

PROGRAMME REPORT



1. Title of the programme : Educational Tour
2. Mode of conduction: Offline
3. Date : 10.05.23 to 13.05.23
4. Venue: Darjeeling
5. Category of participants : 6th semester students of Geography department
6. Organizers: Department of Geography
7. Funded by: teachers fund provided by the college authority and students provide their own fund
8. Introduction:

- a. Description of the programme: Department of geography, Thakur Panchanan Mahila Mahavidyalaya, organized an educational tour in accordance with the existing curriculum of Geography (Hons and Prog.) under CBPBU for the students of 6th semester. It was organized by the students of 6th semester and the faculty members of Geography department. The students would write a project report on the basis of the experience they would gather in the tour.
- b. Objectives of the programme: there are many objectives of this educational tour -

--

- (i) To facilitate the students with a broader mindset as many of them are not equipped with and familiar to the outside world as such.
- (ii) To promote the creative aura and the creative judgment among them
- (iii) To gain the practical knowledge about the Darjeeling such as knowledge of the climate, vegetation cover, soil types, cultural aspects like food habits, dresses etc.

9. Details findings of the programme:

Tour and its necessary arrangements were basically done by the students under the supervision of the faculty members. In the process of the arrangement the students learnt a lot regarding the way of the world. In their journey they learned about the landmarks outside of their locality. They got to know something about the difference in terms of the physical perspectives and cultural perspectives of the region they were travelling to. They came to know different culture along with people living in those regions. Darjeeling is a famous tourist spot and established by the British. The students not only know about the landscape but also came to know about the food habits of those people living there. Their first-hand experience of travelling through the hilly regions is worth mentioning.

10. Conclusion (with desired outcome, actual achievement, suggestions): The journey through the beautiful terrain cast a spell on the minds of the students. The tour provokes their thought process of being creative. The obvious reflections of their bright eyes showed the real them. Although they were exhausted with the uphill walking and was frightened for the unknown dangers from the wilderness, the students showed their real enthusiasm of learning and knowing the unknown. They wanted more and more participation in such tours and programmes which would enlighten them of their own capabilities to create and make something out of their very existence.

11. Annexure :

a. Photographs :

12. Signature of the programme Coordinator(s)/Convenor(s)

- i. Md. Khurshid Alam
- ii. Saddam Hussain
- iii. Monuita Dutta

18/05/23

Signature of the Principal

Principal
T.P.M. Mahavidyalaya
Goach Behar

NB: Please submit the report within seven days from the day of completion of the Programme.

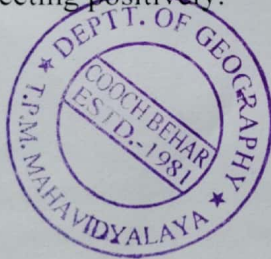


**THAKUR PANCHANAN MAHILA MAHAVIDYALAYA
DEPARTMENT OF GEOGRAPHY**

NOTICE

Date: 14.03.2023

A departmental meeting has been called on 16.03.2023 at Geography laboratory at 1 p.m. for the excursion of 6th Sem. (Honours and Programme course) for the session 2022-23. All teachers ~~are~~ *and Students* requested to attend the meeting positively.



Jolly S. L.
Head *4.03.23*
Deptt. of Geography
T.P.M. Mahavidyalaya

MEETING REGARDING EXCURSION

After vivid discussion among the teachers following decisions have been taken for the excursion of session 2022-23.

- i) The quotation will be used to determine which agency organised the tour.
- ii) A guided educational tour of Darjeeling, West Bengal will take place.
- iii) During the tour, there will be four teachers and one non-teaching staff member.
- iv) On March 18, 2023, a gathering of the students and instructors will be conducted. The principal has been present at the meeting.

Present Teachers-

1. Jolly Saha *Jolly Saha*
2. Saddam Hossain *Saddam Hossain 16.3.23*
3. Md.Khurshid Alam *Alam 16.03.23*
4. Moumita Dutta *Moumita Dutta 16.3.23*



MEETING OF STUDENTS-TEACHERS REGARDING EXCURSION

A students teachers meeting organized at the laboratory. After the vivid discussion with the students following decisions are taken----

- I) All the students have to pay Rs.5870/per head and all the students are agree to pay the amount.
- II) 17 students will agree to go and three students have some issue because of that they are not willing to go.
- III) All the students have to submit their guardian consent form before the tour.

To
The Principal
Thakur Panchanan Mahila Mahavidyalaya
Cooch Behar

Sub: Regarding Educational tour of Geography Department

Madam,

I would like to inform you that as per existing curriculum of Geography (Hons. & Prog.) under CBPBU, Educational tour is compulsory for students of 6th Semester. For this year, I am submitting proposal of 4 days and 3 night tour of Darjeeling starting in April, 2023. Total 20 numbers of students will take part in the tour.

For supervision of the entire tour teaching and non-teaching staff of Geography department will go with the students. Travel Agency will organise the whole programme and per head cost will be as per quotation given by travel agency.

Now, I request you to provide necessary permission and sanction fund required for teaching and non-teaching staff along with contingency expenditure. Kindly look into the matter.

Yours faithfully as per possible.



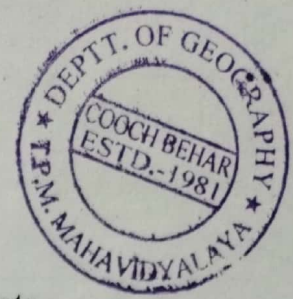
Yours faithfully

Jolly Saha

Head
Deptt. of Geography
T.P.M. Mahavidyalaya

Educational tour
permitted
Gsh
18/02/22

Principal
T.P.M. Mahavidyalaya
Cooch Behar



EXCURSION 2022-23

List of Teaching Staff/Non-teaching staff/Students

Sl. No.	Name of the Teaching /Non-teaching Staff	Contact No.	Signature
1	Jolly Saha	94748-27101	Jolly Saha
2	Moumita Dutta	9474146697	Moumita Dutta
3	Md. Khurshid Alam	9641495854	Md. Khurshid Alam
4	Sanjay Paul	6294291440	Sanjay Paul
5.	Saddam Hossain	9002462918	Saddam Hossain

Sl. No.	Name of the Student	Guardian name with address	Guardian's Contact No.	Student's Signature
- 1.	Lakima Khatun	Hamida Miah vill - Nabinepolia P.O + P.S - Gchoksa nga,	9749023148 9883173716	Lakima Khatun.
- 2.	Sayantani Goswami	Partha pratim Goswami Grandhi Nagar, Cooch Behar	8016672231 8967428508	Sayantani Goswami
3.	Sharmistha Karjee	Late Manoranjan Karjee vill + Post - Talliguri pin - 736156	9883564134	Sharmistha Karjee
- 4.	Joysree Ray	Shyamal Kumar Ray vill + Post - Bara- barahat pin - 736121	7384553658 8158041446	Joysree Ray
5.	Surabhi Roy	Pranesh Roy vill - Baropak Post office - Dhampur Balasi	7584811458	Surabhi Roy
6.	Arjuna Hossain	Ayub Hossain vill - West ghughumari P.O - Tapurhat pin. - 736170	9635981932	Arjuna Hossain

7.	Ishika Karmakar	Gopal Karmakar Address- B.S Road (M) Bonik Timber Cooch Behar	9733203024	Ishika Karmakar
8.	Ayndrila Kundu	Amal Kundu Vill: Jhinaidanga Post: Chakchaka	9733456339	Ayndrila Kundu
9.	Masuma Parvin	Masuma Parvin Entaj ali vill: Henubhanga + post	9547610923	Masuma parvin
10	Meghabati Som	Ahup Som Address - Gardhinegeh Bongcharaba	8207261 - 55 9733456339	Meghabati Som
11	Bina Das	Basu dev Das vill- chandama- TC	8597229566 8170090929	Bina Das
12	Sayantika Chakraborty	Sayantika Chakraborty vill- Doder Par Cooch Behar	9333915116 8972148671	Sayantika Chakraborty
13	Debolina Dey	Sadhan Dey College para, Ward no-1 Sinhata	9609755184	Debolina Dey
14	Kanchan Bin	Rajesh Bin Add - New Dabri Road, ward - 05 P&D - COB	9609826172 (F) 6295687824 (M)	Kanchan Bin
15	Arpita Pal	Ajit Pal vill- Harincharura Dist - Cooch Behar	9734148623 8670596316	Arpita Pal
16	Jhuma Das	Ratan Barmen vill -> Peshchur	9382148361 8116728043	Jhuma Das

17	Sucharita Barman	Sucharita Barman Baburhat, Krishnan Colony	9547732190 7062774376	Sucharita? Barman.
18	Payel Dutta	— Absent —		
19	Prajnashree Sarkar	Puspajit Sarkar Anabinda lane N.N. Road	9046691689 8927079204 9883365867	Prajnashree Sarkar
20	Susmita Sarkar	Susmita Sarkar Krishna ch. Sarkar	7797096088 9609994418	Susmita Sarkar





AUTHENTICATED
18/05/23
Principal
Thakur Panchanan Mahila Mahavidyalaya
Cooch Behar

EDUCATIONAL TOUR OF GEOGRAPHY DEPARTMENT

Date: 10.05.2023-13.05.2023

Place: Takdah Village, Darjeeling

This is a group photo of 6th Semester Students of Geography Department. It is taken when they are ready to field survey.



AUTHENTICATED
 G3m 18/05/23
 Principal
 Gokul Pradhan Mahila Mahavidyalaya
 Cooch Behar

6th semester students are collecting data from villagers.
 They are writing data on questionnaires.

Date: 11.05.2023, Place: Takdah Village, Darjeeling



6th semester students are collecting data from villagers.

They are writing data on questionnaires.

Date: 11.05.2023, Place: Takdah Village, Darjeeling

AUTHENTICATED
Bdm 18/05/23
 Principal
 Thakur Panchanan Mahila Mahavidyalaya
 Cooch Behar



Housing Conditions of Takdah Village

Date: 11.05.2023, Place: Takdah Village, Darjeeling

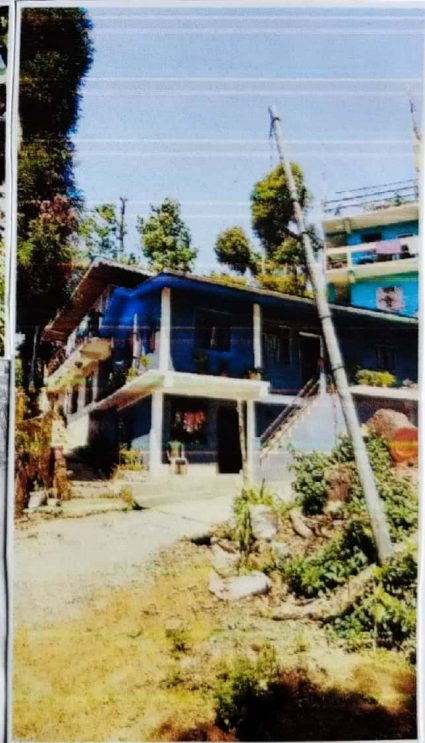
67

AUTHENTICATED

Gshw 18/05/23

Principal

*Prakur Panchanan Mahila Mahavidyalaya
Cooch Behar*



Different Facilities at Takdah Village

Date: 11.05.2023, Place: Takdah Village, Darjeeling

AUTHENTICATED
 Bdm 18/05/23
 Principal
 Bhakur Panchanan Mahila Mahavidyalaya
 Cooch Behar

**FIELD REPORT
ON
SOCIO-ECONOMIC STUDY OF TAKDAH VILLAGE,
DARJEELING, WEST BENGAL**



**B.A Honours in Geography (6th sem.)
Thakur Panchanan Mahila Mahavidyalaya
Cooch Behar-736101
2023**

SOCIO-ECONOMIC STUDY OF TAKDAH VILLAGE

DARJEELING, WEST BENGAL

**A field report for partial fulfillment of degree of Bachelor of Arts (B.A) with honours in
Geography under Cooch Behar Panchanan Barma University**

Prepared by-

Name:.....

Roll No:.....

Regd. No:.....

Supervisors:

Jolly Saha

Saddam Hossain

Moumita Dutta

Md Khurshid Alam

Department of Geography
Thakur Panchanan Mahila Mahavidyalaya (TPMM)
Cooch Behar, West Bengal-736101

2023

ACKNOWLEDGEMENT

I gratefully acknowledge my deep indebtedness to our principal of the institution for her permission.

I gracefully acknowledge my deep indebtedness to our honourable and respected teachers Jolly Saha, Saddam Hossain, Md. Khurshid Alam and Moumita Dutta for giving me the opportunity to visit Darjeeling for field study.

I am also thankful to officials who provided all possible facilities to us and supplied us required data to use for these purposes.

Last, but far from least, my very sincere thanks go to my friends for their help fullness and companionship during the field study.

.....
Student, 6th Sem (Hons.)

Roll No.:

Regd. No.:

Department of Geography

Thakur Panchanan Mahila Mahavidyalaya

Cooch Behar

PREFACE

Field study is an essential part of education. Educational field work and excursion increase our knowledge and help to develop new thought. Education remains incomplete if we do not visit important places of geographical importance. Reading of books provides us knowledge but practical knowledge of places and things opens our eyes and gives us a full knowledge.

The field study is included in our syllabus and therefore, we are bound to complete the field work and to submit the field report at the time of examination. Thus, we went to Darjeeling of West Bengal state for field study, guided by honorable professors Jolly Saha, Saddam Hossain, Md. Khurshid Alam and Moumita Dutta. The tour was for 4 days from 10th May 2023 to 13th May 2023. We have selected Darjeeling to gather geographical knowledge and ideas relating to physical, social, cultural, and economic aspects and their interrelationships. We have selected Takdah village of Darjeeling for a detailed door to door survey. There we collected primary and secondary (i.e., physical, social, cultural and economic data) from the fields and various government offices. A detailed compilation of all the primary and secondary data are provided in this report along with maps, photographs, tables, and diagrams.

This report aims at presenting to whole field study in a logical sequence. For a variety of reasons, the report had to be completed within a short period of time. Therefore, it has not been possible to present all the facts in a planned manner.

1.0 GENERAL INTRODUCTION

- 1.1 Introduction
- 1.2 Statement of the problem
- 1.3 Literature Review
- 1.4 Aims and objectives of the study
- 1.5 Location of the study area
- 1.6 Data base
- 1.7 Methodology
 - 1.7.1 Pre-Field Study
 - 1.7.2 Field Study
 - 1.7.3 Post-Field Study
- 1.8 Organization of the work
- 1.9 Significance of the study

2. *GEOGRAPHICAL ACCOUNTS OF DARJEELING*

- 2.0 Introduction
- 2.1 Physical Characteristics
 - 2.1.1 Geography and geology
 - 2.1.2 Drainage
 - 2.1.3 Climate
 - 2.1.3.1 Temperature
 - 2.1.3.2 Rainfall
 - 2.1.4 Soil
- 2.2 Cultural Characteristics
 - 2.2.1 Agriculture
 - 2.2.2 Transport
 - 2.2.3 Demography
 - 2.2.4 Languages
 - 2.2.5 Religion
 - 2.2.6 Education
 - 2.2.7 Tourism
 - 2.2.8: LULC of Darjeeling

3.1.8 Language	39
3.1.9 Religion	39
3.1.10 Literacy and education	40
3.1.11 Food habit	41
3.1.12 Mode of transport	42
3.2: Economic status	43
3.2.1 Occupational structure	43
3.2.2 Income and expenditure	44
3.2.3 Finance	45
3.2.4 Family engaged in agriculture	45
4. HOUSING CONDITION OF TAKDAH VILLAGE	
4.0 Introduction	48
4.1 Types of houses	49
4.2 Wall structure	49
4.3 Roofs structure	49
4.4 Types of floors	50
4.5 Number of storeys	51
4.6 Assets	52
5. MAJOR PROBLEMS AND REMEDIAL MEASURES	
5.1 Introduction	54
5.2 Major problems	54
5.2.1 Water Scarcity	54
5.2.2 Electricity Supply	54
5.2.2 Electricity Supply	54
5.2.3 Insufficient Roads	54
5.2.4 Communication Problem	55
5.2.5 Unemployment	55
5.2.6Hospital Problem	55
5.3 Remedial measures	56
5.3.1For Water Problem	56
5.3.2 For Electricity Problem	56
5.3.3 For Road Problem	57
5.3.4 For Communication Problem	57
5.3.6 For Hospital Problem	57
6.0 SUMMERY AND CONCLUSION	
Appendices Appendix-A: Household Questionnaire used in the study	
Appendix –B: A few moments at the time of data collection	
References	69

