52	15.79	25.00	37.04	36.84	37.50	40.74	42.11	37.50

Name of the GP	HS			Graduation		
	total	M	F	total	M	F
Naxalbari	16.67	22.73	10.00	2.38	4.55	0.00
Hatighisa	12.50	13.04	11.76	2.50	4.35	0.00
Upper Bagdogra	12.50	15.38	5.88	0.00	0.00	0.00
Lower Bagdogra	18.18	25.00	0.00	0.00	0.00	0.00
Gossaipur	23.08	26.32	14.29	0.00	0.00	0.00
Maniram	3.70	5.26	0.00	0.00	0.00	0.00

Source : Primary Survey 2019-20

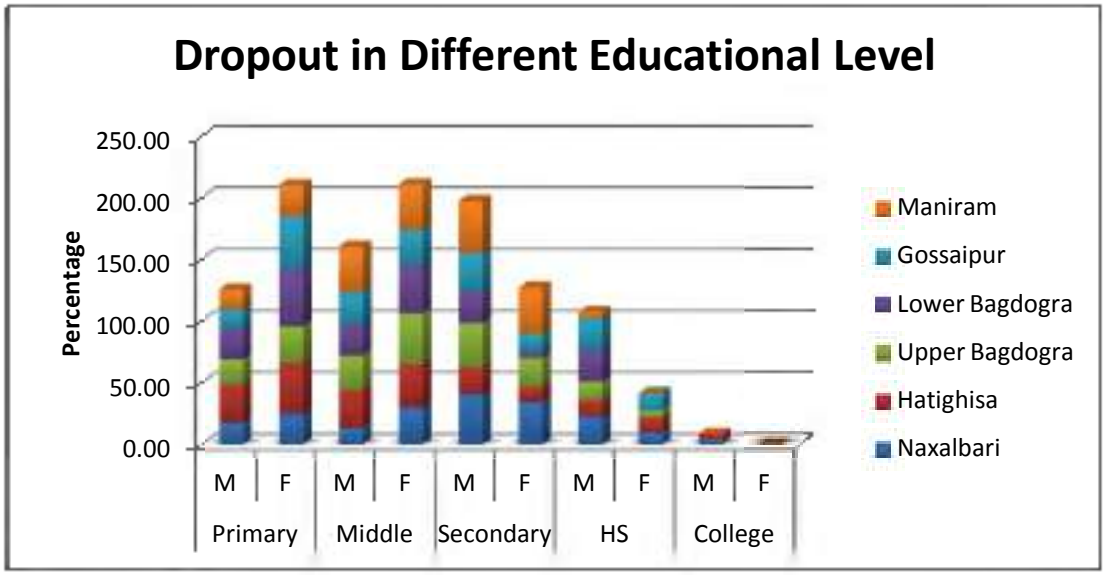


Fig .7

Reasons of Dropout

Reasons of dropout are quite different for tribal male and female. Where for male the prime reason of dropout is requirement of an extra person to earn for the family, for female the main reasons are marriage and requirement of an extra person to look after the household work. Female dropout percentage on marital ground is highest in Lower Bagdogra (66.67%) and followed by Maniram (50%) & Gossaipur (42.86%). In addition to that from Table No 6 it can be seen that in Lower Bagdogra, Maniram & Gossaipur, percentage wise highest female dropout occur in Primary, Middle & Secondary Educational level. Therefore it is quite obvious that Marriage before 18yrs of age is a major problem in those three GPs'. In the remaining three GPs' i.e. in Naxalbari GP, Hatighisa GP & Upper Bagdogra GP under Naxalbari C.D Block, the main reason for female dropout is requirement of helping hand to look after the household work as the elder female members of the family go out for work to earn for the family. The highest percentage of dropout due to this reason can be seen in Hatighisa (41.18%) and followed by Upper Bagdogra (35.29%) & Naxalbari (35%).

Table No 7. Gram Panchayat Wise Reasons of Dropout in Naxalbari C. D. Block

Name of the GP	1.Transportation Problem			2.Required for Household Work			3.Required for Income Generation		
	total	M	F	total	M	F	total	M	F
Naxalbari	7.14	4.55	10.00	21.43	9.09	35.00	28.57	45.45	10.00
Hatighisa	2.50	0.00	5.88	17.50	0.00	41.18	35.00	52.17	11.76

Upper Bagdogra	3.57	5.13	0.00	14.29	5.13	35.29	37.50	48.72	11.76
Lower Bagdogra	0.00	0.00	0.00	18.18	12.50	33.33	27.27	37.50	0.00
Gossaipur	0.00	0.00	0.00	11.54	0.00	42.86	38.46	52.63	0.00
Maniram	0.00	0.00	0.00	11.11	5.26	25.00	33.33	47.37	0.00
Name of the GP	4.Not interested in Studies			5.Repeated Failure			6.Marriage		
	total	M	F	total	M	F	total	M	F
Naxalbari	11.90	18.18	10.00	19.05	22.73	10.00	11.90	0.00	25.00
Hatighisa	21.25	34.78	5.88	13.75	13.04	11.76	10.00	0.00	23.53
Upper Bagdogra	17.29	20.51	17.65	16.07	20.51	5.88	11.28	0.00	29.41
Lower Bagdogra	18.18	25.00	0.00	18.18	25.00	0.00	18.18	0.00	66.67
Gossaipur	23.08	31.58	0.00	11.54	10.53	14.29	15.38	5.26	42.86
Maniram	18.52	26.32	12.50	19.53	21.05	12.50	17.51	0.00	50.00

Source : Primary Survey 2019-20

Relation between Literacy Rate, Educational Level, Dropout & Married below 18 yrs.

Literacy Rate and Dropout

The relation between female literacy rate and female dropout is positive. It can be seen that where the literacy rate is high, dropout percentage is also high. This is because, most of the female students who go to school, are dropped out from schools in Primary, Middle and Secondary level. And it is obvious that where the number of illiterate is high, automatically the number of being dropped out will be lesser. The 'r' value for female literacy and female dropout is 0.62.

Dropout and Married below 18 yrs

There is also positive correlation between female dropout percentage and married below 18 years. It can be seen that where the dropout percentage is high married below 18 years is also high among tribal woman. It implies Child Marriage is an important factor among tribal female students behind being dropped out. The 'r' value for dropout and married below 18 years is 0.67.

Educational Level and Married below 18 years

Fig. 8 to Fig. 14 are showing the relationship between different educational level and married below 18 years among tribal women. It is showing in Below Primary the relation is positive and with the higher educational levels the relations become negative. It definitely indicates that with higher education, the percentage of marriage below 18 years goes down.

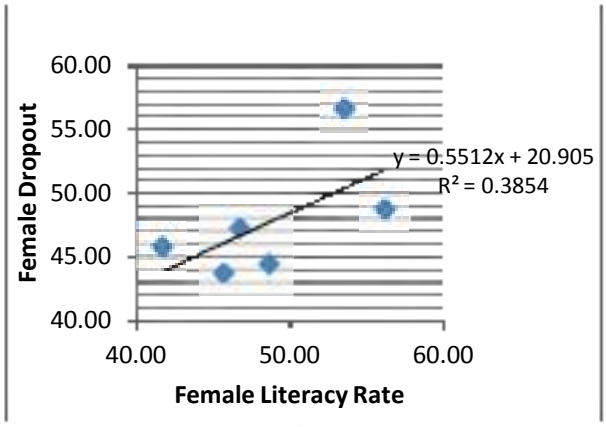
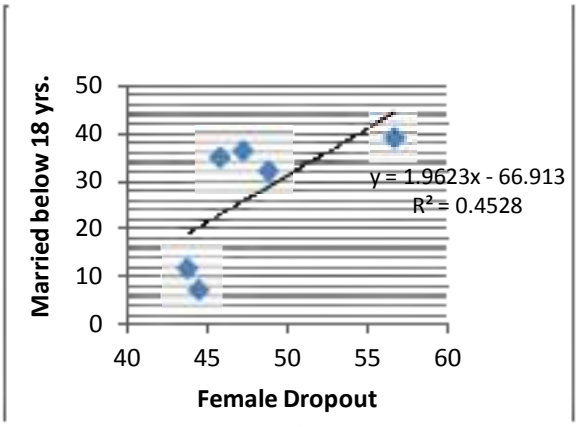