LIST OF TABLES

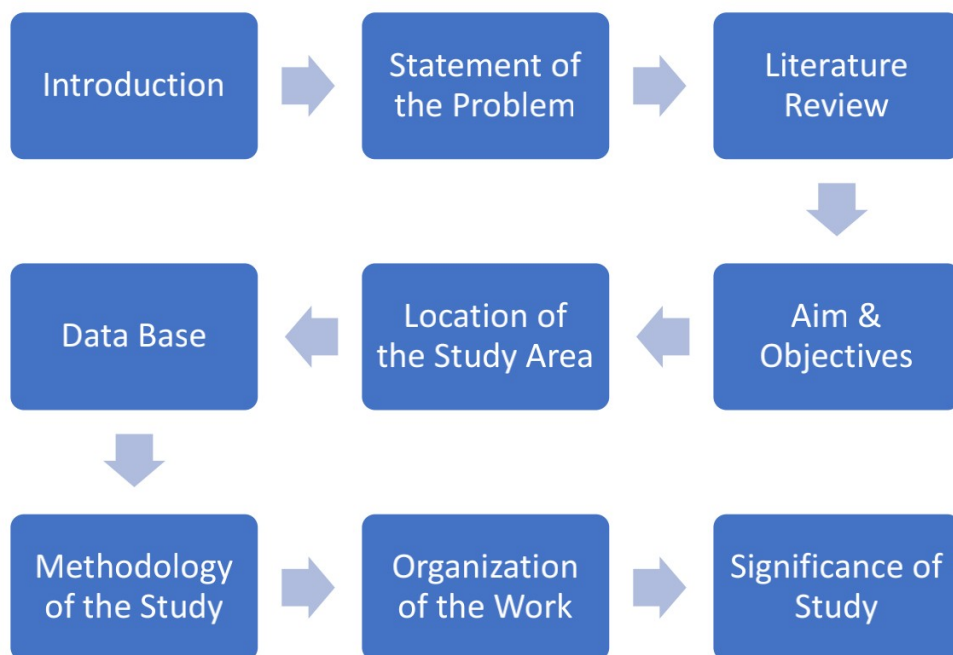
Table No.	Name of the Table	Page No
1.1	Database Used in the Study	8
2.1	Monthly Rainfall and Temperature of Darjeeling (2021)	21
3.1	Total surveyed population	33
3.2	Age sex composition of Takdah Village	34
3.3	Family size of the surveyed population	36
3.4	Origin of the family	36
3.5	Marital status of surveyed population	37
3.6	Caste composition of surveyed population	37
3.7	Language group of surveyed population	39
3.8	Religious group of surveyed population	39
3.9	Percentage of literate & illiterate people of surveyed population	40
3.10	Level of Qualification of surveyed population	40
3.11	Food habit of surveyed population	42
3.12	Mode of transport used by surveyed population	42
3.13	Worker & non-worker status of surveyed population	43
3.14	Occupational status of surveyed population	43
3.15	Monthly income of surveyed population	44
3.16	Loan taken by surveyed population	45
3.17	Families engaged in agriculture	46
4.1	Type of house used by surveyed population	50
4.2	Wall structure of the house	50
4.3	Roofs materials used by surveyed population	51
4.4	Types of Floors used by surveyed population	51
4.5	Number of storeys	52
4.6	Number of assets used by surveyed population	52
5.1	Major problems in the Takdah village	55

LIST OF FIGURES

Figure No	Name of the Figure	Page No
1.1	Location Map of the Study Area	6
1.2	Route Map of the Study Area	7
1.3	Workflow of the study	13
2.1	Geological of Darjeeling	14
2.2	Geomorphology Map of Darjeeling	15
2.3	Drainage Map of Darjeeling	18
2.4	Rainfall and temperature distribution of Darjeeling	22
2.5	Soil Map of Darjeeling	23
2.6	Land use Land cover Map of Darjeeling	29
3.1	Total Surveyed Population	33
3.2	Age sex composition of surveyed population	35
3.3	Family size of surveyed population	36
3.4	Origin of the Family	36
3.5	Marital status of surveyed population	38
3.6	Caste composition	38
3.7	Language group	39
3.8	Religious group	39
3.9	Literate & Illiterate	40
3.10	Education Level	41
3.11	Food habit	42
3.12	Mode of transport	42
3.13	Worker & non-worker status of surveyed population	43
3.14	Occupational status of surveyed population	43
3.15	Monthly income of the Surveyed families	44
3.16	Loan taken by the number of Families	44
3.17	Families engaged in agriculture	46
4.1	House type of surveyed families	50
4.2	Structure of the walls of the surveyed houses	50
4.3	Roofs structure	51
4.4	Floors structure	51
4.5	Nature of House	52
4.6	Commodity use by the Surveyed families of Takdah Village	52
5.1	Major problems of the surveyed families	5

Chapter 1.0
GENERAL INTRODUCTION

Chapter association



1.1 Introduction:

Field work is a part of our syllabus prescribed by Cooch Behar Panchanan Barma University. With this aim in view, we have conducted a field study tour in Darjeeling as well as Takdah village. Takdah is a small hill station located in the Darjeeling district of West Bengal, India, known for its lush green tea gardens and spectacular views of the Himalayan Mountain range. The main motive behind the selection of Darjeeling as well as Takdah village of our study was to gather geographical knowledge and ideas relating to physical, social cultural and economic aspects and their inter relationships. One of the most essential variables in social studies or research is socioeconomic status. It plays an important role in the planning and implementation of development programmes, necessitating the creation of a valid and accurate socioeconomic status measurement tool. Basic social amenities, functional skills, decent education, source of income, hygiene, and health resources are all part of socio-economic situation. Citizens' socioeconomic conditions have a crucial influence in nation creation, both directly and indirectly (Singh 2016). Mortality, mobility, and health related behaviours like smoking, alcohol consumption, dietary intake, exercise, and participation in health examinations are all heavily influenced by socioeconomic status (Fakuda et al. 2015). It is a significant factor of an individual's health, nutritional condition, mortality and mobility. It also has an impact on the availability, pricing, acceptability, and actual use of accessible health services (Masthi et al. 2013). The study of socioeconomic conditions provides information on sanitary service, housing conditions, household income, population, flood danger and unplanned settlements, as well as vital but under-appreciated social classes. It puts the unseen side of the story in the spotlight, attempting to meet needs and emphasise the value of marginalised individuals (Krishna and Chourasia 2016). The forms of household solid waste management and the locations where it is disposed of are influenced by socioeconomic factors. Education is an essential socioeconomic indicator since it raises knowledge of the importance of keeping one's

surroundings clean and hygienic (Hague and Telfair 2000). The major goal of this study is to learn about and analyse the socioeconomic conditions of Takdah village of Darjeeling, which will aid planners, administrative authorities, and policymakers in implementing correct planning and policies. However, it is important to remember that site-specific planning and rules are more acceptable and appropriate.

1.2 Statement of the problem

We visited and surveyed area, near Takdah on 11.05.2023. There we come to know about the lifestyle of the people along with the problem faced by them. Some of the major problems are Transportation, Water supply, medical facility. A weekly market, held every Thursday, and the people says that the distance of the market is a problem faced by them. Roads that connect Takdah and Darjeeling are in very bad condition.

1.3 Literature Review

Rawat (2019) studied Sustainable rural tourism in Darjeeling hills. His work is based on Takdah and Mineral Spring. The paper analyzes the sustainable rural tourism in Darjeeling Hills that has brought about rural development and economic development. Rural tourism nowadays has become a new form of tourism activity that has contributed towards economic, cultural and social benefits to the society. Bhattacharya and Ghosh (2014) made an intensive survey on the socio-economic status of the two emerging eco-tourism hamlets like Tinchuley and Takdah. In this survey extensive investigations at other hill areas of North Bengal were done so that the places could be highlighted for conservation in future. Using a case study of village tourism in Darap, West Sikkim, cajee (2014) argues that eco- cultural tourism is a powerful force for overall economic, social and cultural growth as well as biodiversity protection in the region. Gautam and chettri (2016) said that self-help groups (SHGs) play a significant part in the empowerment women in India. The study has been focused on the Geyzing subdivision in

Sikkim's west district. The paper focuses on the subject areas conceptual and functional foundation for Self Help Groups. It also investigates the SHG's social and economic impact as well as women empowerment in the research area. According to Tamang et al., (2016) the nature of the problem of such prejudice has varied from society to society. Various socio-cultural, religious, political, legal and economic issues influence woman's standing in emerging countries, notably in Asia. These are further complicated by factors such as family structure, socialization techniques, gender roles, inheritance patterns, gender stereotypes and so on. As a result, woman's empowerment is an essential condition for the nation's economic and social development. Ray and Rahaman (2017) aimed to investigate the link between son desire and related socioeconomic characteristics. It has been discovered that socioeconomic factors such as a woman's education, marriage age, and employment level have an impact on her fertility choice. The socioeconomic survey considers not only education, economy, and other factors, but also the socioeconomic background and distribution of people with the disease. Hague and Telfair (2000) said that three indices, namely customers, medical and physiological are employed in economic characteristics to analyze rural-urban disparities and to understand the significant divergence between urban and rural population groupings. According to Li et al., (2015) forestry and greening of any location that includes environmental protection is also a crucial indicator of a region's socioeconomic status. Cities gain greatly from urban green spaces. The amount of greenery that can be appreciated visually and artistically influences the aesthetics attractiveness neighborhood. In their work, Ray et al., (2012) evaluate the impact India's National Tourist Policy ,2002, as recommended by the Ministry of Tourism, Government of India, on this rural tourist destination. In terms of the local population's economic development, job prospects, livelihood, and lifestyle changes.

1.4 Aims and Objectives of the present work

The main aims and objectives of the present studies are as follows:

- To understand the physical environment of the study area.
- To identify the demographic status of the study area.
- To find out the socio-economic condition of the study area.
- To expose the local problem which hampering the daily life of the peoples.

1.5 Location of the study area

Darjeeling district is the northernmost district of the state of West Bengal in eastern India in the foothills of the Himalayas. The district is famous for its hill station Darjeeling tea. The area is an example of the finest forest covered zone in northern India. Located between latitude 27°13' N to 26°27' N and longitude 88°53' E to 87°59' The district is spread over 2092 square kilometers which covers 2.36% of the total area of West Bengal.

Geographically, the district can be divided into two broad divisions: the hills and the plains. The entire hilly region of the district comes under the Gorkhaland Territorial Administration, a semiautonomous administrative body under the state government of West Bengal. This body covers the three hill subdivisions of Darjeeling, Kurseong and Mirik and the district of Kalimpong. The foothills of Darjeeling Himalayas, which comes under the Siliguri subdivision, is known as the Terai. The district is bounded on the north by Sikkim, on the south by Kishanganj district of Bihar state, on the east by Kalimpong district and on the west by Nepal. Darjeeling district has a length from north to south of 18 miles (29 km) and a breadth from east to west of 16 miles (26 km). As of 2011, it was the second least populous district of West Bengal (out of 19), after Dakshin Dinajpur. The hill areas get heavy rainfall in the monsoons. It holds total 9 number of blocks. The district touches two international boundaries

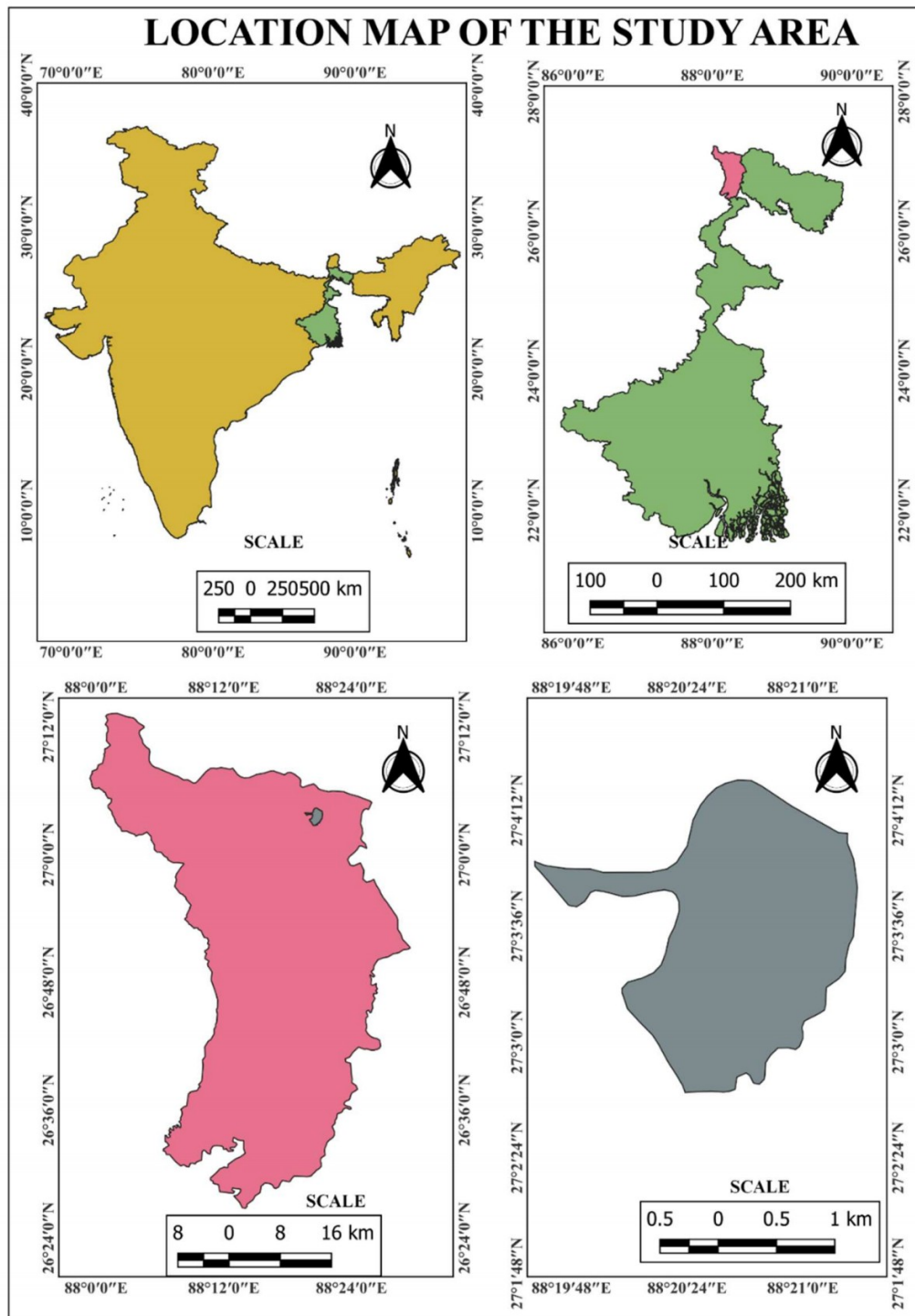


Fig 1.1: Location map of study area

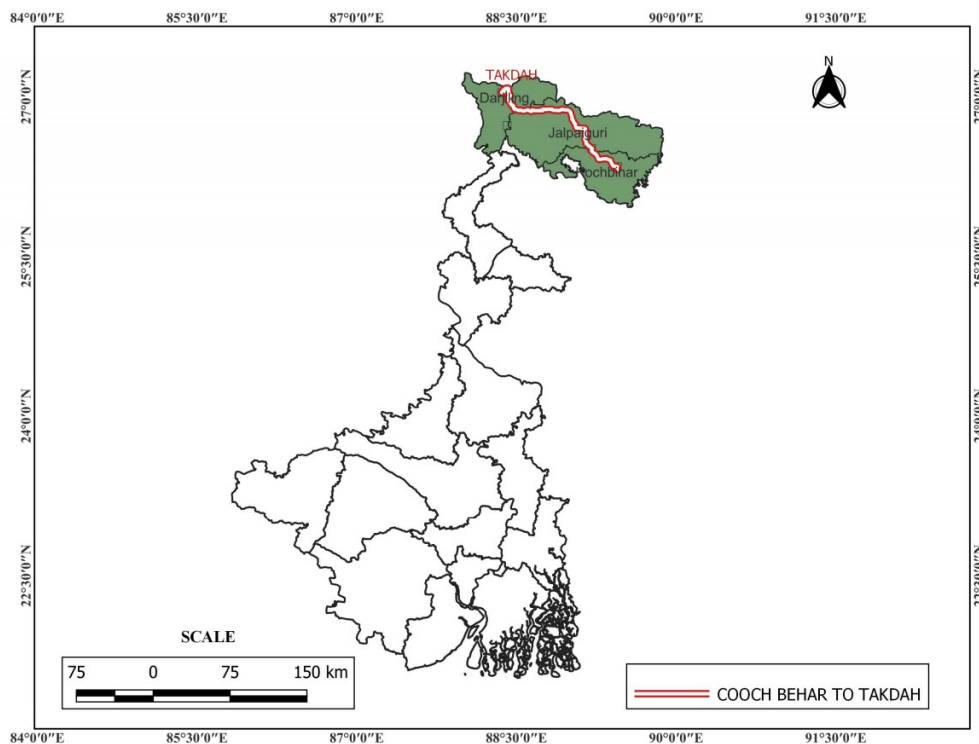


Fig 1.2: Route map

1.6 Data base

This study is based on both primary and secondary data. We surveyed the area randomly with questionnaire to collect primary data on socio culture and economic aspects of the area. A total of 57 families covering 217 peoples have been surveyed. Individual households were selected randomly so that the survey remains un-biased. These data are then summarized and analysed with tables and diagrams by applying suitable cartographic techniques to reach various conclusions. The necessary secondary data have been collected from the concerned central and state government departments like census of India, agricultural department, meteorology department, land revenue department, survey of India etc. The data collected are statistically processed and converted into indicators. Functional interrelationships among the indicators are then analysed.

Table 1.1 Data base used in the study

Sl.No	Dataset's name	Data Source
1	Geomorphological Data	Bhukosh (gsi.gov.in)
2	Geological Data	Bhukosh (gsi.gov.in)
3	Soil Data	Bhukosh (gsi.gov.in)
4	Land Use and Land Cover Map	https://bhuvan-app1.nrsc.gov.in/thematic
5	Drainage Map	https://bhuvan-app1.nrsc.gov.in/thematic
6	climate Data	www.weather-atlas.com
7	Demographic Data	Census of India 2011
8	Socio-culture and economic data	Field survey 2023
9	Major problems	Field survey 2023

1.7 Methodology

During the preparation of survey report, data base, geology, transportation found as sketchy and disjointed. There are data sources of public domain as well as in websites. Hence after correcting available data base, extensive work has been undertaken to verify and analyse the data base. Preparation of this survey has undergone through several steps as stated below.

1.7.1 Pre-field study: A thorough literate review and series of group discussion were conducted before going to field area with the help of secondary data. The secondary data collected before going to the field survey helps us to prepare questionnaire upon which survey was conducted. The Secondary data collected consist of castral map or mouza map from BLRO office. The number of questionnaire available was 57 one for a single household. The questionnaire consists of the socio-economic based questions.

1.7.2 Field study: Data collection through random sampling of 57 household was a major part of the second phase besides interaction with local villagers and observation we collected so much more information about socio-economic status of the study area. Secondary data was helpful in obtaining needed information about the study area. In this study, a semi-structure

questionnaire was developed to explore the status of livelihood vulnerability of the households. The questionnaire for data collection purpose was designed for collection of general information about the respondents such as age, gender, occupation, educational level, marital status etc. And the questions per-training to the vulnerability domain as information about the exposure, sensitivity, and adaptive capacities of the inhabitants. Direct interview with the respondents was conducted to collect the data from the 57 households. GPS survey also conducted.

1.7.3 post-field study: The collected data and information was analysed in detail to fulfil the objective of the field survey. All the hard copy of map scanned and converted into digital format to use on GIS platform. The secondary maps were register with the UTM projection and converted into Vector Data. GCP is collected using GPS for Geo-referencing the present study area. Previous maps were registered based on the past hard copy maps available from different sources. Those maps already possessed co-ordinates. The entire work has been done on Microsoft Excel. After calculation and statistical tools. Maps, bar graphs, line graphs, pie chart, column and creation of master table has been used to achieve the final product.

1.8 Organization of work

This field report has been divided into five chapters. Introduction of the field report covering the aspects like introduction ,aims and objectives of the work and significance of the study is presented 1.0.Detailed geographical accounts of the Darjeeling district have been presented in chapter 2.0.Socio-cultural and economic conditions of the peoples of Takdah have been

presented in chapter 3.0.Housing condition of Takdah in chapter 4.0.Problems and remedial measures have been presented in chapter 5.0.In the last chapter 6.0,summery and conclusion of the survey work have been presented. The last part of the report is devoted to listing of references and appendix.

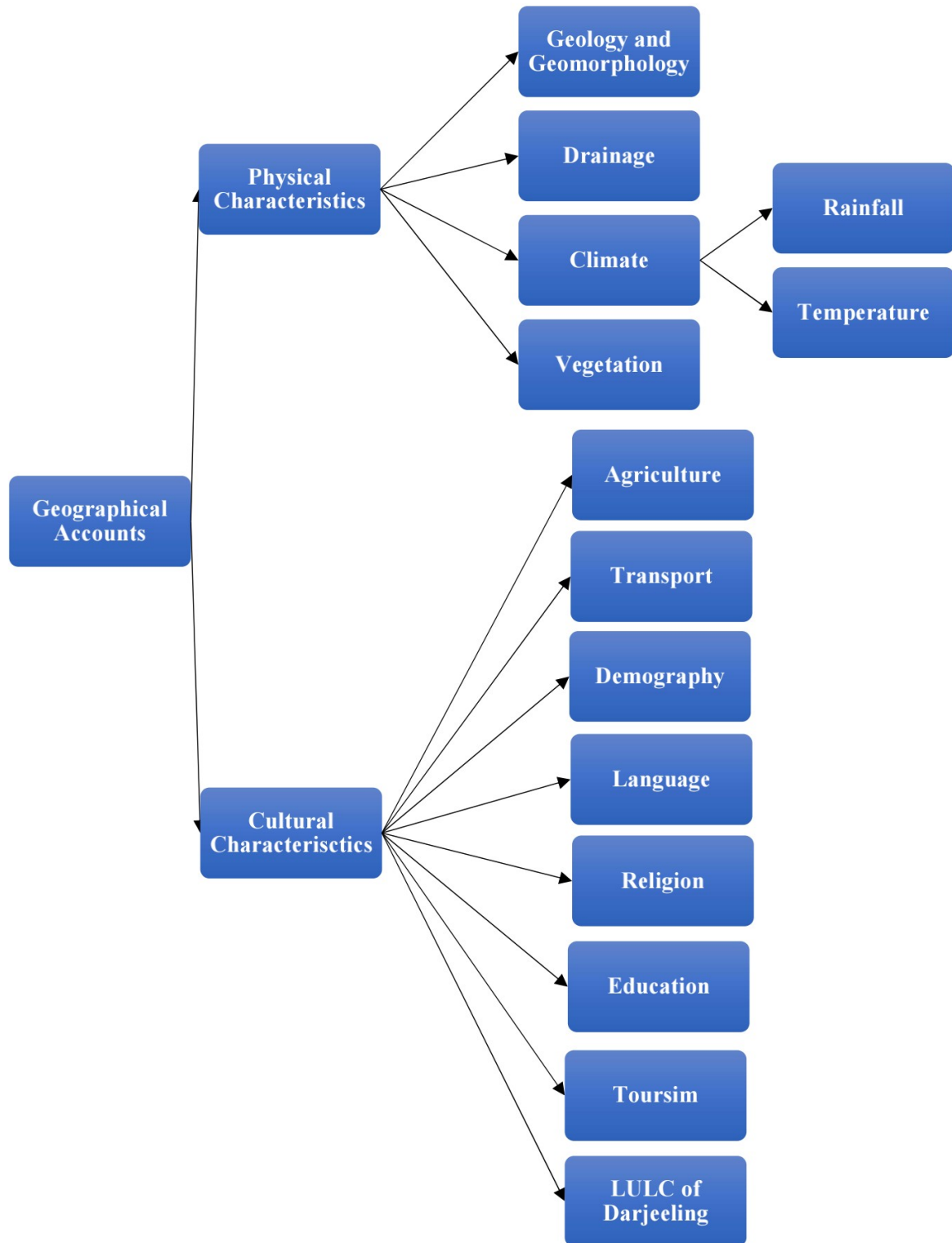
1.9 Significance of the study

The field excursion organized by the Geography Department of Thakur Panchanan Mahila Mahavidyalaya 2023 was accompanied in the area of Takdah. The study findings of the survey will redound to the benefits of the society in which the survey was undertaken. The reports of the survey will be helpful in putting forward the problems of the area to the administrative body, so that it could be resolved as soon as possible. It will also be of great beneficiary for the upcoming researchers as the study will uncover critical areas with several problems that many researchers could not explore. Lastly, taking into consideration of the field survey that we did was of a great experience and will provide great help in the future.

CHAPTER 2.0

GEOGRAPHICAL ACCOUNTS OF DARJEELING

Chapter Association:



2.0 Introduction

Darjeeling, located in the Indian state of West Bengal, is a beautiful hill station known for its breath-taking landscapes, tea plantations, and colonial charm. Situated in the Lesser Himalayas at an elevation of approximately 2,042 meters (6,700 feet) above sea level, Darjeeling boasts a unique set of physical characteristics that contribute to its appeal as a popular tourist destination. Darjeeling is situated among gentle hills and lush valleys, encircled by tall mountains of the Eastern Himalayas. The town provides breathtaking sights of some of the tallest mountains in the world, like the stunning Kanchenjunga, which is the third highest mountain on Earth. The rugged terrain and steep slopes add to the region's charm.

Due to its elevated location, Darjeeling enjoys a pleasant climate throughout the year. Summers in Darjeeling are pleasant, with temperatures ranging from 15°C to 25°C (59°F to 77°F), making it a favoured escape from the hot plains. Winters, on the other hand, can be chilly, with temperatures dropping to around freezing point, often accompanied by occasional snowfall. The hills of Darjeeling are filled with thick forests and tea farms, giving the area a lush green colour. The area is known for its diverse flora and fauna, with numerous species of trees, orchids, and rhododendrons. The forests are home to a variety of wildlife, including endangered species like the red panda and the clouded leopard. Darjeeling is synonymous with its world-famous tea gardens that produce some of the finest and most aromatic teas in the world. The tea plantations, spread out on the hillsides, paint a beautiful picture-perfect scene. The neatly manicured tea bushes against the backdrop of the mountains make for a breath-taking sight.

The region is blessed with several rivers and waterfalls that add to its natural beauty. Rivers like the Teesta, Rangeet, and Rungdungma flow through the hills, offering mesmerizing views and opportunities for activities like river rafting. The hills also have beautiful waterfalls flowing down the slopes, which create a peaceful and calm atmosphere. Darjeeling experiences a significant amount of cloud cover due to its elevation and proximity to the mountains. The

town is often covered in clouds, giving it a mysterious and magical feeling. This phenomenon, called the "Darjeeling mist," adds a touch of enchanting beauty to the surroundings.

Darjeeling has stunning mountains, enjoyable weather, beautiful green landscapes, tea gardens, flowing rivers, waterfalls, and captivating clouds. All these elements come together to create a peaceful and picturesque environment, making Darjeeling a beloved destination for nature enthusiasts and adventurers alike.

2.1 Physical Characteristics:

2.1.1 Geology and Geomorphology

The Sikkim-Darjeeling Himalaya region is located within the tectonically active Eastern Himalayas. It consists of three main tectonic units: the Higher Himalaya, the Lower Himalaya, and the Siwaliks. These units are separated by thrust faults but connected by the Teesta River, which forms a significant fluvial system in the area. The Higher Himalaya, characterized by elevations ranging from 2,000 to 4,000 meters, experienced uplift of approximately 2,000 meters during the Quaternary period. This uplift brought the region above the snowline. The mountains in this area were previously shaped by fluvial processes, but they have since been transformed by glacial activity. The Lower Himalaya, with elevations ranging from 1,000 to 2,000 meters, features dissected terrain. Fragments of mature relief can still be found within the forested regions of this area. The Siwaliks, which lie along the Himalayan Range in this region, have been reduced to a narrow belt that gradually merges with the Lower Himalaya. The Siwaliks rise above 1,000 meters along the Frontal Fault, directly overlooking the alluvial plains of the Sub-Himalayan foredeep. This foredeep is an active geological formation characterized by blocks with various tectonic tendencies.

The geological formations in the Darjeeling-Sikkim Himalaya primarily consist of unaltered sedimentary rocks. The Sub-Himalaya region is composed of Siwalik deposits, which originated during the Tertiary age. North of the Siwaliks, there are lower Gondwana formations

that contain coal deposits. The Daling series, dating back to the Pre-Cambrian period, is found further north. The region also includes the Darjeeling gneiss, which is a distinctive rock formation. These geological formations offer valuable insights into the geological history and evolution of the Darjeeling-Sikkim Himalaya region. Understanding the composition and arrangement of these rocks helps in unraveling the complex tectonic processes that have shaped the landscape and geological features observed in the region. The Darjeeling Sub-Himalaya region consists of the Terai plains and foothills, which were shaped by the final upheaval of

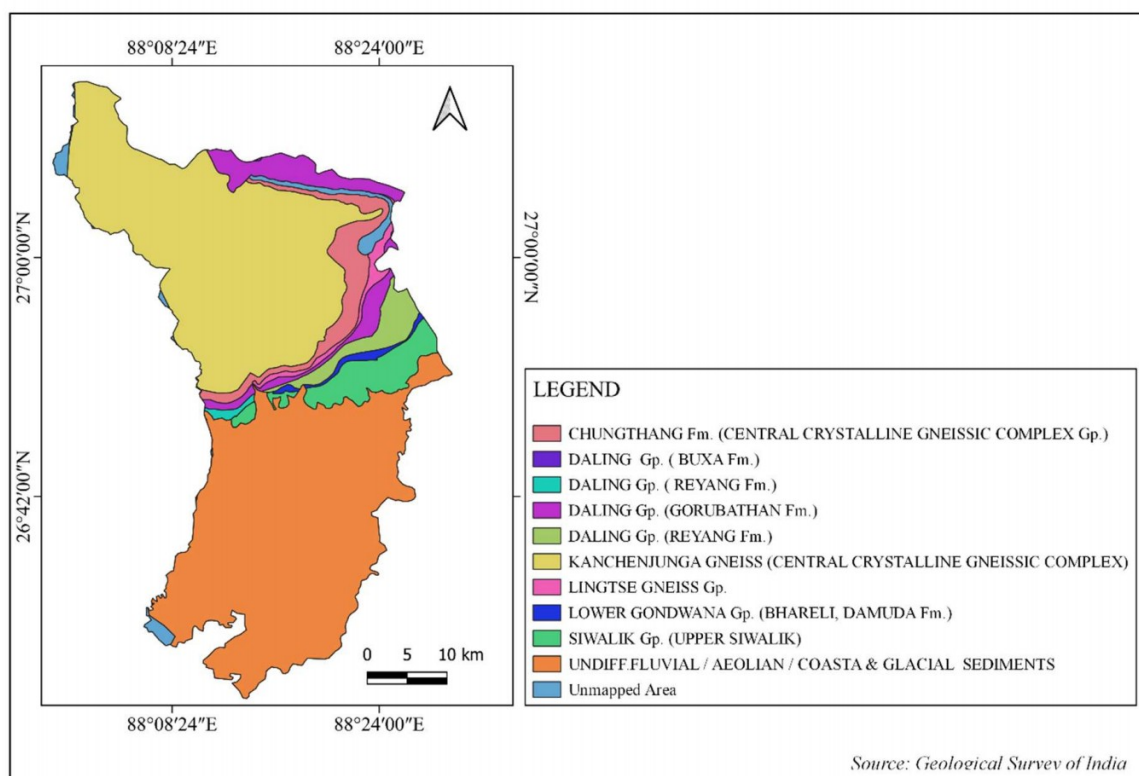


Figure 2.1: Geology of Darjeeling district

the Himalayan orogeny. These areas are composed of nearly horizontal layers of unconsolidated sand, silt, pebbles, and gravel. The Sub-Himalaya primarily comprises Siwalik deposits from the Tertiary period, which are well-exposed along the Teesta River.

Along the foothills of Darjeeling, the Siwalik deposits are steeply overthrust by the Damuda Series, part of the Lower Gondwana formations. This thrust zone, coinciding with the main

boundary fault, is poorly exposed but appears to dip at an angle of 60° to 70° towards the north. The Damuda sandstones are micaceous, feldspathic, and brownish, often weathered in exposed thrust zones. Coal-bearing detrital rocks are also present. In some areas, the sandstones have been transformed into quartzites, shales into splinter-shales, and carboniferous shales into graphitic shales. A thin and discontinuous band of limestone can be found from Kalijhora to Rongtong. Northwards, the Damuda Series is succeeded by the Daling Series, which is characterized by slates, phyllites, and silvery mica schists. The Daling rocks are sharply thrust

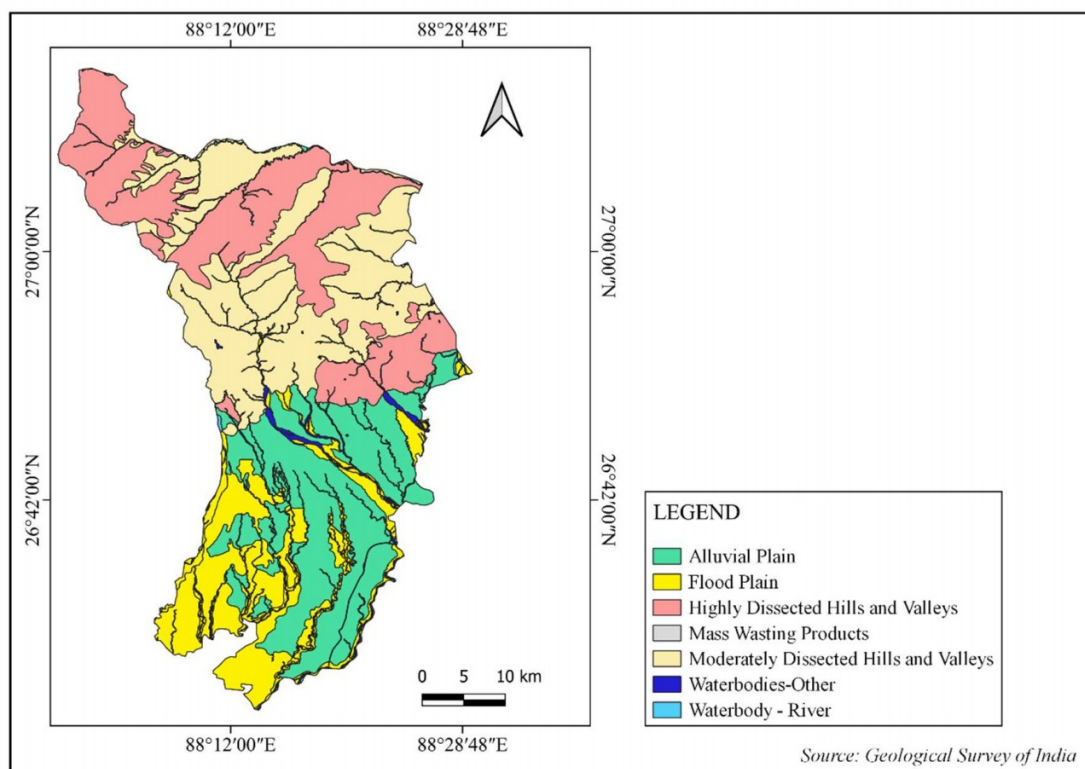


Figure 2.2: Geomorphology of Darjeeling district

against the Damuda formations, dipping steeply towards the north. Alternate layers of feldspars and quartz can be observed in these rocks.

The Darjeeling gneiss occupies a significant portion of the region, primarily found in the higher reaches of the hills. It comprises garnetiferous mica-schists, quartzites, biotite-kyanite, and sillimantic gneiss. The Darjeeling gneiss is well-exposed along several road sections, including

SukhiaPokhri - ManeyBhanjang - Tonglu- Sandhakphu-Phalut Road and Phalut-Rammam-Rimbick-Jhepi-Pulbazar-Darjeeling Road. These gneisses exhibit well-developed foliation, extensive folding, and crumpling, and are characterized by prominent jointing in an east-west direction (40° - 70°).