Fig.8



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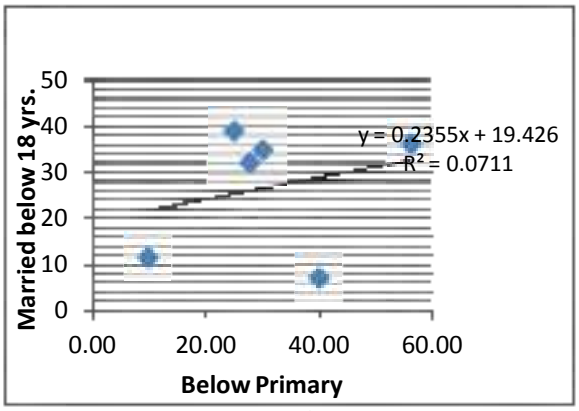

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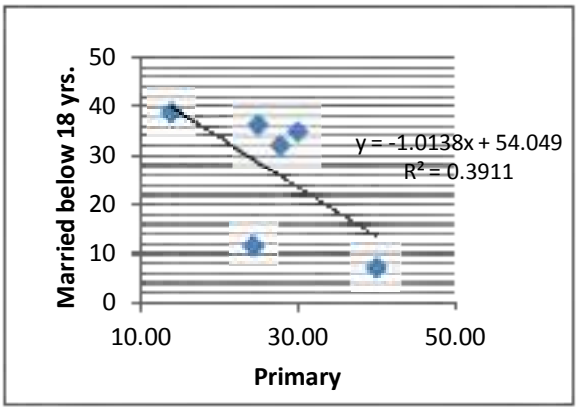

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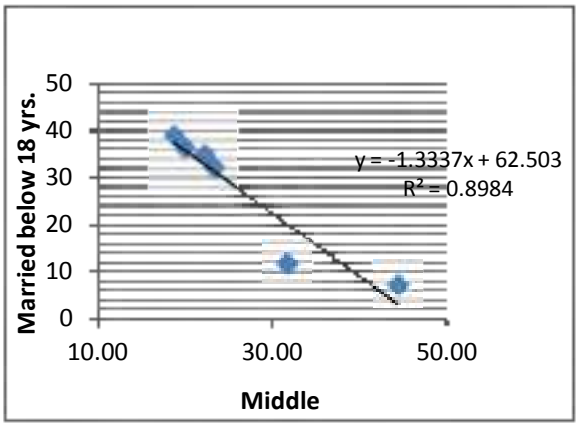

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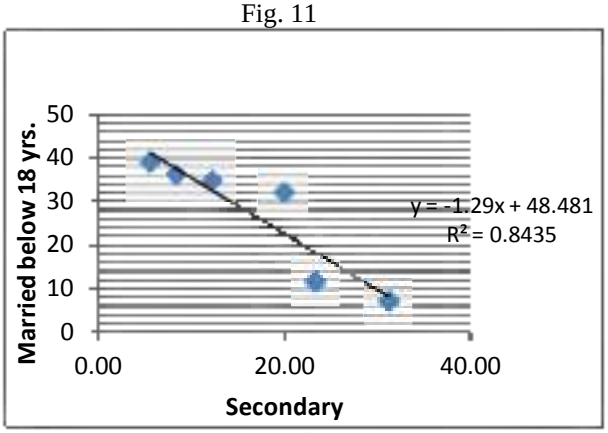

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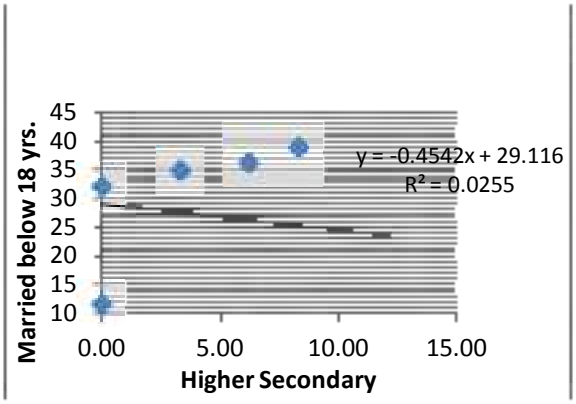

Fig. 14

III. CONCLUSION

Status of women varies in different societies. Literacy percentage among tribal women, as women in all social groups, is lesser than the tribal male counterpart. The present study examine the educational status and dropout issue among tribal women of Nakshalbari C. D. Block. The study finds that like any other community, gender gap in education is also present in tribal society in our study area. It is also found that almost in every GP the dropout percentage of female is lesser than that of male among tribal population. The data reveals that where the major factor associated with male dropout is poor economic condition specifically need of engagement in work to earn money, for female dropout it is due to engagement in household work and lower age of marriage. It is not simply a result of academic failure, but rather often results from both social and academic problems. For reducing dropout and gender gap in literacy it will require a comprehensive approach to help students for their social and academic problems that they face in their lives.

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Literacy and Employment Status of Tribal Population in Darjiling District, West Bengal

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Abstract: The process of development of any region or area is characterized by various socio economic and infrastructural factors, but in overall the most important factor is education. Literacy is essential for eradicating poverty and mental isolation, for cultivating peaceful and friendly international relation. Illiteracy, on the other hand takes away from man his dignity, increase poverty and mental isolation and also hampers social advancement, economic growth and political maturity. Improvement in education is an important index of social and cultural advancement and economic transformation that the country under goes. Education and employment plays a dominant role in influencing the quality of human resource. The socio-cultural factor that effecting education and work participation, and also occupational structure of population are highly related to the productivity and economic growth of the country. The present paper is designed to analyze the progress, spatial variation, inter block variation, gender disparity in literacy and also the variation in work participation rate and different occupational category of Darjiling district, West Bengal.

Keyword: Education, Employment, Literacy, Disparity.

Introduction

Literacy level is an important characteristic of population. In fact, it is an important indicator of socio cultural development and political consciousness (Husain 2013). The process of development of any region or area is characterized by various socio economic and infrastructure factors, but in overall the most important factor is education (Yadav 2009). Literacy is essential for eradicating poverty and mental isolation, for cultivating peaceful and friendly international relation. Illiteracy, on the other hand takes away from man his dignity, increase poverty and mental isolation and also hampers social advancement, economic growth and political maturity. Above all literacy influences other such attributes of population as fertility, mortality, mobility, occupation etc (Chandana1986). Improvement in education is an important index of social and cultural advancement and economic transformation that the country under goes (khullar1999). Literacy and basic education liberates people. Human resource refers to the abilities of people in a country that have working skill, good health, education and experience that are important for economic growth. Education and employment plays a dominant role in influencing the quality of human resource (Hannan 2013). The socio-cultural factor that effecting education and work participation, and also occupational structure of population are highly related to the productivity and economic growth of the country. Education is not only effecting the work participation but also the occupational structure. The concept of literacy, which varies from country to country, generally refers to the minimum level of literacy skill. According to the census of 2011, in India, literacy has been defined as any person above the age of 7 years, who can read and write with understanding in any one language, is treated as literate (Husain 2013). The main advantage of literacy is that it provides relatively more opportunity of employment. The tribal population in India represents an enormous diversity of groups. They live largely in isolation but they spread over the length and breadth of the country. When we talk about the tribal they considered as the backward community. Education and employment plays an important part for the development of tribal community. The process of development of any region or area is characterized by various socio economic and infrastructure factors, but in overall the most important factor is education and employment. This is also true for the tribal society. The present paper is designed to analyze the progress, spatial variation, inter block variation, gender

disparity in tribal literacy and also the variation in work participation rate and different occupational category of Darjiling district, West Bengal.