This mountain range consists of several high peaks, including the famous Kanchenjunga, the third highest peak in the world. The Himalayas contribute to the rugged terrain and profound valleys found in the region. Numerous valleys and river systems traverse the Darjeeling district. The most prominent valley is the Teesta Valley, which is formed by the Teesta River. Darjeeling district comprises several hill ranges and ridges that add to its distinct geomorphology. These hills often have steep slopes and provide breathtaking views of the valleys below. Some notable hill ranges include Singalila Range, Tindharia Range, and Kurseong Range. The high altitudes of the Eastern Himalayas have led to the formation of glacial landforms in Darjeeling district. Glacial valleys, moraines, and cirques can be found in the higher reaches of the region. Glacial activities have shaped the landscape over thousands of years, leaving behind characteristic landforms that are a testament to the region's glacial past. Takdah is situated on the slopes of the Eastern Himalayas, resulting in a hilly and undulating terrain. The region is characterized by a series of hills and valleys, formed by the erosional processes of rivers over time.

2.1.2 Drainage

The river Teesta, also spelled as Tista, holds great significance in the Darjeeling district as it is the most important river in the region. The main stream of the river originates from Cholamoo (Tso Lhamo) Lake in Tibet. It traverses through the mighty Himalayas during its initial course and reaches the plains near Sevoke, close to Siliguri. Upon entering the Jalpaiguri district, the river expands further in the plains. The river Teesta is fed by numerous smaller tributaries from the East and fewer but larger tributaries from the West bank as it flows through Sikkim, Darjeeling, and Jalpaiguri. In the Darjeeling district, the primary tributaries of the Teesta are

the Rangpo River on the left bank, which forms a natural boundary between Darjeeling and Sikkim for a certain distance, and the Great Rangeet (Bari Rangeet/Rangeet Chhu) and Rammam rivers on the right bank, which form the district boundary with Sikkim. The river Teesta primarily relies on snowmelt in its upper course and receives heavy rainfall during the months of June to September in its lower course.

Another significant river in the region is the Mahananda, also known as Mahanadi or Mahaldi. It originates from the Mahaldiram Hills to the east of Kurseong at an elevation of 6,900 feet and flows in a north-south direction through the district until it reaches Siliguri. The Mahananda is joined by major tributaries such as Mechi, Balason, Ratwa, and Kankai. Like other rivers in North Bengal, the Mahananda is fed by numerous small streams and rivulets originating from the Himalayas. Notable among these are Trinai, Ranochondi, Chokor, and Dauk.

The rivers Rammam and Rangeet form the natural northern boundary of the Darjeeling district with the state of Sikkim. Rangeet originates from a glacier of Mt. Kabru in the lower Kanchenjunga region and meets the Rammam River near Jorethang in Sikkim. Eventually, both rivers join the Teesta. The Rammam River originates from the Singalila range in Darjeeling and flows eastward before merging with the Rangeet River. The Rammam River is fed by its main tributary, Lodhoma, and numerous small streams before reaching its confluence with the Rangeet.

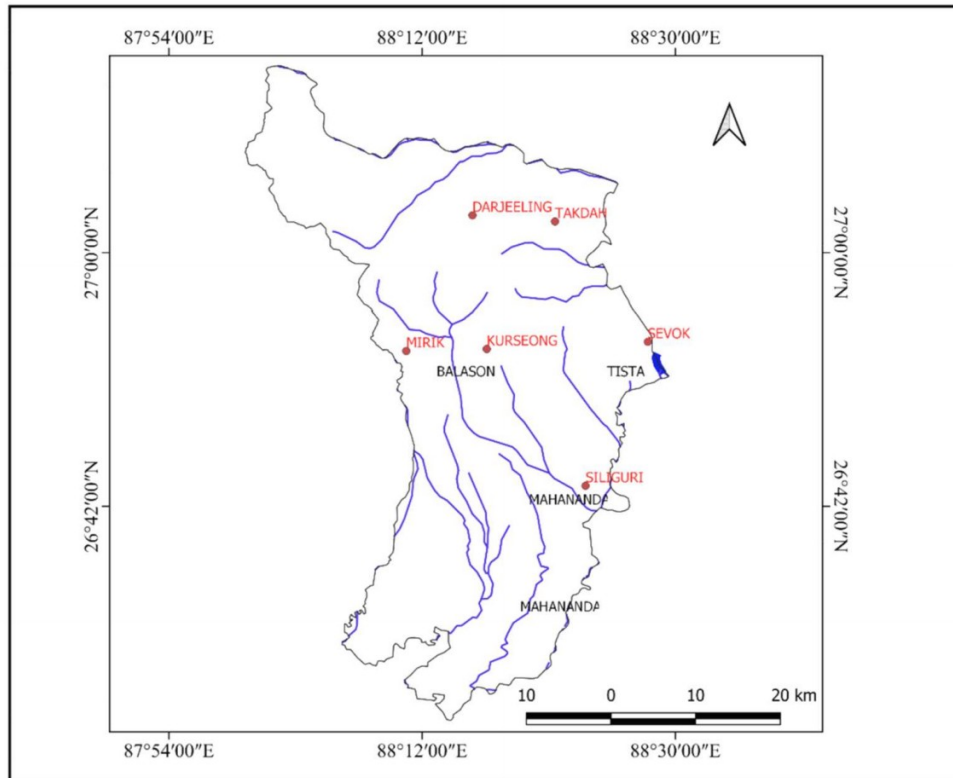


Figure 2.3: Drainage map of Darjeeling district

The Balason River originates from Lepcha Jagat in the Senchal Hills southwest of Darjeeling. It flows in a north-south direction and is a tributary of the Mahananda River. Notable tributaries of the Balason River include Rinchintong on the left bank and Rangbong on the right bank. The stones, gravels, and sand found in the hilly terrain of the Balason River are utilized for construction purposes and are known for their impressive quality. The Mechi River originates from the Mahabharat Range in Nepal, flowing from north to south, and enters the Darjeeling district at the Mirik C.D. Block. The Rungdung River is a smaller river that flows through the vicinity of Takdah. It is a tributary of the Teesta River and contributes to the local hydrology and drainage system.

2.1.3 Climate: Darjeeling district is characterized by a subtropical highland climate, which is influenced by its geographical location near the Bay of Bengal. The climate is humid throughout the year, with mild summers, cool winters, and distinct monsoon and post-monsoon

seasons. The region experiences a spring-like weather pattern for most of the year. The climate is comparable to an oceanic climate, with moderate temperatures and regular rainfall.

The unique geography of the Darjeeling Himalaya, including its relief and varying altitudes ranging from 300m to 3700m above sea level, contributes to its distinct climatic peculiarities.

The region is directly exposed to the moisture-laden southwest monsoon, which flows from the Bay of Bengal between May and October. This results in wet summers and dry winters.

The altitude and configuration of the neighbouring mountain ranges greatly influence air movement, rainfall patterns, and temperature distribution, leading to significant climatic variations within short distances. The Darjeeling Himalaya exhibits a range of climates, from subtropical to temperate and alpine, due to its mountainous terrain. These variations in climate create diverse habitats and contribute to the region's rich biological diversity.

The district experiences four distinct seasons: the pre-monsoon season, monsoon season, post-monsoon season, and winter season. The pre-monsoon season occurs before the arrival of the southwest monsoon and is characterized by increasing temperatures and occasional showers.

The monsoon season brings heavy rainfall due to the southwest monsoon, which is essential for agriculture and contributes to the region's lush greenery. The post-monsoon season follows the monsoon and is marked by gradually decreasing rainfall. Finally, the winter season brings cooler temperatures, and in some higher areas, it may include snowfall.

2.1.4 Rainfall: It commonly witness high-intensity rainfall within shorter spans of time in Darjeeling. The average annual precipitation in Darjeeling is approximately 3,100 mm. 80% of the annual rainfall takes place between the months of June and September, due to the monsoon of South Asia. The "June– May ratio," or the percentage by which the rain increases from May to June, is 2.6 or 260%. In contrast, just 3% of the annual rainfall takes place between December and March. Darjeeling's altitude—which is greater than some other regions of the Eastern Himalayas at the same latitude (27° N), such as the Assam hills—and its rarified air

causes its UV radiation levels to be correspondingly higher. Its mean monthly UV radiance is approximately 4500 microwatts per square cm per day during the peak months of May, June, and July. It is 50% higher than the Assam hills to the east, whose altitude is 170 meters. For the district of Darjeeling the highest rainfall occurs at Kurseong, the south facing town with an annual rainfall of exceeding 4000 mm followed by Darjeeling and Kalimpong. The district experiences the highest rainfall during the months between June to September brought about by the southwest monsoons and the lowest between November – February with occasional moderate showers during March – May. Sikkim also shares the same monsoonal rainfall with the south facing slopes receiving the maximum amount of rains. The eastern, western, and southern regions receive greater amounts of rainfall as compared to the north. From the beginning of the twentieth century, Darjeeling's average temperature has increased by 4 °C, which is twice the world's average, and the annual averages of its daily maximum and minimum temperatures have increased by greater margins. During the same period, relative humidity has decreased by 7%, and rainfall by 300 millimetres annually.

2.1.5 Temperature: Temperature of the Darjeeling district shows a great degree of variation where altitude plays to be the most important factor. In the upper hilly regions, the temperature (day and night) remains higher during the rainy season than in the summer and spring season. The range of fluctuation of temperature between day and night is higher in the plains of Siliguri and the terai region remains hot or warm till the withdrawal of southwest monsoon (i.e., from the month of November). Thereafter, the temperature falls rapidly throughout the region. Such variation widely affects the vegetation of the region. The average monthly temperature record of Darjeeling (2150 m asl), Kurseong (1480 m asl) and Kalimpong (972 m asl). Normally January is the coldest month when the diurnal temperature at Darjeeling, Sonada and Labha often go down below 0°. Altitude plays a significant factor in determining the temperature of Darjeeling. The upper hilly areas of the hill station exemplify higher day and night temperatures

during the monsoon months. This happens because the southwest monsoon disappears around this time. This phenomenon affects the climatic condition of the entire region of Darjeeling.

Table 2.1: Monthly Rainfall and Temperature of Darjeeling district (2022)

MONTH	AVERAGE RAINFALL (mm)	AVERAGE TEMPARATURE (°c)
January	16	10.51
February	35	13.36
March	55	17.15
April	218	20.15
May	362	21.9
June	435	22.27
July	525	22.21
August	387	22.21
September	290	21.36
October	121	18.36
November	16	15.15
December	17	11.51

Source: www.weather-atlas.com

Due to this reason temperatures drop rapidly in Darjeeling as soon as monsoon is over. The Himalayan ranges of Darjeeling show their own temperature peculiarities that are the effect of the entire range of variations in altitude, right from the height of 300m-3700 m above sea level. The typical monsoon-like climate that is characterized by dry winters and wet summer makes tourists throng to the hill station for summer retreats. The average annual rainfall in Takdah ranges between 2,000 to 2,500 millimeters (80 to 100 inches). The region receives a significant amount of rainfall throughout the year, with slightly higher precipitation during the monsoon season, which typically occurs from June to September. The average annual temperature in the town ranges between 10°C to 20°C (50°F to 68°F). Summers are generally cool and pleasant, with average temperatures ranging from 15°C to 25°C (59°F to 77°F). Winters can be chilly, with temperatures dropping to around 5°C to 10°C (41°F to 50°F). It is worth noting that temperatures may vary depending on the specific month or time of day.

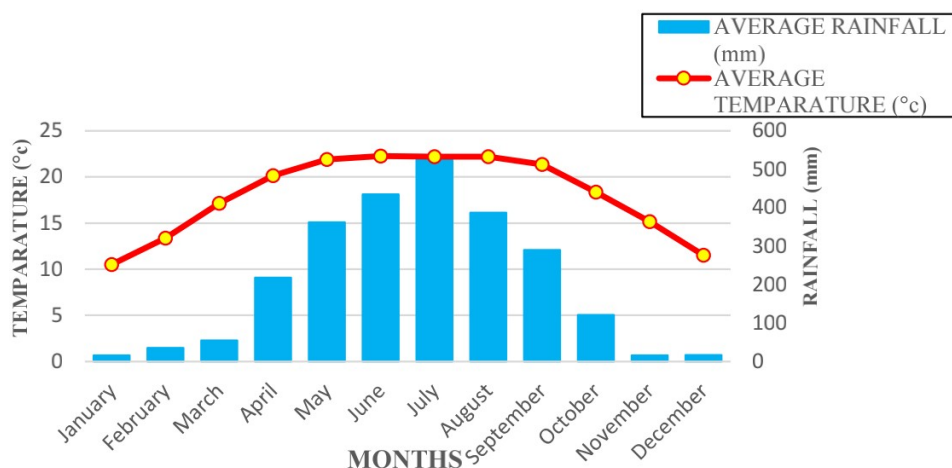


Figure 2.4: Rainfall and temperature distribution of Darjeeling district

2.1.6 Soil: The soil composition in the Darjeeling district exhibits variations based on the geographical features and underlying rock formations. In the upland areas, the soil is typically red and gritty, while the plains have dark and fertile soil. Along the banks of the Teesta River, silty or silty loam soil predominates. On the higher slopes of the Darjeeling Himalaya, the gneisses and schists formations give rise to red and yellow soils. The weathering of these rocks, rather than a high proportion of iron content, contributes to the reddish colour of the soil. The soil is primarily siliceous and aluminous, with sand consisting of free quartz. It tends to be deficient in lime, magnesia, iron oxide, phosphorus, and nitrogen, but relatively rich in potash derived from the muscovite and feldspar present in the gneiss.

In the southernmost part of the district, river alluvium can be found. The hilly areas feature podzolic soils, which are suitable for tea cultivation. Parent material variations exert a stronger influence on soil characteristics in the Darjeeling Himalayas than climate or vegetation. The Siwalik region has pale yellow and coarse-textured soils, while the Dalings exhibit dark grey and porous soils. The gneisses give rise to brown clay soils that can be shallow and sticky. The Gondwana formations generally have sandy soils. Weathering of the Darjeeling gneiss is selective, occurring along mica-rich bands and susceptible joints and shear planes. This leads

to the presence of highly weathered clay surrounding fresh rock blocks, which contributes to the occurrence of massive landslips.

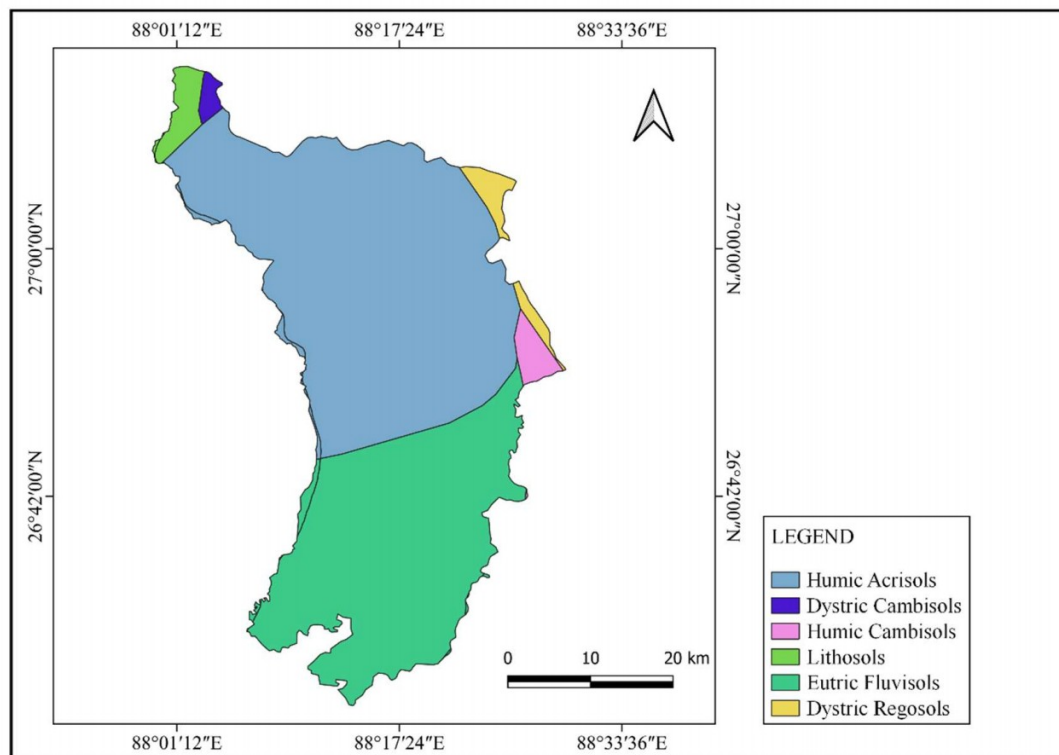


Figure 2.5: Soil map of Darjeeling district

The hill areas of Darjeeling have been classified into various soil types by the National Bureau of Soil Survey and Land Use Planning (NBSSLUP) of the Indian Council of Agricultural Research (ICAR). The dominant soil type is coarse-loamy (Typic Udorthents), followed by loamy skeletal (Typic Haplumbrepts). The soils in the region are heterogeneous in nature. The soils on steep hill slopes are shallow to very shallow, excessively drained, and prone to severe erosion. They range in texture from gravelly loam to loam, with high gravel content and organic carbon ranging from 2% to 7%. These soils are classified as Lithic and Typic Udorthents. On side hill slopes, the soils are moderately deep to deep, well-drained, and loamy in texture. They exhibit some profile development and are classified as Umbric and Typic Distrochrepts, Lithic Udorthents, and Lithic and/or Typic Haplumbrepts. These soils are moderately to strongly acidic, rich in organic carbon, and have moderate to low base saturation.