Study area

Darjiling district is the northern most districts in the state of West Bengal which lies in the foothill zone of Himalaya. Previously the district comprises of 4 sub-division namely 1.Darjeeling sadar 2.Kalimpong 3.Kurseong 4.Siliguri. But Kalimpong was separated and it officially became a separate district on 14th February 2017. Presently it has 3 sub-division, which consist of 9 blocks. Darjeeling sadar have 3 blocks namely Darjeeling-pulbazar, Rangli rangliot, Jorebunglow-sukiapokhri, Kurseong sub-division has only one block which is Kurseong, and Siliguri sub-division have 4 blocks namely Matigara,Naxalbari, Kharibari, Phansidewa. The district is bounded by Sikkim on the north, on the west by Nepal and Bihar state and Uttar Dinajpur district on the south. The district Darjeeling lies between 26˚31'N and 27˚ 13'N latitude and between 87˚59'E and 88˚30'E longitude.

Fig.1 Location map of Darjiling District.

Objectives

The present study is based on the following objectives:

1. To study the spatial variation in literacy rate and gender disparity of tribal population.
2. To study the work participation rate and different occupational structure.
3. To examine the relation between literacy rate and occupational category.

Database and methodology

The present study is entirely based on secondary data. Secondary data relating to literacy and working category have been collected from district census handbook, primary census abstract and village directory.
To show the relative concentration of tribal population location Quotient has been used
Location Quotient
LQi= (Pij/Pi) / (Pj/P)
Where, Pij=number of person in jth category of area i.
Pi= total population in all the categories of area i
Pj= sum of persons of category j in all the n areas

P= total population of the region in each category.

Percentage of tribal literate to the total tribal population have been calculated for showing the gender disparity in different blocks Sopher's disparity index, modified by Kundu & Rao (1985) has been used.

$$Ds=Log(X2/X1) + Log [(200-X1)/ (200-X2)]$$

Where, Ds is gender disparity index,

X1 is percentage of literate female to total female population

X2 is percentage literate male to total male population.

The spatial pattern of tribal population by literacy rate and occupational structure has been examined. To reach the standardization, the data from each indicator have been calculated into Standard Score.

$$Zi=\frac{Xi-\bar{x}}{SD}$$

Where, Zi is standard score.

Xi is original values for observation i

X bar is the mean for the variable and SD is the standard deviation.

Now the average of standard score has been calculated which is known as opposite score.

$$CS=\frac{\Sigma Zij}{n}$$

Where, CS in Composite Score

N is refers to the number of variable

ΣZij Indicates Z-score of all variables 'i' in block j.

Concentration of Tribal population

Table.1 Block-wise concentration of tribal population (2011).

Name of the Blocks	LQ for ST
Darjeeling Pulbazar	1.15995
Rangli Rangliot	1.33153
Jorebunglow Sukiapokhri	1.20927
Mirik	1.24003
Kurseong	1.24770
Matigara	0.54061
Naxalbari	0.78796
Phansidewa	1.23248
Kharibari	0.78371

Source: Calculated from census HandBook.

Fig.2 Location Quotient of tribal population

The value of location Quotient shows the concentration of scheduled tribe population. the value of LQ shows that the higher concentration of tribal is mainly on the hilly region. The highest value which is 1.33 is found on Rangli Rangliot. The majority which is including the indegeneous ethnic groups are Bhutia, Lepcha, Limbu, Tamang, Subba. Five blocks of the hilly part of the district which is Darjeeling pulbazar, Rangli rangliot, jorebunglow and Mirik has the high concentration of ST's. In the plain region Phansidewa block has also a hig concentration with the LQ value of 1.23. the tribal community in the plain is different from the hill area. The indigenous people like Santhal, Oraon, Munda, Bhumij are mostly concentrated in plain. The tribal population in Naxalbari and Kharibari it is quit balanced. In Matigara the population of Scheduled tribe is quit dispersed.

Trends of Tribal literacy rate

India is continuously improving its literacy rate but tribal literacy rate is still low in India. In 1961 literacy rate in India was only 28.31% where 15.35% is for female and 40.4% for male only. But for St Population it was very low only 10.27% where 3.29% for female and 16.69% for male. The increasing rate of tribal literacy in India is very slowly. In 1991 literacy rate in India was 52.21% but for tribal it was only 29.60%. Table.1 is showing tribal literacy rate in India, West Bengal & Darjiling District since 1991. During a span of thirty years from 1991 to 2011 for India it grows from 29.60% to 58.96%. But this rate is below country average. In 1991 the tribal literacy rate is 27.78% for West Bengal and 39.37% for Darjiling District. In 1991 female tribal literacy rate is very low in West Bengal i.e. 14.82%, but for Darjiling district it is little high which is 30.77%.

Table 2.Trends of Tribal literacy rate of India, West Bengal and Darjiling district (1991-2011)

census year	India			West Bengal			Darjiling		
	T	M	F	T	M	F	T	M	F
1991	29.6	40.65	18.91	27.78	40.06	14.82	39.37	47.54	30.77
2001	47.1	59.17	34.76	43.4	57.38	29.15	55.48	67.07	45.85
2011	58.96	68.53	49.35	57.92	68.16	47.71	74.26	81.5	67.16

Source: Census of India

In 2001 a slight improvement in literacy rate was observed in comparison to the previous decade. It was 47.10% for nation average, 43.4% in West Bengal and 55.48% in Darjiling district. But from 2001 to 20111 the rate is not very high. It increases only to 58.98% for India and 57.92% for West Bengal. But for Darjiling district it increased to 74.26%. Though the tribal literacy rate is high in the district but there is a block-wise variation.

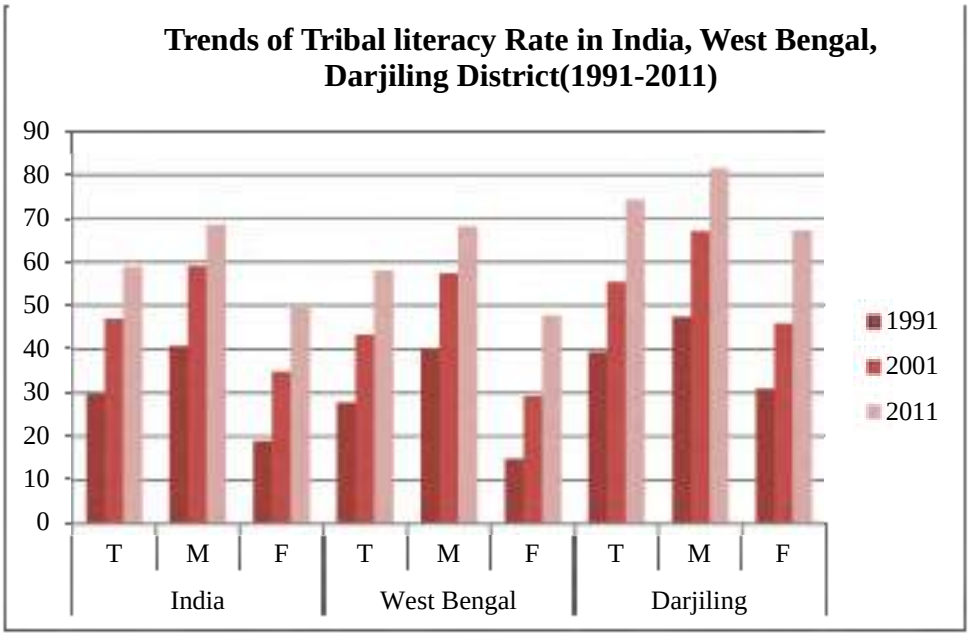

Fig.3 Trends of Tribal literacy Rate

Trends of Tribal employment rate

The study of employment rate and structure is one of the most important part of population geography. The state of employment rate in India is less as compared to many developed countries in the world. According to 2011 census work participation rate in India is 39.79%. But for tribal people the employment rate is higher than the national average. Table.2 is showing the employment rate of three decades. For tribal people the employment rate is not very changing. In 1991 work participation rate was 42.03% in India for West Bengal it was 47.71% but for Darjiling district it is low i.e 39.49%. In2001 it slightly increased 44.82%. In 2001 female work participation for tribal (53.20%) was higher than the male population (49.06%).for Darjiling district it increase from 1991 (39.49%) to 2001 (40.85%) ,but in 2011 it again decrease to 39.24% . Female work participation for tribal is low and also decreased from 2001 (33.49%) to 2011(30.81%). In west Bengal male employment rate increases from 53.75% to 55.49% but for female employment rate it again decreases from 43.69% (2001) to 39.24% (2011).