2.2 Cultural Characteristics

2.2.1 Agriculture: Horticulture, tea production, agriculture, tourism, and forestry constitute the economic pillars of the Darjeeling hill region. The region is known for its diverse agricultural practices and produces a variety of crops. The main agricultural activities in Darjeeling district include tea cultivation, paddy farming, maize cultivation, potato cultivation, horticulture (including production of fruits and vegetables), and floriculture. The unique climate and topography of the region contribute to the cultivation of high-quality tea, which is renowned worldwide. Additionally, the district engages in animal husbandry, with dairy farming and poultry being important aspects of the agricultural sector. The agricultural sector in Darjeeling district not only supports the livelihoods of the local population but also contributes to the overall economy of the region. Agricultural production is one of the main economic sources of the people in Takdah. In the hill areas Takdah, terrace cultivation or step cultivation is practiced

2.2.2 Transport: Transportation in Darjeeling encompasses both intra-city transport and connectivity between the city and other locations within Darjeeling district. Darjeeling, a picturesque hill station in the state of West Bengal, India, serves as the administrative headquarters of Darjeeling district. Situated in the Mahabharat Range, also known as the Lesser Himalaya, the city boasts an average elevation of 2,134 meters above sea level. To access the town of Darjeeling, one can embark on a scenic journey via the renowned "Toy Train," officially known as the Darjeeling Himalayan Railway. This narrow-gauge railway, measuring 60 centimetres (2 feet) in width, spans 80 kilometers from Siliguri. Operated by the Indian Railways, the Darjeeling Himalayan Railway offers a unique and memorable travel experience to reach the charming town of Darjeeling.

Darjeeling is connected to Siliguri through the Hill Cart Road, designated as National Highway 110. Additionally, there is an alternate route via Mirik that links the two towns. For those

seeking shortcuts from the Hill Cart Road, two options are available: one passing through Pankhabari and the other through Rohini. Given the steep slopes in the region, four-wheel drives have gained popularity as the preferred mode of transportation. Vintage Land Rovers are commonly seen along this route, along with Maruti Omni and various SUVs. However, it is important to note that during the monsoon season, both road and toy train communications often experience disruptions due to landslides. To cater to the bus transport needs of the region, the Tenzing Norgay Bus Terminus in Siliguri serves as a crucial hub.

Darjeeling does not have its own airport. The closest airport is Bagdogra Airport (IXB), located near Siliguri, which is approximately a 3-hour drive covering around 90 kilometers from Darjeeling. Bagdogra Airport is served by various airlines including Air India, GoAir, IndiGo, and SpiceJet, providing connectivity to and from different destinations. The nearest major railway station to Siliguri is New Jalpaiguri, which serves as an important transportation hub. New Jalpaiguri Railway Station enjoys excellent connectivity with major cities across India, particularly Kolkata. It provides convenient rail connections to and from various destinations, facilitating travel to Siliguri and the surrounding region.

In Darjeeling, intra-city transport primarily relies on hired taxis, which are commonly used for getting around. However, walking remains the predominant mode of transportation in this hilly town, favored by many residents and visitors alike. Additionally, two-wheelers, such as motorcycles and scooters, are popularly utilized by the local population for commuting within the town. The Darjeeling Ropeway, spanning a length of 8 kilometers (5 miles), connects Darjeeling's North Point with Singla. Originally established in 1968, the ropeway had to be closed following an accident in 2003. However, it was successfully reopened in February 2012, allowing visitors to enjoy the scenic and thrilling experience of traversing the route once again.

2.2.3 Demography: According to the 2011 census, the population of Darjeeling district is recorded as 1,846,823, which is approximately the same as the population of Kosovo. This places the district at the 257th position among all districts in India. The population density of the district is 586 inhabitants per square kilometer (1,520/sq mi). The district witnessed a population growth rate of 14.77% during the decade from 2001 to 2011.

In terms of gender distribution, Darjeeling has a sex ratio of 970 females for every 1000 males. The district also boasts a literacy rate of 79.56%. Following the separation of Kalimpong district, the population of Darjeeling district was recorded as 1,595,181. Out of this, 671,177 individuals (42.11%) reside in urban areas. The sex ratio in the remaining district is 972 females per 1000 males. Scheduled Castes and Scheduled Tribes account for 18.86% and 20.21% of the population, respectively.

The hills of Darjeeling have a population of 624,061, accounting for nearly 40% of the total population. The original inhabitants of the Darjeeling Hills were the Lepchas or Rongpa, who refer to themselves as the ravine people. The district also has a rich history of communities like Limbu, Rai, Tamang, Gurung, Magar, Newar, Thami, Chettri, Bahun, Kami, and Damai. Since the 1950s, a significant population of Tibetans has migrated to the region. However, over time, the ethnic distinctions among the hill people have become less prominent, and today many identify as Gorkha and speak Nepali as their mother tongue.

In the plains, the majority population consists of Bengalis, while there is also a significant presence of Gorkhas and Adivasis. The Adivasis migrated from Chotanagpur and Santhal Parganas during British rule to work as tea garden laborers. Both in the hills and plains, various migrants from other regions, including Biharis, Marwaris, and Punjabis, have settled over the years, adding to the diverse cultural fabric of the region.

2.2.4 Languages: A language is a system of communication which consists of a set of sounds and written symbols which are used by the people of a particular country or region for talking

or writing. As per the 2011 census, the linguistic composition of Darjeeling district was as follows: 39.88% of the population spoke Nepali, 26.51% Bengali, 10.95% Hindi, 6.17% Rajbangsi, 5.38% Sadri, 2.52% Kurukh, 1.50% Bhojpuri, and 1.15% Santali as their first language. Additionally, 1.04% of the population identified their language as 'Others' under Bengali. In the three hill sub-divisions of Darjeeling district, including Kalimpong, the 1951 Census reported that approximately 26% of the population spoke Nepali as their mother tongue. Previously, languages like Rai, Limbu, Tamang, Magar, Gurung, and Newar were also spoken in the hills. While Bengali is the official language of the district, Nepali has been declared as a co-official language only in the Darjeeling and Kurseong subdivisions.

In the hill divisions of Darjeeling, Kurseong, and Mirik, Nepali emerges as the dominant language, spoken by over 90% of the population. It is important to note that while Nepali is widespread, most hill inhabitants do not belong to the Khas community. Although several hundred original hill inhabitants still retain their native languages, the majority now primarily speak Nepali. In the Siliguri subdivision, Bengali serves as the main language. It is followed by a significant number of speakers of Kamatpuri or Rajbongshi. Among the Adivasi communities, Sadri is the primary language, although some individuals still communicate in their original languages such as Kurukh, Mundari, and Santali.

2.2.5 Religion: In Darjeeling, the religious landscape exhibits some variations between the hills and the plains. Hinduism remains the predominant religion in both regions. However, in the hills, Buddhism and Kirat Mudhum are prevalent, while Christianity has a strong presence primarily in the hills but also among the tea tribes in the plains. Islam, on the other hand, is predominantly practiced in the plains.

2.2.6 Education: Darjeeling district is widely recognized for its prestigious educational institutions, earning a reputation for excellence in education. The district is home to a multitude

of renowned and highly sought-after schools and educational centres. These institutions are known for their commitment to quality education and have become prominent choices for students seeking a well-rounded academic experience in Darjeeling. Some of the most renowned educational institute of the Darjeeling district are Loreto Convent, St. Joseph's College, Dr. Graham's Homes, St. Paul's School and Victoria Boys' School. Takdah has Griffith's Higher Secondary School, is an English-medium coeducational institution established in 1936. It has facilities for teaching from class V to class XII. Takdah may not have higher education institutions within its immediate vicinity. Students seeking higher education typically must travel to nearby towns and cities like Darjeeling or Siliguri, which offer colleges and universities.

2.2.7 Tourism: Darjeeling is a stunning hill resort known for its snowy peaks and beautiful green hills. It is considered one of the most magnificent hill destinations in the world. The landscape is filled with vibrant colors, such as red rhododendrons and white magnolias. The rolling hills are covered with lush green tea plantations, and there are enchanting forests of silver fir. The sky above is a lovely shade of blue with fluffy clouds, making Darjeeling truly deserving of its title as the "Queen of Hill Stations." In the morning, the majestic Kanchenjunga peak shines brightly, adding to the charm of this place.

Takdah is a small scenic hill station that attracts tourists with its natural beauty, pleasant climate, and tea gardens. The Takdah Orchid Center is a popular spot for nature walks, as it houses a variety of orchids and other flora. The hill station has some remnants of colonial architecture, including old British-style bungalows and churches. Exploring these structures adds a touch of history and nostalgia to the visit.

2.2.8: LULC of Darjeeling: The land use and land cover in the Darjeeling district are characterized by a mix of various categories. The district of Darjeeling has significant forest

cover, including both natural and plantation forests. The forests consist of a variety of tree species and support rich biodiversity. Darjeeling is renowned for its tea gardens, which are an important part of the district's economy. The undulating hills are covered with lush green tea

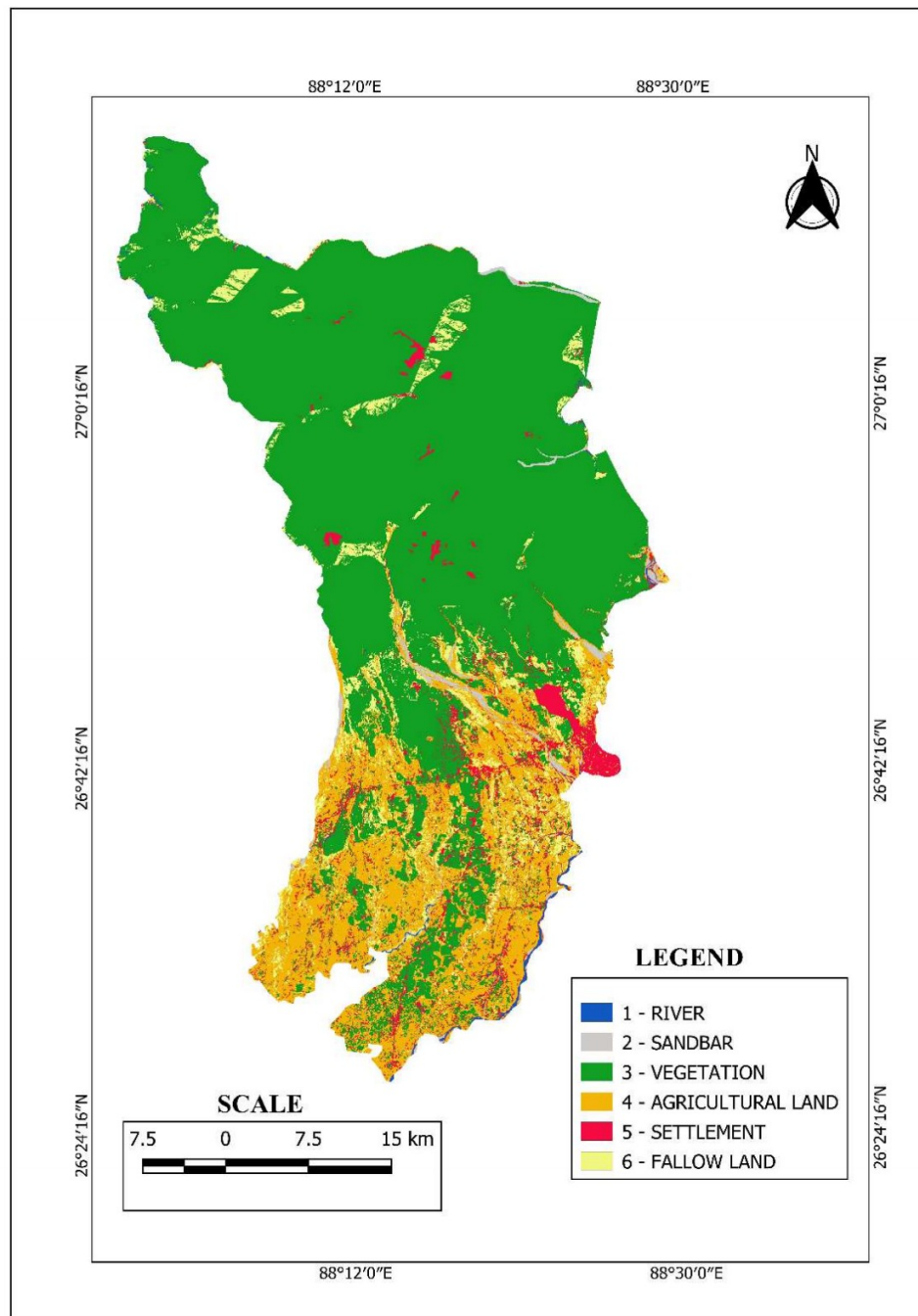


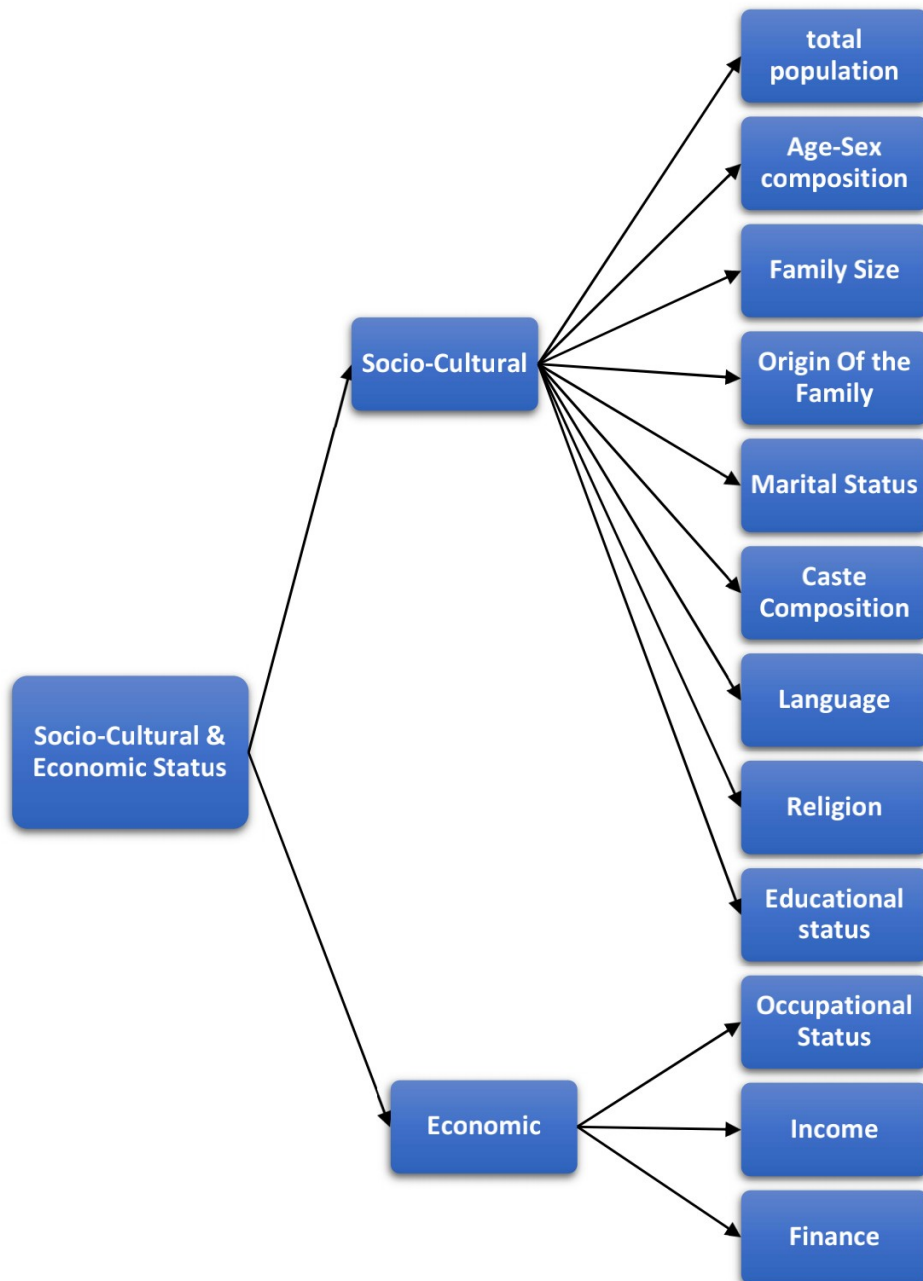
Figure 2.6: LULC map of Darjeeling district

estates, producing high-quality Darjeeling tea. The district has agricultural land that is used for cultivation. Various crops grown in the region include rice, maize, millets, vegetables, and fruits. Rivers, streams, and lakes are present throughout the district. These water bodies provide water for irrigation, drinking, and other purposes. Some prominent rivers in the area include the Teesta, Rangeet, and Mahananda. Darjeeling town and other urban settlements within the district have developed infrastructure, including residential, commercial, and industrial areas. Urbanization has resulted in the conversion of agricultural land into built-up areas. Certain parts of the district may consist of rocky or barren land, particularly at higher altitudes where the terrain becomes rugged.

CHAPTER 3.0

SOCIO CULTURAL AND ECONOMIC STATUS OF THE SURVEYED PEOPLE OF TAKDAH VILLAGE

Chapter organization



3.0 Introduction: A locality in the Darjeeling Sadar subdivision of the Darjeeling district in West Bengal, India, called Takdah Cantonment is located in the Rangli Rangliot CD block. It is one of the Darjeeling Hills' newest tourism hotspots. When you visit the fog, you will learn that it is known as Takdah, which literally means "always covered," in one of the local folktales. In Darjeeling, Takdah is a lovely location to spend time with loved ones. Darjeeling's Takdah is a charming location. Takdah's connecting roads are in terrible shape. Before India gained its freedom, Takdah Cantonment was a British cantonment, as the name suggests. Many high-ranking British officers from all throughout India travelled there. Takdah was abandoned by the new regime after independence, much like many other towns and villages. People in the area only recently began to truly establish themselves. Even though the British have long since left, we can still see the stunning buildings they built. The old, deserted club house, which is only one kilometre from the town, is where Takdah's wonder may be found. The village is significantly cooler than the towns nearby due to its greater altitude, which gives place to cedar trees.