Table 3.Trends of Tribal employment rate of India, West Bengal and Darjiling district (1991-2011)

Census year	India			West Bengal			Darjiling		
	T	M	F	T	M	F	T	M	F
1991	42.03	54.74	43.71	47.66	54.04	41.03	39.49	48.07	30.49
2001	44.82	49.06	53.2	48.77	53.75	43.69	40.85	48.17	33.49
2011	48.74	53.91	43.52	47.37	55.49	39.24	39.73	48.78	30.81

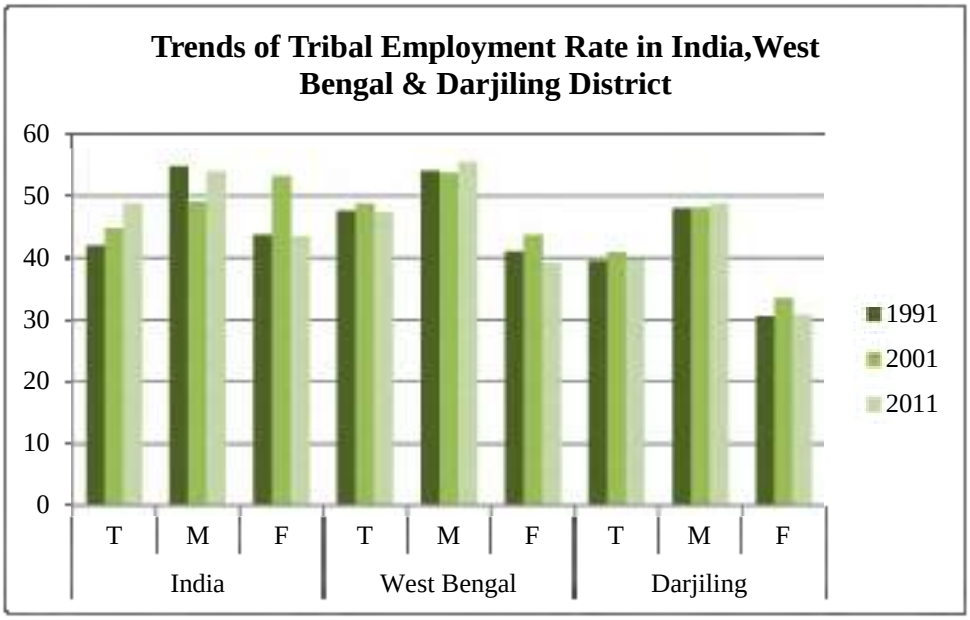

Fig.4 Trends of Tribal employment Rate

Block Wise Variation of Tribal Literacy Rate (2011):

There is a huge variation in terms of literacy rate among different blocks. This variation is even more prominent between the blocks under the hilly and plain region. Out of 9 blocks under Darjiling district, 5 blocks named Darjiling Pulbazar, Rangli Rangliot, Jorebunglow Sukiapokhri, Mirik, Kurseong are high altitude blocks and the remaining 4 named Phasidewa, Matigara, Naxalbari and Kharibari come under plain region. The tribal communities, who live in the hilly area and plain area under this district, are different to each other. In one case the Lepchas, Bhutias, Tibetans, Limbus and various Nepalees are living in the hilly area; on the other hand as the plain area is covered by very thick forest, it is inhabited by indigenous tribal groups like Koch, Dhimal and others like them. They mainly live upon cultivation, jhoom cultivation,nomadic (Ref: District gazetteers, Darjeeling, 1907 edition, author LSS O'Malley, ICS, Superintendent of Census).

Table 4. Block wise variation in Tribal Literacy Rate Gender Disparity of Darjiling District (2011)

BLOCK NAME	TOTAL	MALE	FEMALE	DISPARITY INDEX
Darjeeling Pulbazar	79.94	86.82	72.94	0.126
Rangli Rangliot	80.50	87.66	73.50	0.128
Jorebunglow Sukiapokhri	82.62	89.38	76.18	0.118
Mirik	79.16	87.03	71.20	0.144
Kurseong	77.69	85.82	69.58	0.149
Matigara	64.39	73.78	55.47	0.183
Naxalbari	61.97	71.51	52.67	0.192
Phansidewa	58.03	67.26	49.20	0.191
Kharibari	52.63	62.76	42.61	0.228

Source: Census of India

*Excluding 0-6 population

The literacy rate among the tribal people who live in the hilly region, is comparatively sound than that of who live in the plain region under the district. Under this district the highest literacy rate in the block named Jorebunglow Sukiapukhri i.e. 82.62% and the lowest literacy rate in Kharibari block i.e. 52.63%. The literacy rates of the other

blocks are as follows: Darjiling Pulbazar 79.94%, Mirik 79.16%, Rangli Rangliot 80.50%, Kurseong 77.69% and Phasidewa 58.03%, Matigara 64.39%, Naxalbari 61.97%.

Gender Disparity in Tribal Literacy (2011):

The gender disparity in tribal literacy of Darjiling district has been shown here by Modified Shopher Index. From the above table we can see that there is not a single block whose female literacy rate is higher than the male one. So disparity is very prominent. Though the block Jorebunglow Sukiapokhri has the highest literacy rate among all the 9 blocks under Darjiling district but there is a gap between the male and female literacy rate; where the male literacy rate is 89.38%, the female literacy rate is 76.18%, the disparity index is 0.118. Female literacy rate is highest in this block among all. The male literacy rate of other blocks is as follows. : Darjiling Pulbazar 86.82%, Mirik 87.03%, Rangli Rangliot 87.66%, Kurseong 85.82%. From the higher altitude blocks female literacy is low in Kurseong i.e 69.58%. Tribal female literacy rate in the other blocks are Darjiling Pulbazar 72.94%, Mirik 71.20%, Rangli Rangliot 73.50%. Disparity index in Mirik and Kurseong is little high i.e .144 & .149 respectively. On the other hand gender disparity is high in the other 4 blocks. Kharibari block has the lowest literacy rate (52.63%) as well as it's disparity index (0.228) is highest among all the blocks under Darjiling district which is very alarming. Most importantly the female literacy rate is only 42.61%. Naxalbari & Phansidewa has the disparity of .192 & .191 which is also on the higher side and female tribal literacy is also low i.e. 52.67% and 49.20% respectively. As the tribal people of the 3 blocks Naxalbari, Phasidewa, Kharibari, live mostly in rural areas; the gender disparity is also very high for those blocks. These are the top three blocks in terms of gender disparity. The whole scenario is showing the block which have high literacy rate has low gender disparity and the block which has low literacy rate has the high gender disparity.

Fig.5 Gender Disparity Index

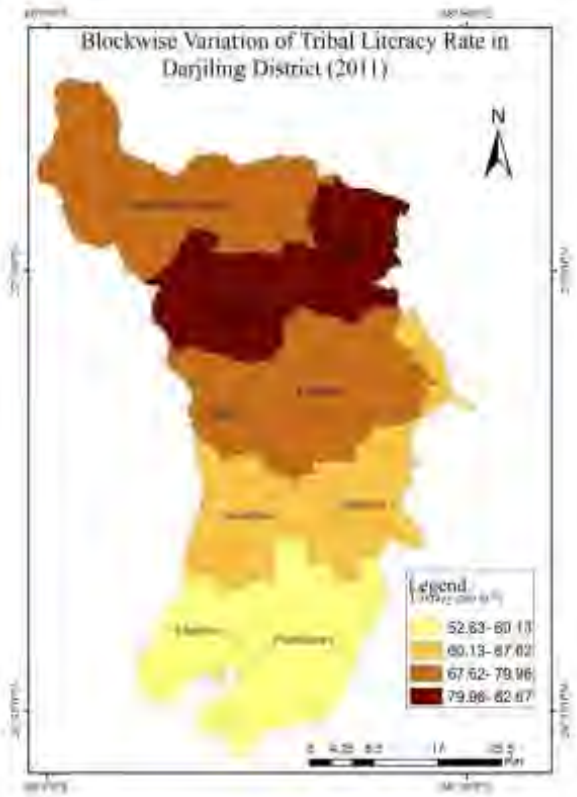

Fig.6 Tribal literacy Rate

Table 5. Educational level of Different age group of people in Darjiling District (2011)

Age Group	Literate without educational level	Below primary	Primary	Middle	Secondary	HS/Pre-University/Snr. secondary	Technical/non technical diploma	Graduate & above
7-14	0.64	53.06	36.21	9.98				
15-19	1.16	11.58	23.78	34.60	20.35	8.40	0.07	
20-24	2.00	14.26	21.14	22.93	11.58	20.21	0.34	7.44
25-29	3.18	15.91	21.59	24.93	9.04	12.58	0.22	12.41
30-34	3.34	16.63	21.44	26.65	9.28	12.31	0.19	10.08
35-39	3.28	19.75	21.68	24.99	8.85	12.20	0.11	9.05
40-44	3.47	22.41	21.49	22.23	8.09	11.24	0.17	10.76
45-49	3.72	24.77	21.57	22.70	7.86	9.14	0.17	9.89
50-54	3.79	27.69	20.99	21.48	8.22	9.79	0.14	7.80
55-59	4.01	28.04	19.74	20.33	9.38	10.85	0.25	7.29
above60	5.65	32.60	22.32	17.56	8.25	7.90	0.19	5.39

Source: Census of India

Table 5. is showing different educational level of different age group of people. It is important to note that higher education percentage is significantly low for the tribal population. Among the higher age people the literacy level is mostly between below primary, primary and middle. 32.60% population in the age group of above 60 is below primary level. Education level i.e. graduation and above is little high among the age group between 25-29 and 30-34 that is 12.41% and 10.08%. age group above 60 has only 5.39% of graduate population.

Table. 6 Work participation rates of different Blocks 2011

	Work participation Rate			Main worker			Marginal worker			Non Worker		
BLOCK NAME	**TOTAL**	**M**	**F**	**Total**	**M**	**F**	**Total**	**M**	**F**	**Total**	**M**	**F**
Darjeeling Pulbazar	42.99	25.91	17.08	25.75	16.54	9.21	17.24	9.37	7.87	57.01	24.57	32.44
Rangli Rangliot	38.74	23.55	15.19	23.70	14.61	9.09	15.04	8.94	6.10	61.26	26.14	35.12
Jorebunglow Sukiapokhri	34.70	21.80	12.90	27.83	17.43	10.40	6.87	4.37	2.50	65.30	27.18	38.13
Mirik	39.74	23.79	15.95	26.92	15.76	11.16	12.82	8.03	4.79	60.26	26.56	33.70
Kurseong	37.81	23.25	14.56	27.63	17.00	10.64	10.17	6.26	3.92	62.19	26.73	35.46
Matigara	40.21	24.62	15.59	34.38	21.35	13.03	5.82	3.27	2.55	59.79	24.25	35.55
Naxalbari	42.13	25.17	16.96	31.29	20.36	10.93	10.84	4.81	6.03	57.87	24.19	33.67
Phansidewa	44.08	24.08	20.00	30.47	17.79	12.68	13.61	6.29	7.32	55.92	25.03	30.88
Kharibari	45.30	26.62	18.68	31.91	21.47	10.44	13.39	5.15	8.24	54.70	23.30	31.40

Source: Census of India

There is a block wise variation in work participation rate of tribal population. Highest WPR is found in Kharibari block(45.30%) followed by Phansidewa (44.08%), Naxalbari (42.13%) and Matigara(40.21%). Whereas lowest WPR is found in Jorebunglow-sukiapokhri (34.70%). It is interesting to note that WPR is quite high in the plain areaamong At population. There is also gap between male-female WPR. Female WPR is low in most of the blocks. Lowest female WPR is found in Jorebunglow-sukiapokhri (12.90%) and highest female WPR is found in Phansidewa block. The scenario is different in case of main worker and marginal worker. In most of the blocks marginal female WPR is low but in Kharibari, Phansidewa & Naxalbari marginal female WPR is higher that the male marginal workers. Marginal male WPR is 4.81%, 6.29%, 5.15% in Naxalbari, Phansidewa and Kharibari respectively. Female marginal WPR is 6.03%, 7.32% and 8.24%. Table 7 the different working categories in different bocks. The highest cultivator is found in Darjeeling–pulbazar i.e. 40.27% followed by Mirik (17.87%), and Kharibari (12.69%). Highest agricultural labour is found in Kharibari (26.95%). The percentage of household industry worker is very low. Percentage of other working category is quite high. The majority of tribal population is mostly concentrated on tea plantation area and worked in tea garden.

Fig 7.Work participation rate

Table. 7 Block-wise variations in working category

BLOCK NAME	Cultivator			Agricultural Labour			Household Industry			Other Worker		
	Total	**M**	**F**	**Total**	**M**	**F**	**Total**	**M**	**F**	**Total**	**M**	**F**
Darjeeling Pulbazar	40.27	24.35	15.92	11.97	6.79	5.18	3.04	1.56	1.48	44.72	27.57	17.15
Rangli Rangliot	11.43	6.99	4.44	22.13	12.78	9.35	1.41	0.9	0.51	65.02	40.11	24.91
Jorebunglow Sukiapokhri	8.56	5.47	3.09	6.54	3.95	2.59	1.99	1.34	0.65	82.92	52.08	30.84
Mirik	17.87	12.6	5.27	14.71	8.65	6.06	1.44	0.95	0.49	65.97	37.66	28.32
Kurseong	9.88	6.75	3.13	5.4	3.66	1.74	2.21	1.39	0.81	82.51	49.69	32.82
Matigara	4.45	3.46	1.00	1.86	1	0.85	1.62	0.95	0.68	92.06	55.82	36.24
Naxalbari	5.79	4.58	1.21	8.46	5.18	3.28	1.67	0.92	0.75	84.08	49.06	35.02
Phansidewa	4.42	3.61	0.81	9.41	5.73	3.68	1.18	0.61	0.57	84.99	44.68	40.31
Kharibari	12.69	10.58	2.11	26.95	14.85	12.11	1.25	0.66	0.58	59.11	32.68	26.44

Source: Census of India

After examining the spatial pattern of education and occupational structure it is important to study the education in relation with occupation in the study area. The spatial distribution of literacy and employment comprising two set of variable (literacy-total, male, female), as well as occupational structure (WPR, cultivator, agricultural labour, Household industry worker, other worker).

Table.8 Composite score of literacy & occupational structure in Darjiling District.

Name of the Blocks	composite z-score of literacy	Composite z-score of Occupational Structure
Darjeeling Pulbazar	0.7925	1.2096
Rangli Rangliot	0.8514	-0.2707
Jorebunglow Sukiapokhri	1.0399	-0.2212
Mirik	0.7305	-0.7807
Kurseong	0.6051	-0.2710
Matigara	-0.5486	-0.5856
Naxalbari	-0.7672	-0.0869
Phansidewa	-1.1125	1.0998
Kharibari	-1.5911	-0.0932

Source: Calculated from census of India

Table 8 shows that only one block which is Darjeeling pulbazar having high score of literacy and employment. From the plain only Matigara has low score of literacy and employment. But among the other blocks specially on the hilly part it is interesting to note that though the score in literacy is quite high but the score of occupational structure is low. The value of composite score is positive in RangliRagliot, Jorebunglow-sukiapokhri, Mirik and Kurseong but the score of occupational structure is in negative value in this blocks.