A variety of rare Himalayan orchids are grown in a centre for orchids in Takdah Cantonment. Tourists who travel to Takdah frequently choose to visit this centre. Rungli, Giele, and Teesta Valley tea gardens are the closest. Dara Dokan is the name of Takdah's principal intersection. Every Thursday, a weekly market attracts visitors from all the local communities who come to buy their weekly necessities. Thirty kilometres separate Takdah from Darjeeling, and buses and jeeps run frequently between the two cities. There are several excellent educational institutions located in Takdah Bazaar, including the campus of the following co-residential English-medium school: People living outside can benefit from the ICSE curriculum' good sources of knowledge and education. Takdah had a total population of 1,376 people in 2011, of which 719 (52%) were men and 657 (48%) were women. There were 156 people in the 0 to 6 year old age group. There were 905 literate individuals in Takdah (or 65.70% of the population older than 6

years). English-medium coeducational Griffith's Higher Secondary School was founded in 1936. It provides resources for teaching classes V through XII. The main public hospital in the Rangli Rangliot CD block is Takdah Rural Hospital, which has 30 beds in Takdah.

3.1 Socio-cultural aspects

3.1.1 Total population: The total number of souls out of 57 surveyed households of Takdah village is found to be 217. Out of these males constitute 51 % and females constitute 48% of the total surveyed population.

Table 3.1: Total surveyed population

Total surveyed population	Male population	Female population	Percentage of male population	Percentage of female population
217	112	105	51.61	48.39

Source: field survey, 2023

3.1.2 Sex composition:

In the Takdah village, males outnumber females.

As against 51.61 per cent male, the female Population is only 48.39 per cent. Thus, more Male is available per female. According to 2011 census report sex ratio of West Bengal state is 944 females for every 1000 males.

Among the surveyed people we also found the same characteristics. This low proportion

of female is due to low economic condition and

desire of Male children who can be the earning member of the family.

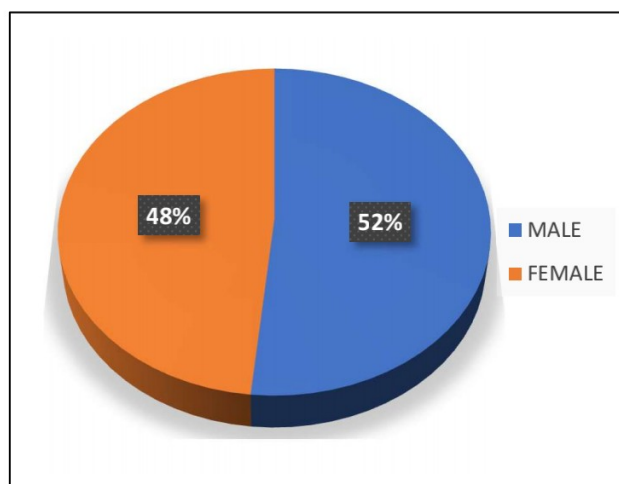


Figure3.1: Total surveyed population

3.1.3 Age composition:

The surveyed population of Takdah village is classified into the age group: 0-5,5-9,10-14,15-19,20-24,25-29,30-34,35-39,40-44,45-49,50-54,55-59,60-64 and above 64 years. The proportionate share of population in these age groups are 3.69 per cent, 2.30 per cent, 3.23 per cent, 3.23 per cent, 9.22 per cent, 8.29 per cent, 13.82 per cent, 11.52 per cent, 8.29 per cent, 5.07 per cent, 16.13 per cent, 3.23 per cent, 5.99 per cent, and 5.99 per cent respectively (table3.2 and figure3.2).

Table3.2: Age sex composition of Takdah village

Age group in years	Total surveyed population	Percentage of population	Male population	Female population	Percentage of male population	Percentage of female population
<5	8	3.69	5	3	3.94	3.33
5-9	5	2.30	3	2	2.36	2.22
10-14	7	3.23	3	4	2.36	4.44
15-19	7	3.23	4	3	3.15	3.33
20-24	20	9.22	12	8	9.45	8.89
25-29	18	8.29	9	9	7.09	10
30-34	30	13.82	20	10	15.75	11.11
35-39	25	11.52	18	7	14.17	7.78
40-44	18	8.29	10	8	7.87	8.89
45-49	11	5.07	5	6	3.94	6.67
50-54	35	16.13	20	15	15.75	16.67
55-59	7	3.23	5	2	3.94	2.22
60-64	13	5.99	9	4	7.09	4.44
>64	13	5.99	4	9	3.15	10
Total	217	100	127	90	100	100

Source: Field Survey, 2023

In the Takdah village, the age composition of surveyed population shows that the maximum population amounting to 84.79 per cent belongs to the 15-64 years age group. They are called economically active population. It reveals the number of active and productive people of a place. It supports the bulk of other age groups. On the other hand, 9.22 per cent of the surveyed population falls within the age group below 15 years and only 5.99 per cent falls within the age

group 64 years and above. They are called economically inactive population. The rate of dependence of young and old people on the adult people (economically active people) is found less.

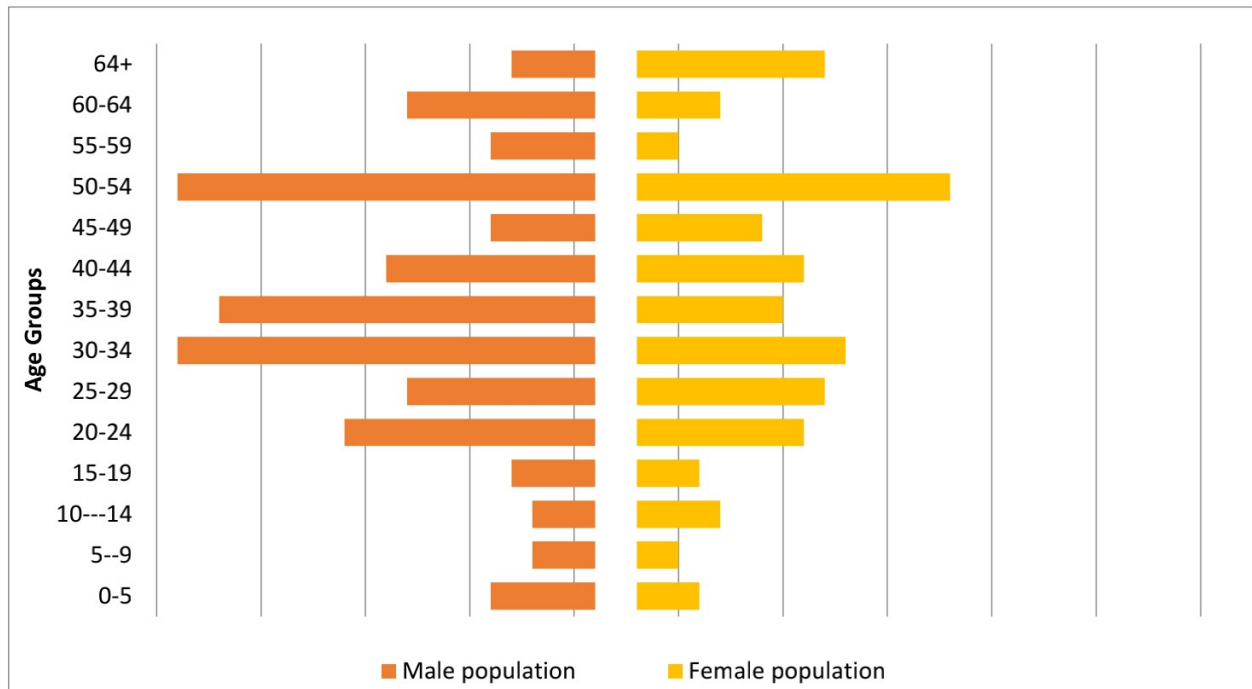


Figure3.2: Age Sex composition

Figure 3.2 shows the sex diversity in the age composition. Generally speaking, females show a lesser proportion of population in the maximum number of age group except the 10-14, 45-49, and >64 age groups. In these three age groups females are out number of males. There is however, no parity between the males and females in the age groups. Considering from every point of view, it can be said that the picture of human resource of Takdah village is satisfactory.

3.1.4 Family size: Family size is of different types in this area. The number of medium sizes is the highest in this area. The family having 4 to 6 members is considered as the medium size. According to the sample the number of medium size family is 35 out of 57. This number is 61.40 per cent of the total families. The percentage of small size consisting of 3 members is 12.28 per cent. The percentage of the big size consisting of 7 to 9 members is 26.33. Economy

of the study area is agriculturally based because of this family size is large of the study area for the supply of agricultural labor (Table3.3 and Figure3.3).

Table 3.3: Family size of the surveyed population

Family size	Number of family	Percentage level
3	7	12.28
4	9	15.79
5	9	15.79
6	17	29.82
7	8	14.03
8	4	7.018
9	3	5.26
Total	57	100

Source: Field survey, 2023

Table 3.4: Origin of the family

Origin of the family	Number of family	Percentage level
Indigenous	53	92.98
Migrated	4	7.02
total	57	100

Source: Field survey, 2023

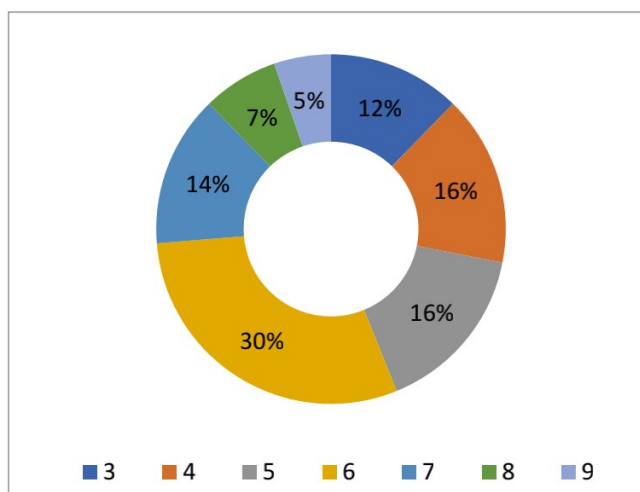


Figure 3.3: Family size of surveyed population

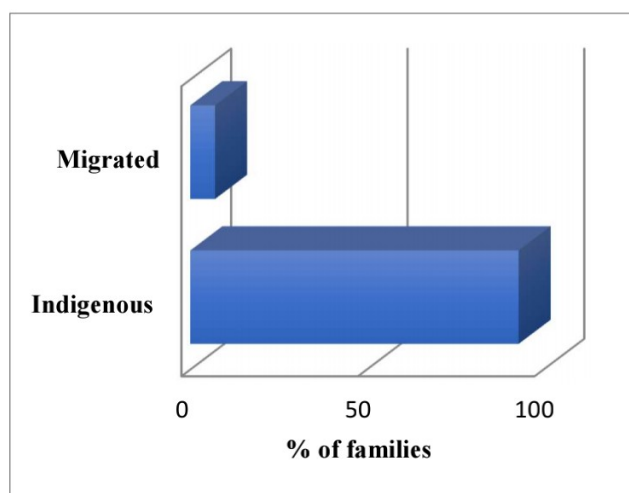


Figure 3.4: Origin of the Family

3.1.6 Marital status

Out of the total surveyed people, 130 people are married (41.94 per cent) and 180 people are unmarried (58.06 per cent). There is no divorce case among the surveyed families. Marital age group of our country is 18 for girls and 21 for boys which is strictly followed in the study area. No one do the marriage before the prescribed age by the government.

Table 3.5: Marital status of surveyed population

Marital status	Number of people	Percentage level
Married	142	65.44
Unmarried	75	34.56
Total	217	100

Source: Field survey, 2023

Table 3.6: Caste composition

Caste	Population	Percentage Level
General	44	20.28
Scheduled caste(SC)	11	5.07
Scheduled Tribe(ST)	74	34.10
Other Backward Class(OBC)	88	40.55
Total	217	100

Source: Field survey, 2023

3.1.7 Caste system: Among the surveyed population in Takdah village, the number of Other Backward Class (OBC) population is greater than that of other castes. In this area about 40.55 per cent of the surveyed population belongs to Other Backward Class (OBC) category. In other Scheduled Tribe (ST), the proportionate share of population is about 34.10 per cent. The rest 20.28 per cent populations belong to general category and 5.07 per cent populations are belonging to scheduled caste category.

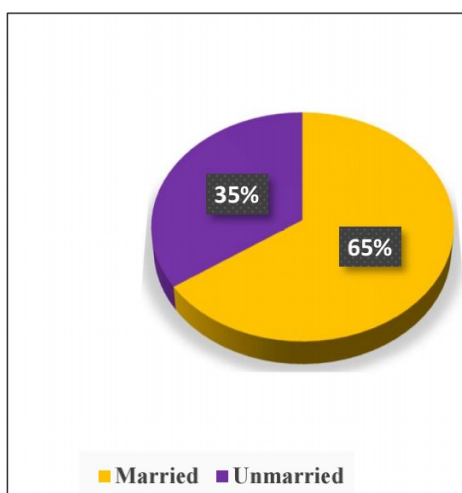


Figure 3.5: Marital status

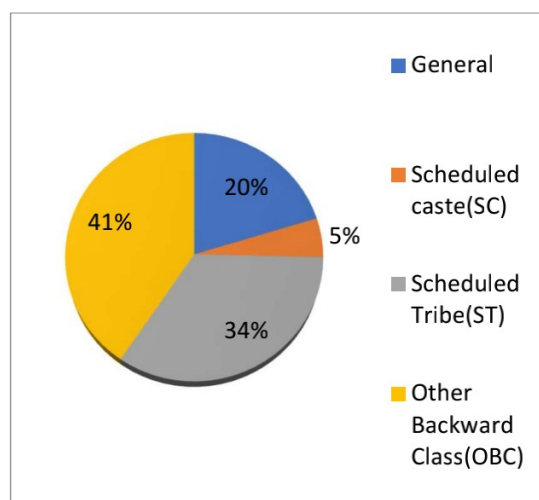


Figure 3.6: Caste composition

3.1.8 Language:

A language is a system of communication which consists of a set of sounds and written symbols which are used by the people of a particular country or region for talking or writing. Just as there are different languages in different places, Takdah also has some languages, which is described below. The dominant languages in Takdah are Nepali, Hindi, Bengali and English. Bengali is the official language of the place. On the other hand, Nepali declared as co-official language only in Darjeeling and Kurseung subdivisions. Nepali is very common to most of the people. Besides, Refugees and some other Tribal people speak Tibetan but the population of Takdah is predominantly Nepali speaking. There are also smaller number of Lepchas, Bhutias, Tibetans, Marwaris and Biharis. The Nepali community is a complex conglomeration of various castes and ethnic groups, with the ancestry of many of them rooted in tribal and animist traditions. Their religious traditions find expression in everyday life.

Among the total surveyed families, 51 families speak in Nepali language which is 89.47 per cent of the total surveyed families. Second largest speaking language is Hindi; about 5.26 per cent of the total surveyed families speak in Hindi language. The rest 2 families speak in Gorkhali and only 1 family speaks in Bhojpuri which is migrated from West Bengal.

Table 3.7: Language group

Language	No. of households	(%) of households
Gorkhaly	2	3.51
Nepali	51	89.47
Bhojpuri	1	1.75
Hindi	3	5.26
Total	57	100

Source: field survey, 2023

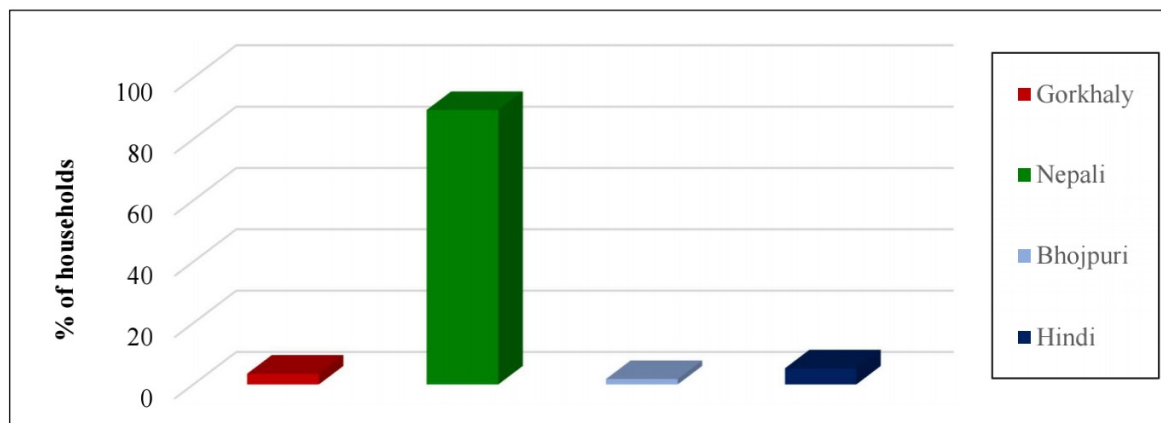


Figure 3.7: Language group

3.1.9 Religion: The main religion of the Sikkim state is Hinduism. According to the 2011 census 57.8 per cent people follow Hinduism. Hinduism is followed by 76.13 percent of the entire surveyed population, making it the most popular religious group among those surveyed. Christianity is followed by 11.29 percent of the total. Buddhism is practiced by 8.39 percent of the people surveyed. Only 2.58 percent of the respondents believe in Islam, while only 1.61 percent believes in Sikhism.