Fig 8.

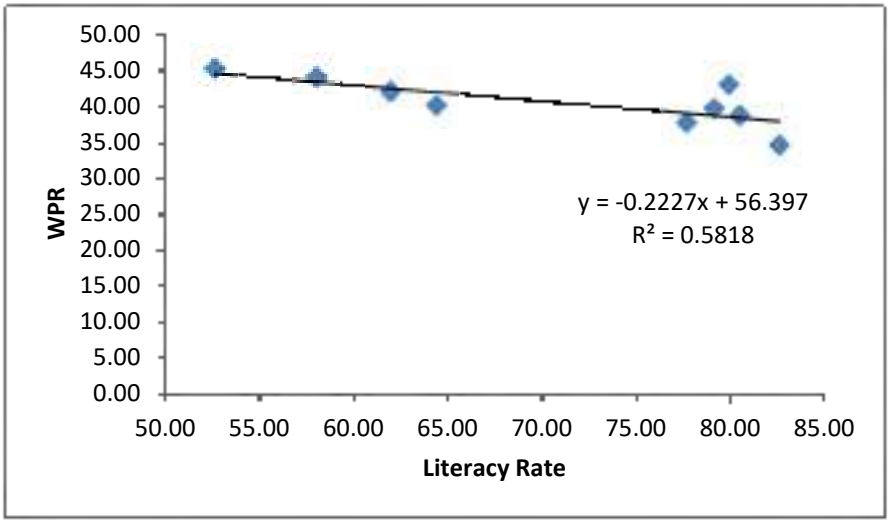

Fig.6 is showing the relation between literacy rate and WPR by scatter plot and trend line. The trend is showing a negative relationship between WPR and literacy. From the equation it can be said that the relation between literacy (x) and WPR (y) is such that an increase in literacy rate can cause a decrease of 2% in WPR.

Table.9 correlation (r) Matrix of the variable of Literacy and occupational groups.

	X1	*X2*	*X3*	*X4*	*X5*	*X6*	*X7*	*X8*
X1	1							
X2	0.999249	1						
X3	0.999353	0.997333	1					
X4	-0.76275*	-0.77149*	-0.76142*	1				
X5	0.044186	0.026053	0.04887	0.548079	1			
X6	-0.17673	-0.18798	-0.17559	0.410644	0.645554	1		
X7	0.557823	0.551026	0.558935	-0.1998	0.155532	-0.3441	1	
X8	-0.23445	-0.21808	-0.23615	-0.35266	-0.81549*	-.68133*	-.38725	1

*significant at t=.050

The casual relationship between literacy and occupational structure has also been examined with the linear relationship. The result of association between the variable of literacy and occupational group has been shown in table 9. Here X1 is showing total literacy rate X2 is male literacy rate and X3 is Female literacy rate and X4,X5,X6, X7,X8 is showing work participation rate, cultivator, Agricultural labour, Household industry worker and other worker respectively. It reveals that there is negative correlation of literacy (X1) and WPR (X4). There is positive relationship between literacy (X1) and household industry worker (X7). The analysis suggests that there is negative relation between literacy and WPR. The data is showing this result because in the hilly region the literacy rate is quite high among the St population but the WPR is low. where as in the plain region the literacy rate is low but WPR is high. Actually in both the region there is difference in St Community. In case of plain region it is notable that the St Community is revolving mainly around the tea garden area where the consciousness about education among the St's is very disappointing. As the consciousness about education is very low it is obvious that the young age people as well as their parents are keen to go to work from the very early age instead of getting their education definitely for income. But in the hilly region the consciousness about education is high among St than the plain area.

Conclusion

Tribal people are the most under privileged section of the society. In terms of socio-economy, they are far behind from the other communities of our society and their cultural essence is also different from others. The study shows there is variation in literacy rate and work participation rate among the different blocks of Darjiling district. Literacy rate among St's of plain region which includes four blocks of the district is very poor. The relationship between education and employment shows a very different picture. A higher level of literacy and low level of employment has been observed in the hilly blocks. But a very low level of literacy and high level on employment rate has found in the southern part of the district. Gender gap in literacy and work participation rate is also prominent in different blocks of the district. The scenario of tribal literacy in Darjeeling District from the preceding study reveals that the literacy level has undergone considerable positive transformation. But the existing situation of tribal development across different areas shows that the rural sides of the plain area are still lagging behind.

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15

Infrastructural Development of School Education in Kharibari C. D. Block of Darjiling District, West Bengal

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Abstract

Education plays a very important role for economic development of any country. India has always focused on improving the literacy rate in our country. School education in India creates the basic foundation of educational development. School is very much significant in shaping up a student's personality and learning process and school infrastructures plays an important role in creating a favorable environment for a child's growth. This study shows the development of school infrastructure and its relation with literacy in various Gram Panchayats of Kharibari Block, Darjiling District, West Bengal.

Keywords**:** Infrastructure, Literacy, Composite Z-score, Correlation.

Introduction

Education is regarded as a potential instrument of individual development as well as social upliftment. It is intimately related with the

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national development and positively correlated with productivity and quality of life. Those who have remained backward and underprivileged over years can be empowered by education to assert their rights and to fulfill their rightful places in the society. It enables an individual to be aware of his/her rights and responsibilities and to discharge his/her duties properly (panda, 2013). School education in India, is the foundation on which the development of every citizen and the nation hinges. Building effective schools is one of the key components to the national development, economic prosperity, and social stability- and it is critical to providing a quality education to all students (Tripathi, 2010).

In India, education has been made free for children 6 to 14 years of age up to class VIII under the Right of Children to Free and Compulsory Education Act 2009. It provides for children's right to an education of the equitable quality, based on principles of equity and non-discrimination. School infrastructure is the base for learning in schools. Infrastructural resource is a very important component for providing a proper environment to quality learning. It plays an important role in development of school education which impacts on the enrolment of student especially on girls in elementary classes.

Study Area

Kharibari C.D. Block is an administrative division of Siliguri Sub-division of Darjiling District of West Bengal has been selected as the study area. The study area lies between 26° 30′ N to 26° 39′ N latitude and 88° 06′ E to 88° 15′ E longitude. This block is a part of western Dooars and bounded by Naxalbari C.D. Block on the north, Phasidewa C.D. Block on the west and Bihar on the south. Mechi River forms the international boundary on the western side with Nepal. Kharibari Block Has an area of 144.88Sqkm. It has 4 Gram Panchayats consists 74 villages and 2 census towns. The Gram Panchayats in Kharibari C.D. Block are Binnabari, Buraganj, Kharibari-Panisali, and Raniganj-Panisali.

Objectives

The basic objectives of this study are:

1) To study the variation in the infrastructural development of school education.

2) To find out the relation between literacy and different variables of infrastructural development of school education.