Table 3.8: Religious group

Religious group	Number of population	Percentage level
Hinduism	145	66.82
Buddhism	41	18.89
Christianity	21	9.68
Islam	10	4.61
Total	217	100

Source: field survey, 2023

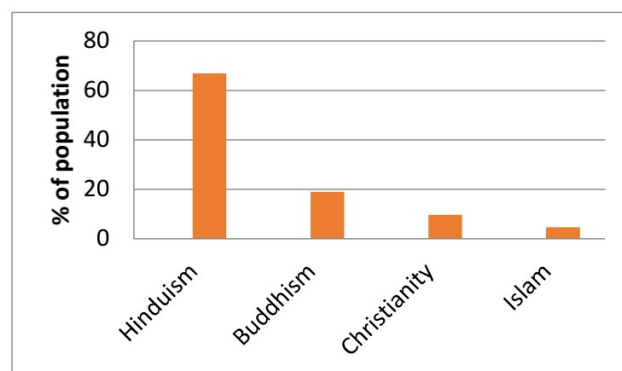


Figure 3.8: Religious group

3.1.10 Literacy and Education: Literacy rate is satisfactory in this area. About 92.17 per cent of the surveyed population are literate whereas only 7.83 per cent of the surveyed populations are illiterate (table 3.9 and figure 3.9). About 88.89 per cent of the surveyed male people are literate whereas, 97.56 per cent of surveyed female people are literate. The number of illiteracy both the cases of male and female is very low though it is a tribal dominated area and hilly area. From the data we can say that education level is satisfactory. (Table 3.9 and Figure 3.9)

Table 3.9: Percentage of literate & illiterate people

Status	Total	Percentage	Number of males	number of females	percentage of males	Percentage of females
Literate	200	92.17	120	80	88.89	97.56
Illiterate	17	7.83	15	2	11.11	2.44
Total	217	100	135	82	100	100

Source: field survey, 2023

Similarity is also found between literacy and quality of education of the people of Takdah village. According to qualification, the literate persons can be divided in different categories which can note below (table 3.10 and figure 3.10)

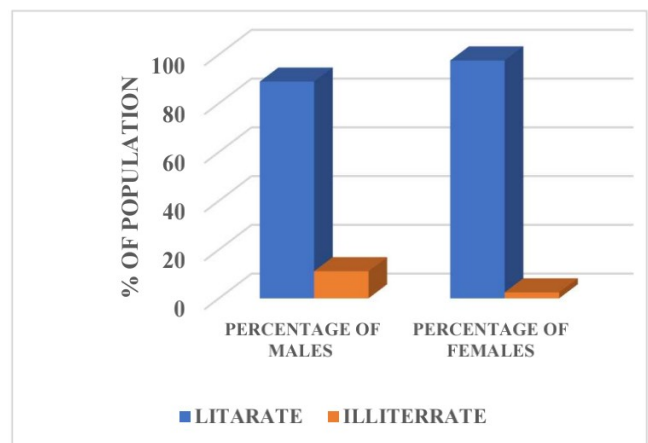


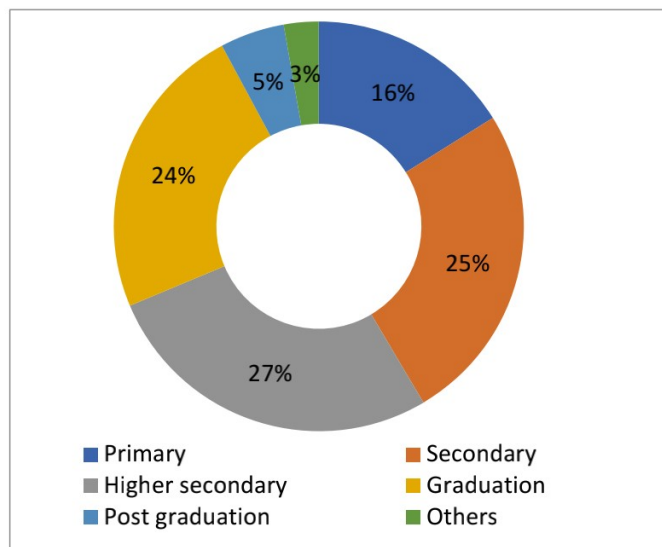
Figure 3.9: Literate & Illiterate

Table 3.10: level of Qualification of the surveyed population

Qualification	literate persons	Percentage
Primary	35	16.13
Secondary	55	25.35
Higher secondary	59	27.19
Graduation	51	23.50
Post graduation	11	5.07
Others	6	2.76
Total	217	100

Source: field survey, 2023

From the above figure 3.10, it is clear that the level of educational standard is quite high among the literate persons in Takdah village. About 16 per cent of total literate persons have the qualification up to primary level. About 25.35 per cent of the total surveyed literate people have the qualification of secondary level. About 27.14 per cent have passed the



higher secondary examination. The percentage of graduate, post graduate and others qualified people are 23.50 per cent, 5.07 per cent, 2.76 per cent respectively.

Figure 3.10: Education Level

3.1.11 Food habit: They eat rice, bread, leafy vegetables, vegetables, cereals and pulses etc as their food. Rice is their staple food. Most of the people are meat eaters. Variety of fresh and processed meats of mutton, beef, pork, chicken are feasted in almost every meal. From the figure 3.11 it is clear that peoples of Takdah village are meat eaters. Among the 57 total surveyed families, 46 numbers of households are non-veg which are 80.70 per cent of the total surveyed family. Only 19.30 per cent surveyed have their food habit of veg categories (Table 3.11 and Figure 3.11).

3.1.12 Mode of transport: Now a day's Sikkim developing in transport system. Numbers of roads are constructed throughout the Sikkim to connect the four districts. In Sikkim Road is the only mode of transport. About 54.41 per cent of the surveyed families use public transport vehicle. Only 27.94 per cent of the total surveyed families have their own car like bike, car and for transport they use their own transport vehicle. About 17.65 per cent of the surveyed families prefer walking as a mode of transport for visiting local market, office etc (Table 3.12 and Figure 3.12).

Table 3.11: Food habit

Food habit	Number of house holds	% of house holds
Veg	11	19.30
Non veg	46	80.70
Total	57	100.00

Source: field survey, 2023

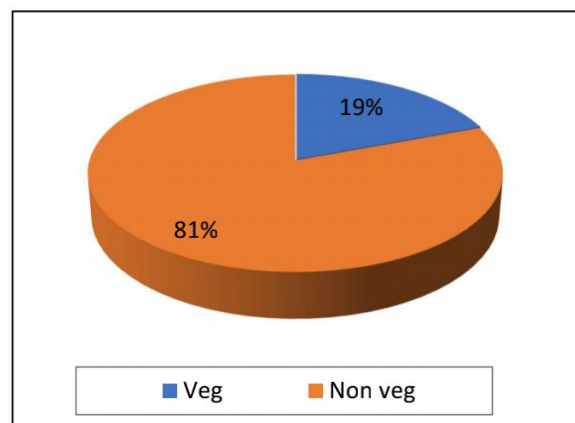


Figure 3.11: Food Habit

Table 3.12: Mode of Transport

Mode of transport	Number of houses holds	% of house holds
Walking	15	26.32
Bi-cycl	5	8.77
Public bus	20	35.09
Own transportation	17	29.82
total	57	100.00

Source: field survey, 2023

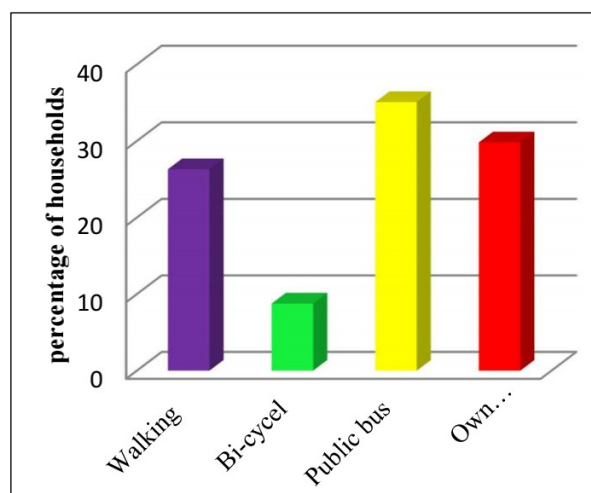


Figure 3.12: Mode of transport

3.2: Economic status

3.2.1 Occupational structure

About 48.39 per cent of the total surveyed populations of Takdah village are engaged in work. Rests 51.61 per cent are non-workers (table 3.13 and figure 3.13). Thus, a large percentage of non working population depends upon a little percentage of working people in Takdah village. Incapability of the West Bengal socio-cultural and economic structure to generate enough employment opportunities is mainly responsible for low percentage of work force. So, economic condition of this place is not satisfactory to a considerable extent.

Table 3.13: worker & non-worker people

Sector	Number of persons	Percentage level
Total worker	105	48.39
Total non-worker	112	51.61
Total	217	100

Source: field survey, 2023

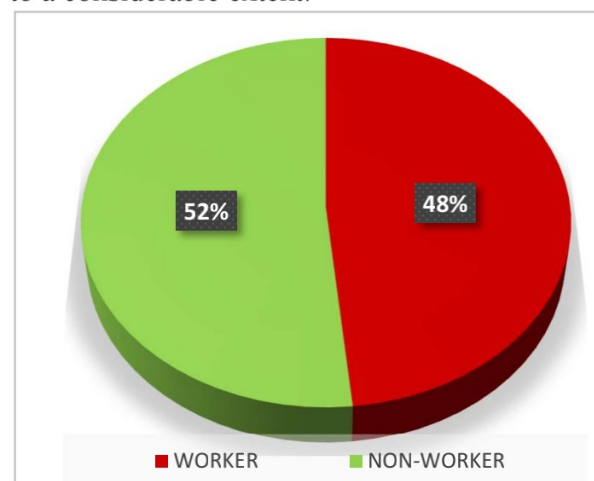


Figure 3.13: Worker and Non-worker

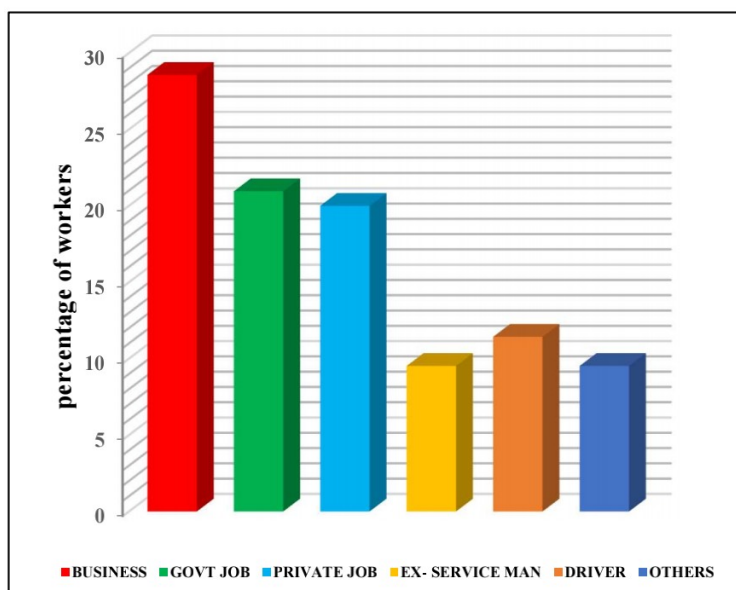


Figure 3.14: Occupational structure

Table 3.14: Occupational structure

Occupation	Number of workers	Percentage level
Business	30	28.57
Govt job	22	20.95
Private job	21	20
Ex- service man	10	9.52
Driver	12	11.43
Others	10	9.52
Total	105	100

Source: field survey, 2023

The above figure 3.14 shows how much workers are engaged in different types of works. It being a tourist area, business is the main occupation of the people. Nearly 28.57 per cent of the working people are engaged in agriculture. Darjeeling is famous for tourism. Huge amount of tourist is come from different part of India as well as world. Because of the tourism numbers of peoples are engaged as tourist car driver. Among the total surveyed working people about 11.43 per cent are engaged as a driver of tourist car. About 20.95 per cent are engaged in government job and 20.00 per cent of the surveyed working people are engaged in private sector job. About 9.52 per cent working people are engaged in other sector like non-government, factory workers etc.

3.2.2 Income and expenditure

Monthly income per family is not same in this area. Figure 24 shows income status of surveyed families. About 8.77 per cent of the surveyed families' monthly income is less than 10000. Monthly income of these families is low and they belong to lower class family. Monthly income of 31.58 per cent surveyed families is 10000- 20000. This percentage of families is highest so far as monthly is concerned. Monthly income of these families is moderate and they belong to middle class family. Monthly income of 20000-30000 is found in 22.80 per cent of the surveyed

Table 3.15: monthly income

Monthly income in Rs	Number of family	Percentage level
<10000	5	8.77
10000-20000	18	31.58
20000-30000	13	22.80
30000-40000	10	17.54
>40000	11	19.30
Total	57	100

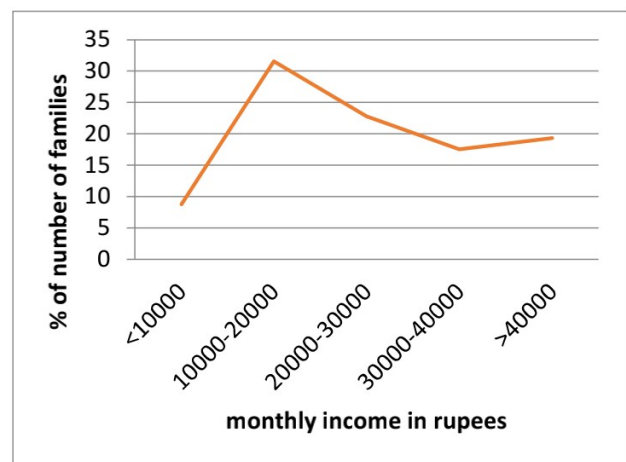


Fig.3.15 Monthly income

families. About 17.54 per cent families' monthly income is 30000-40000. About 19.30 per cent surveyed families earn more than 40000 per month. Monthly income of these families is high. These families are economically well-equipped and belong to upper class family.

They spend their earnings for food, cloths, residence maintenance, household equipments, education, medicine, electricity, festival and others. Out of 57 surveyed families 48 families spend most of their earning and run under deficit budget and the rest 20 families have surplus budget.

3.2.3 Finance

They get financial help from the government and non government banks. Among the 57 total surveyed families 12 families get loan from the banks which is about 21.05 per cent. Maximum families take car loan for their tourism benefit. The rest 56 families don't have any kind of loan.

Table 3.16: loan taken

Loan taken	Number of families	Percentage level
Yes	12	21.05
No	45	78.95
Total	57	100

Source: fieldsurvey, 2023

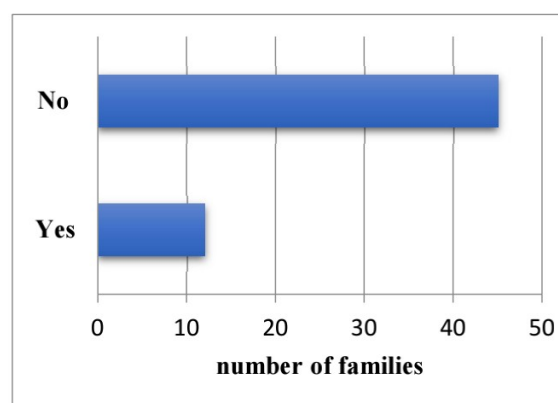


Figure 3.16: loan taken by number of families

3.2.4 Family Engaged in Agriculture: Takdah is tourist spot of Darjeeling district. Because of that maximum people are engaged in non-agricultural activities. Table 3.17 shows that about 70.18 percent families are engaged in non-agricultural activities. Takdah is a British containment area. From the time of British period this place is used for the production of tea.

Here famous Rangali Rongloid tea estate situated. Because of the tea estate about 29.82 percent families engaged in agriculture.

Table 3.17: Farming status

Farming status	Number of Family	percentage level
Farmer	17	29.82
Non-Farmer	40	70.18
Total	57	100

Source: field survey, 23

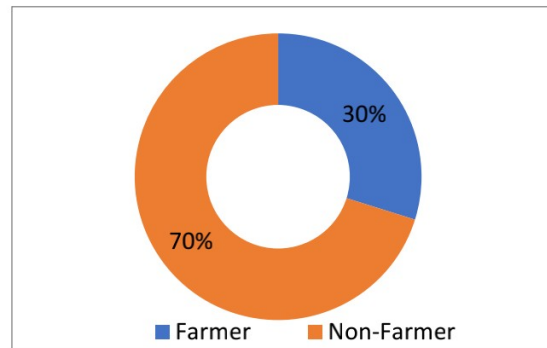
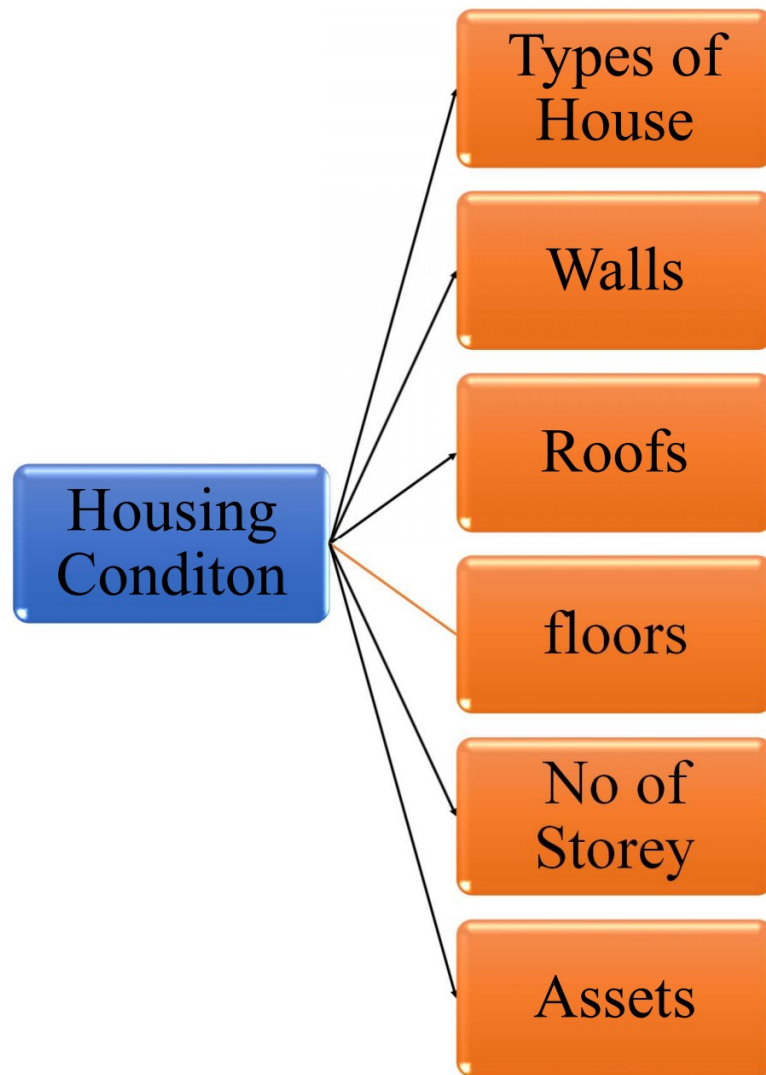


Figure 3.17: Family engaged in Farming

Chapter 4.0

Housing condition of Takdah Village

Chapter Association



4.0: Introduction

Housing is critical to a country's, regions, or area's economic development. Housing is not only one of the most basic necessities of life, but it also serves as a barometer of the population's living standards. The term "housing" is defined variously by the scholars. For example, Smith (1776) describes housing as a commodity; Ricardo (1817) defines it as a tangible asset with a prospective return; and Jevons (1871) defines it as a fixed asset, whether owned or rented. A home is more than just a refuge for many low-income families. It has allowed people to work from the comfort of their own homes and make positive changes in their lives. Breaking the cycle of poverty requires stable and affordable housing. A quality home leads to better health, higher school achievement, more economic prospects, and increased community togetherness. The value structure of an organization, on the other hand, is measured in terms of assets or lack thereof. Assets are items with a monetary value. To put it another way, an asset is any resource or good that may be used to produce cash flow, lower expenses, or bring future economic advantages to an individual, government, or organization. Assets have economic value and can help a company's operations, enhance a company's value, or boost a person's net worth. Personal assets are those belonging to an individual, whereas business assets are those belonging to a corporation or enterprise. Physical or intangible assets, currently for sale or for long-term sale, or utilized in the day-to-day operations of a corporation, are all examples of assets. We employed a total of eight indicators in the study to describe the dwelling conditions and asset status in the Cooch Behar municipality. Wall structure, roof structure, room density, storied number, seal latrine, separate kitchen, ownership status, and asset availability are all factors to consider.