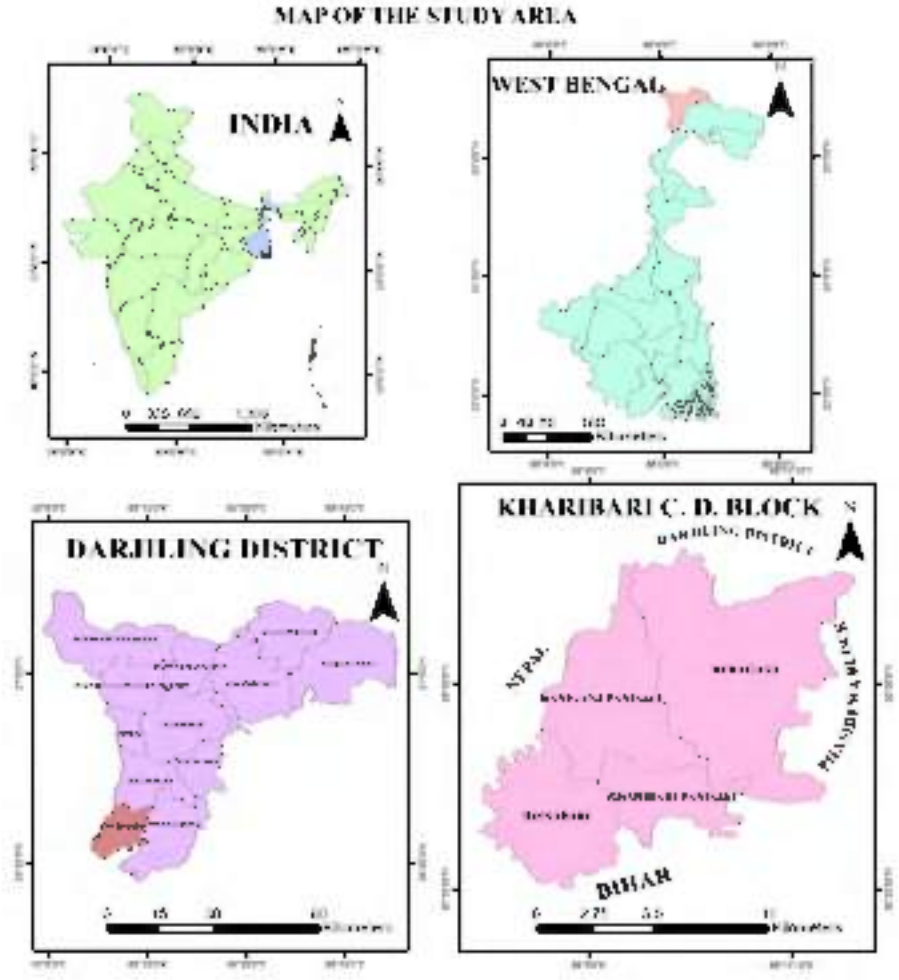

Figure 1

Methodology

The data has been collected from the various secondary sources. The data related to the different variables of educational development such as number of educational institution, teacher related indicators, infrastructural data, number of enrolment etc. are obtained from DISE-school report card 2010-11 and district census Handbook 2011.

To analyse the literacy rate and educational development some statistical techniques have been used. z- score and composite z-score have been used to show the regional distribution of literacy and to transform the individual raw data to identify the level of infrastructural development.

$$Zi = \frac{Xi - \bar{x}}{SD}$$

Where, Zi is standard score.

Xi is original values for observation i

is the mean for the variable and SD is the standard deviation.

Now the average of standard score has been calculated which is known as opposite score.

$$CS - \frac{\Sigma Zij}{n}$$

Where, CS in Composite Score

N is refers to the number of variable

Indicates Z-score of all variables 'i' in block j.

To study the relationship between dependent (literacy rate) and independent variables (infrastructural development) a correlation matrix table has been prepared. The relationship is examined using Karl Pearson's Coefficient of Correlation (r) techniques and t-test is used for the significance of the determinants.

For the statistical techniques SPSS, Excel and for the mapping purpose Arc Map 10.5 have been used.

Literacy Rate

Literacy rate is one of the important indicators of educational development. According to the census of India "A person aged seven and above who can both read and write with understanding in any language is treated as literate". This literacy rate in India is also called "effective literacy rate". It is the percentage of the total population excluding 0-6 population who can read and write with understanding. Literacy rate in Darjiling District is 79.56% which is higher than the state average that is 76.26%. Though the literacy rate is high in the district but

there is a variation in literacy rate among the blocks of the district. The blocks in the plain region of the district have very lower rate of literacy. Kharibari C.D Block is one of them. Literacy rate in Kharibari C.D. Block is 67.37% which is very lower than the state and district average. There is a gender gap between male and female literacy also. Male literacy rate is 76% but the female literacy rate is only 58.37%. This C.D. Block consist 4 Gram Panchayats. Female literacy in every block is very low. Lowest literacy rate is found in Binnabari Gram Panchayat with 61.82%. Male and female literacy is also lowest in this Gram Panchayat i.e. 71.96% 51.26% respectively. Highest literacy rate is found in Raniganj-panisali i.e. 71.81% and highest female literacy is found in Kharibari-panisali Gram Panchayat with 64.08%.

Table 1: Gram Panchayat Wise Literacy Rate in Kharibari C. D. Block 2011

Name of the Gram Panchayat	Literacy rate		
	Total	M	F
Binnabari	61.82	71.96	51.26
Buraganj	62.48	72.04	52.74
Kharibari-Panisali	71.31	78.21	64.08
Raniganj Panisali	71.81	79.89	63.27

Source: Census of India 2011

Infrastructural Development

To study the variation of infrastructural development in Kharibari C. D. Block some important variables have been selected. These variables are number of primary schools (X1), number of upper primary schools (X2), number of secondary schools (X3), number of higher secondary schools (X4), pupil-teacher ratio (X5), number of enrolment (X6), student-classroom ratio (X7), percentage of schools with library (X8), percentage of schools with common toilet (X9), percentage of schools with girl's toilet (X10), percentage of schools with drinking water facility (X11), percentage of schools with electricity (X12), percentage of schools with playground (X13).

School infrastructure in Kharibari C.D.Block is not in very good condition. The number of primary schools is 17.57/10k population but the number of secondary and higher secondary schools in this block is only .73/10k population. Only 9.85% schools have library. Toilet facility

is also not present in most of the schools. 56% schools have the common toilet and the percentage of girls toilet is also very low i.e. 59.11%. Basic infrastructure like presence of electricity is also very less, only 30.54% school has the electric supply.

Table 2: Gram Panchayat Wise Z- Score of Infrastructural Development in Kharibari C. D. Block

Variables	Binnabari	Buraganj	Kharibari Panisali	Raniganj Panisali
X1	-0.7023	0.4066	-0.9240	1.2197
X2	-0.8660	-0.8660	0.8660	0.8660
X3	-0.7071	0.0000	1.4142	-0.7071
X4	-0.7071	0.0000	1.4142	-0.7071
X5	0.1580	-0.0952	1.1860	-1.2488
X6	-1.3707	0.4072	-0.0137	0.9773
X7	-0.3847	-0.2272	1.4490	-0.8371
X8	0.6251	1.0618	-0.6718	-1.0151
X9	0.0584	0.2484	-1.3550	1.0482
X10	1.1922	-0.9898	0.4366	-0.6390
X11	-1.1148	-0.4328	1.2052	0.3425
X12	-0.8162	-0.7808	1.2723	0.3247
X13	0.1788	-0.3603	-1.0971	1.2786

Source: DISE 2010-2011, calculated by author

Z-score of all the variables have been calculated for the study (table. 2). The mean composite z-score of these indicators has been categorized into two categories that are higher level of infrastructural development and lower level of infrastructural development. Spatial variation of these variables is responsible for the literacy level of the study area. Higher level of infrastructural development is found in Kharibari-panisali and Raniganj-panisali Gram Panchayat i.e. .3986 and .0694. The literacy rate is also on the positive side in this two gram Panchayat with a composite score of 0.7965 and .9233 (table. 3). Lower level of educational facilities is found in the other two Gram Panchayat. Educational facilities of Binnabari is -0.9200 and the literacy is also low i.e. -0.3428. In Buraganj educational facilities is 0.7999 and literacy is -0.1252.

Table 3: Gram Panchayat Wise Composite Score of Literacy Rate and Infrastructural Development

Name of the Panchayat	Composite Score	
	Literacy Rate	Infrastructural Development
Binnabari	-0.9200	-0.3428
Buraganj	-0.7999	-0.1252
Kharibari Panisali	0.7965	0.3986
Raniganj Panisali	0.9233	0.0694

Source: Census of India 2011, calculated by author

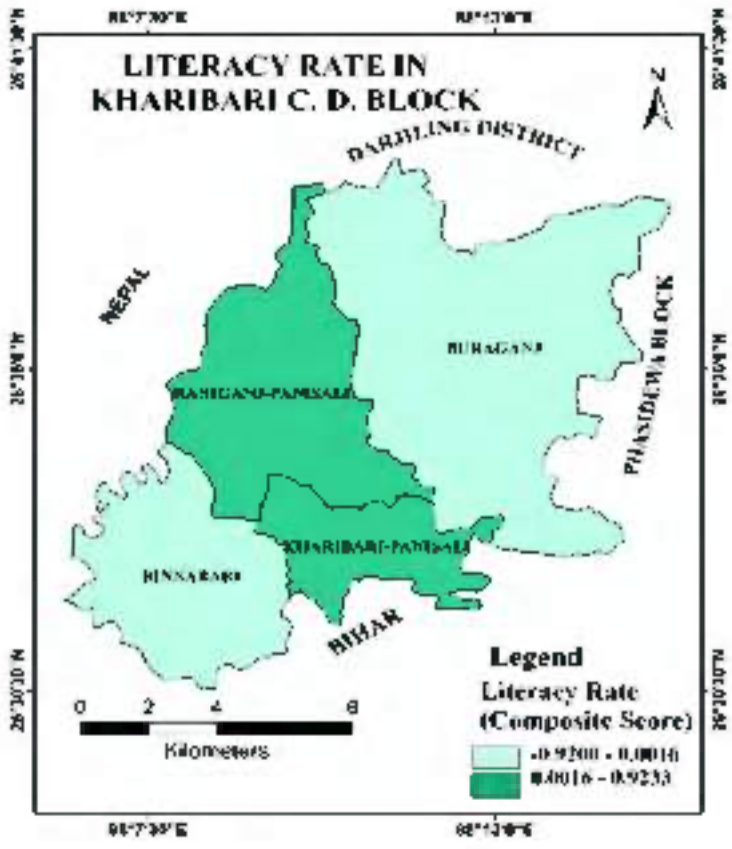

Figure 2

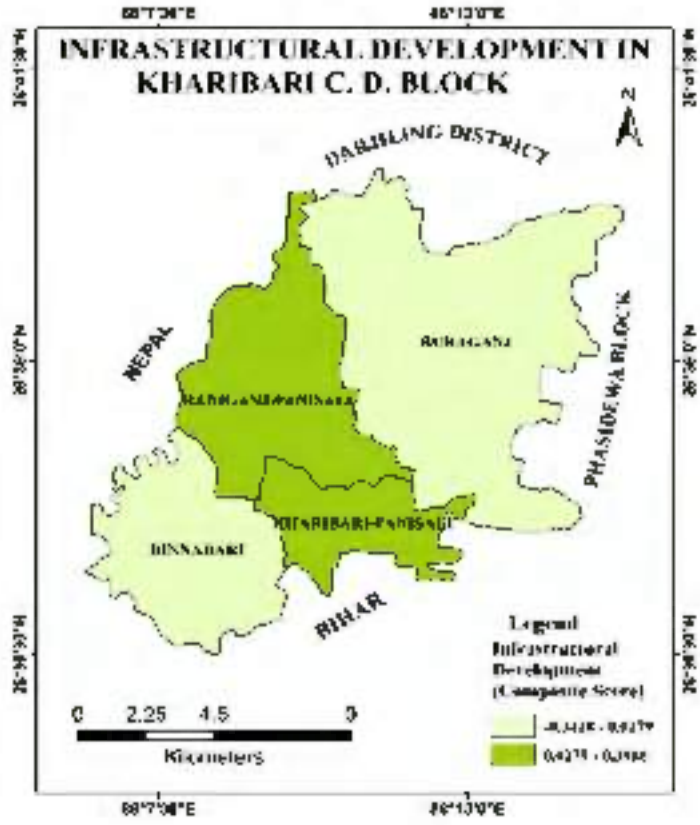

Figure 3

Relation between Literacy and Infrastructural Facilities

Correlation matrix table have been prepared to show the relationship between Literacy Rate with different variables (Table no. 4). To show the relationship between this two variables Literacy rate (Y1), Male Literacy Rate (Y2), Female literacy Rate (Y3) has been taken as dependent variables and different infrastructural facilities as independent variables (i.e. X1, X2, X3…….X13). it has been observed that the 'r' value between Literacy Rate (X1) and No. of upper primary school (X2) is 0.998 which is showing a very high positive correlation at 99% significant level between these two variables in Kharibari C. D. Block. Literacy rate (X1) is also positively correlated with percentage of schools with drinking

Table 4: Correlation Matrix of Different Variables

Variables	Y1	Y2	Y3	X1	X2	X3	X4	X5	X6	X7	X8	X9	X10	X11	X12	X13
Y1	1															
Y2	0.991**	1														
Y3	0.995**	0.973*	1													
X1	0.226	0.318	0.168	1												
X2	0.998**	0.986*	0.995**	0.171	1											
X3	0.389	0.261	0.474	-0.558	0.408	1										
X4	0.389	0.261	0.474	-0.558	0.408	1.00**	1									
X5	-0.079	-0.202	0.003	-0.923*	-0.036	0.816	0.816	1								
X6	0.607	0.622	0.599	0.778	0.556	0.086	0.086	-0.497	1							
X7	0.321	0.194	0.403	-0.727	0.353	0.971*	0.971*	0.908	-0.134	1						
X8	-0.968*	-0.982*	-0.946	-0.208	-0.974*	-0.225	-0.225	0.156	-0.469	-0.202	1					
X9	-0.136	-0.011	-0.217	0.864	-0.177	-0.900	-0.900	-0.977*	0.355	-0.973*	0.049	1				
X10	-0.178	-0.195	-0.174	-0.808	-0.117	0.075	0.075	0.533	-0.889	0.311	0.017	-0.479	1			
X11	0.892	0.825	0.931*	-0.030	0.894	0.750	0.750	0.289	0.557	0.662	-0.771	-0.482	-0.198	1		
X12	0.906*	0.845	0.937*	-0.175	0.922*	0.716	0.716	0.350	0.367	0.688	-0.841	-0.542	0.049	0.964*	1	
X13	0.130	0.263	0.037	0.767	0.105	-0.861	-0.861	-0.945	0.291	-0.882	-0.277	0.916	-0.242	-0.309	-0.282	1

Source: Calculated by author. ** Significant at 0.01 level, * Significant at 0.05 level

water facility (X11), percentage of schools with electricity (X12), 'r' value between Literacy rate (X1) and this variables are 0.892, 0.906 respectively. A positive correlation at 95% significant level has been observed between literacy rate (X1) with percentage of schools with electricity (X12). Male literacy rate (Y2) and Female literacy rate (Y3) is also positively correlated with No. of upper primary schools (X2). Male literacy rate (Y2) is correlated with No. of upper primary schools (X2) at 95% significant level with a 'r' value of 0.986. Female literacy rate (Y3) is positively correlated with No. of upper primary schools (X2) at 99% significant level and the 'r' value is 0.995. Male literacy rate (Y2) and Female literacy rate (Y3) is also positively correlated with percentage of schools with drinking water facility (X11) and percentage of schools with electricity (X12). Female literacy rate (Y3) is positively correlated with percentage of schools with drinking water facility (X11) and percentage of schools with electricity (X12) at 95% significant level with the 'r' value of 0.931 and 0.937.

Conclusion

Physical conditions of schools can create positive effects on the student's all inclusive development. School buildings, classrooms, playground, electricity, toilet facilities, libraries are the most important aspect of school infrastructure. These are crucial elements of learning for the schools. There is strong evidence that high quality infrastructure facilitated better instructions, improves students outcomes and reduce dropout rates, among other benefit. The study shows the rural school infrastructure in Kharibari C. D. Block. Literacy rate in this block is quite low and school infrastructure is also in very poor condition. In the study area most of the schools does not have the basic infrastructure like electricity, girl's toilet, libraries, drinking water facilities. A good school infrastructure makes it possible for children that live in remote areas to study. It also tends to improve the attendance specially the attendance of girl's and the interest of students and teachers in learning. For this reason investments in school infrastructure especially in rural areas have an essential role in solving the access problems of students to the school system and to improve their performance.

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