4.1 Type of house

Agglomerated settlement has developed in Takdah village. Houses are constructed on the gentle slopes of hills are one or double storied. Besides this, linear settlement is also found along the road. Here the houses of the people are Pakka. Pakka houses account for 70.59 percent of the houses surveyed. Kachcha houses account for 14.71 percent of all surveyed houses. Sem-pakka was discovered in 13.24 percent of the houses. A wooden house is owned by only one family. Each house has several numbers of rooms. Doors and windows of the houses are built with wooden frames and fitted with thick timber shutters. The walls and floors of the houses are made of cementing materials. The walls are plastered with sand and cement. The roofs of the houses are made of tin, asbestos and concrete (Table 4.1 and Figure 4.1).

4.2: Wall structure

In Takdah village, maximum houses are Pakka in nature. Because of that wall of the maximum house are made brick and concrete. Among the 57 surveyed houses, 59.65 per cent walls of the houses are made of brick. 33.33 per cent of the total are mixed in nature which means half made of concrete and another half wooden or mud. Only 7.02 per cent of the total surveyed houses' walls are made of mud (Table 4.2 and Figure 4.2).

4.3 Roofs structure

In Takdah village, the majority of the families are from a lower social level. The majority of the houses are made of concrete. The roofs of 47.37 percent of the houses studied are composed of concrete. Tin roofs account for 35.09 percent of all roofs, while asbestos tin roofs account for 12.28 percent of all roofs. The roofs of only 5.26 percent of the houses are constructed of tallies (table 4.3 and figure 4.3).

Table 4.1: Types of Houses

Houses types	Number of houses	Percentage level
Kaccha	6	10.53
Pakka	35	61.40
Semi pakka	13	22.81
Wooden	2	3.51
Others	1	1.75
Total	57	100

Source: Field survey, 2023

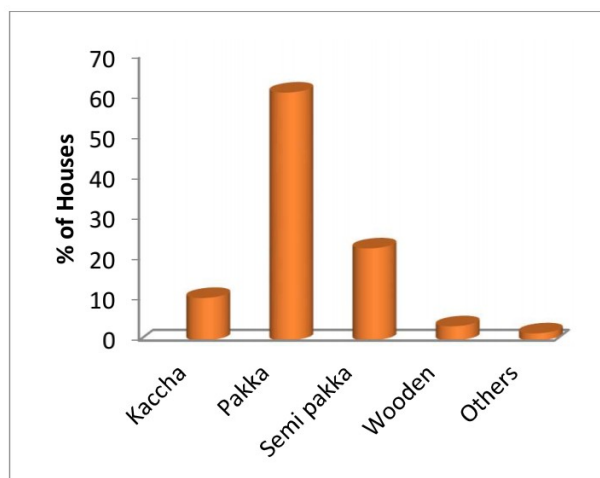


Figure 4.1: Types of House

Table 4.2: Types of Walls

Types of walls	Number of walls	Percentage level
Mud	4	7.02
Brick	34	59.65
Mixed	19	33.33
Total	57	100

Source: Field survey, 2023

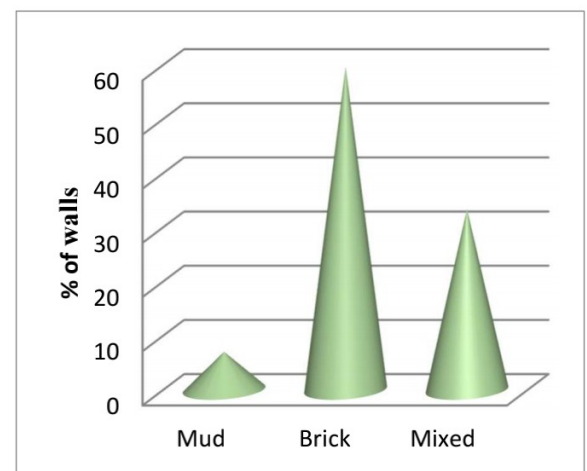


Figure 4.2: Types of Walls

4.4: Types of floors

The percentage of metallised floors in the Takdah village is higher than the percentage of unmetallised floors. About 82.46 percent of the floors in the residences studied are metallised. People prefer the metallised floor because this is a tourist destination and they made their floor metallised to provide better service to visitors. The percentage of unmetallised floors is lower, at around 17.54% (Table 4.4 and Figure 4.4)

Table 4.3: Roof materials

Roofs materials	Number of roofs	Percentage level
Tallies	3	5.26
Tin	20	35.09
Asbestos	7	12.28
Concrete	27	47.37
Total	57	100

Source: Field Survey, 2023

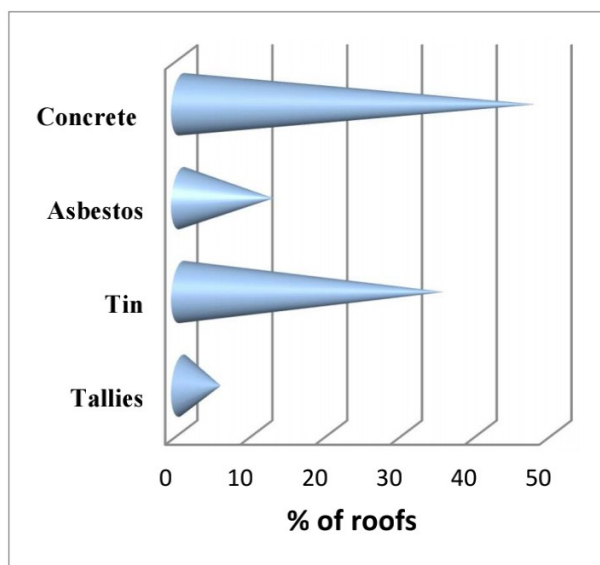


Figure 4.3: Roofs materials

Table 4.4: Floors types

Types of floors	Number of floors	Percentage level
Metalled	47	82.46
Unmetalled	10	17.54
Total	57	100

Source: Field Survey, 2023

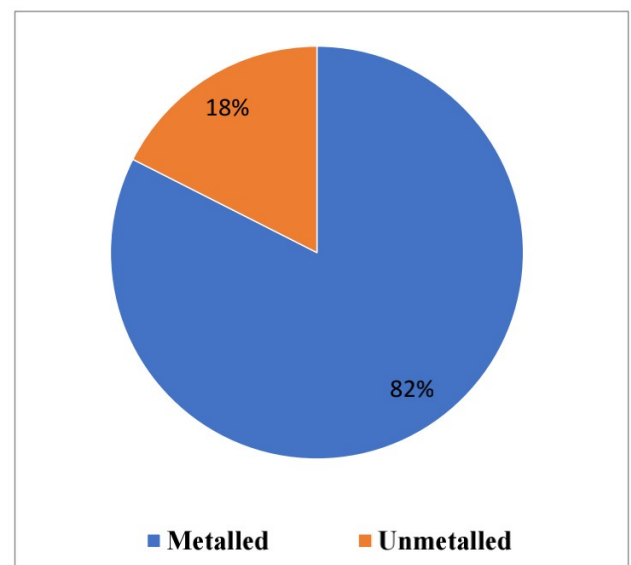


Figure 4.4: Floors materials

4.5: Number of storeys:

In the Takdah village number of non-storied house is highest than storied house. About 56.14 percent of the surveyed houses are non-storied in nature. This is a hilly area, due undulating surface making of storied house is difficult and expensive. Because of that only 43.86 percent houses are stored in nature (Table 4.5 and Figure 4.5).

Table 4.5: number of Storied

Storeys	Number of houses	Percentage level
Storied	25	43.86
Non storied	32	56.14
Total	57	100

Source: Field survey, 2023

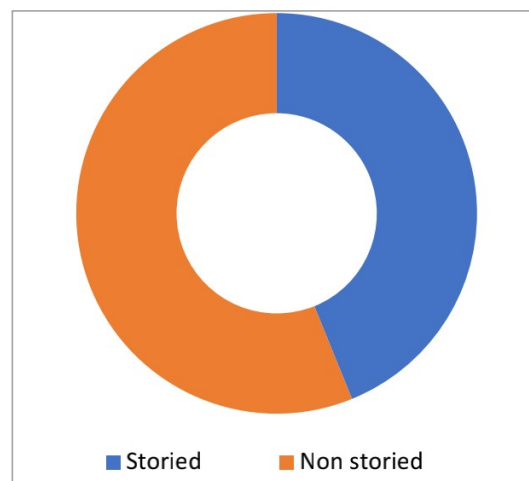


Figure 4.5: number of storied and Non-storied house

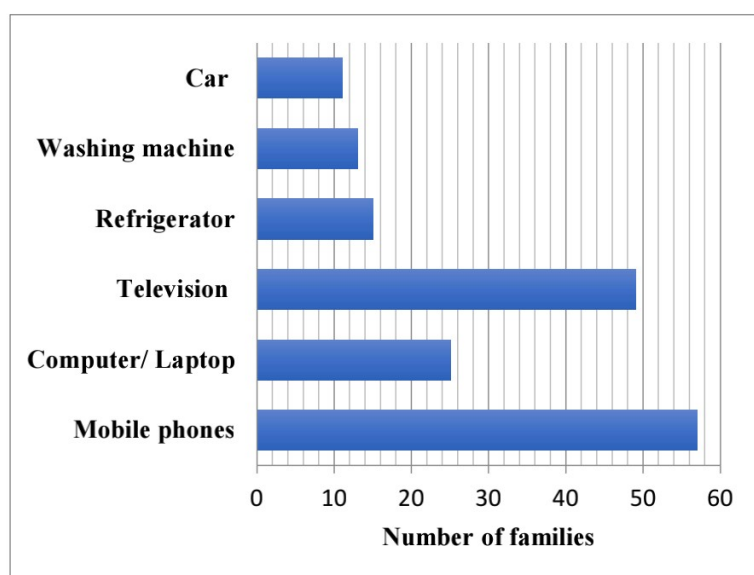


Figure 4.6: Commodity used by the surveyed people

Table 4.6: commodity used

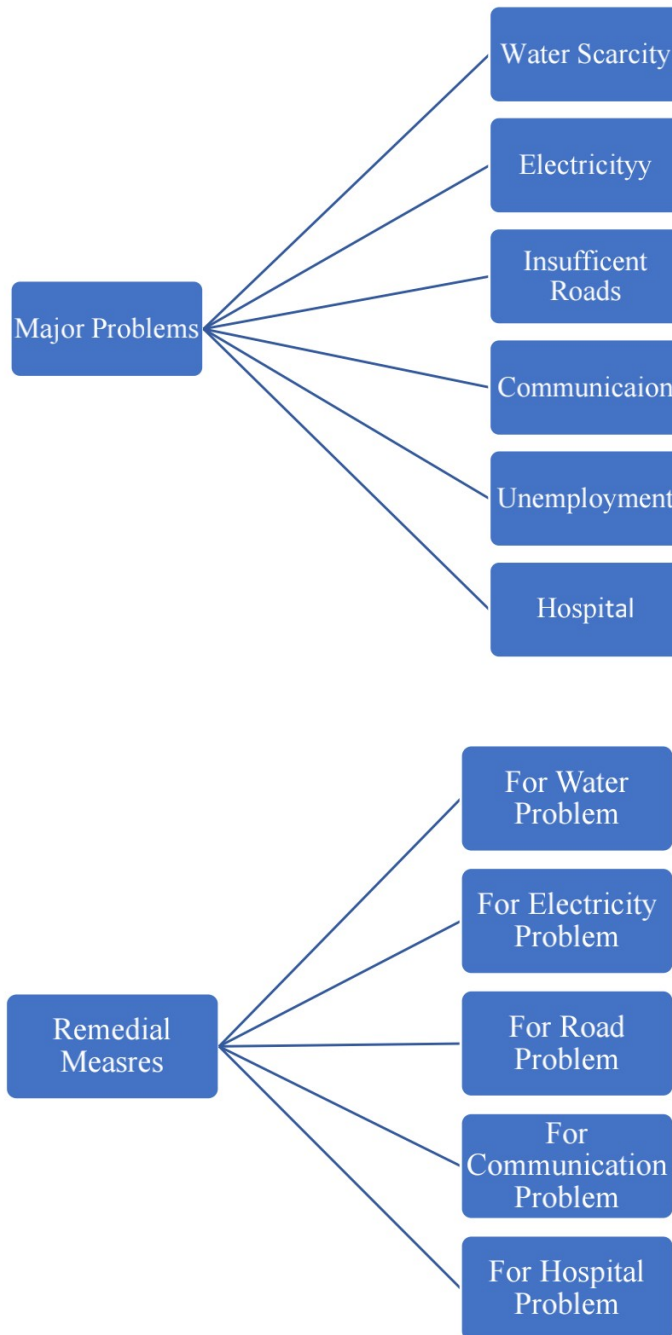
Commodity	Number of families
Mobile phones	57
Computer/ Laptop	25
Television	49
Refrigerator	15
Washing machine	13
Car	25

Source: field survey, 2023

4.6: Assets: Here maximum number of families uses mobile phone. Mobile phone is used by all of the families. Computer and laptop used by 25 families. Television is found in 49 families. A small number of family members utilize the refrigerator, washing machine, and car. Takdah village is a high altitudinal place that's why use of refrigerator is very less.

Chapter 5.0

Major problems and remedial measures



5.1: Introduction

The socioeconomic status (SES) of a person is a combined economic and sociological complete measure of a person's work experience, economic access to resources, and social standing in relation to others. When determining a family's SES, the household income, earners' education and occupation, as well as combined income, are considered, but an individual's SES is determined solely by their own traits. Perceived financial stress, as defined by the "balance between income and necessary expenses," is a lesser-known component of SES, according to recent research. Financial stress can be measured by determining if a person has more than enough, just enough, or not enough money or resources at the end of each month. SES, on the other hand, is more typically used to represent a financial disparity. SES, on the other hand, is more typically employed to illustrate a societal economic disparity.

5.2 major problems:

This socioeconomic status does not exist in every country. This varies from one location to the next. The socioeconomic situation in Takdah village is more or less normal; however experts have discovered several issues. These issues have a negative impact on Takdah village's overall socioeconomic position. The major issues we discovered in Takdah village are discussed below.

5.2.1: Water Scarcity: In the hill region, quality drinking water is always a challenge. We discovered the same issues in Takdah village. The locals of Takdah village claim that the water supply is irregular and insufficient.

5.2.2: Electricity Supply: The researchers also identified electrical supply as a serious issue. Load shading is common, and some isolated families have been without power for extended time.

5.2.3: Insufficient Roads: The problem of transportation in the hills is a major issue. The construction of a road is extremely tough and costly. There is only one metalled road that runs

through the settlement, connecting it to the district town. Because Darjeeling is a landslide-prone location, the road is in poor condition when heavy rain falls.

5.2.4: Communication Problem: Nowadays, cell phones are widely used. However, we discovered that there is a mobile tower problem in the research region. As a result, the residents of Takdah village confront significant communication challenges. As a result of the pandemic, the educational system has now gone online. However, the students of Takdah village are unable to complete their online classes due to the lack of a mobile network.

5.2.5: Unemployment: Unemployment is increasingly a global concern. Unemployment in India is extremely high. This situation has turned into a national crisis as a result of the Covid 19 outbreak. We discovered the same issue in Takdah village as well.

5.2.6: Hospital Problem: However, because of isolated settlements and a lack of transportation, health care in the hill region has become extremely challenging. We also discovered a problem with the health service at Takdah village community. The number of hospitals is insufficient. In Takdah village, there is only one primary health care centre, and the village has no hospital.

Table 5.1: Major problems in the Takdah village

Major problems	Number of families	Percentage level
Water supply	41	60.29
Electricity	13	19.12
Insufficient roads	17	27.94
Communication	37	54.41
Unemployment	21	30.88
Hospital shortage	51	75.00

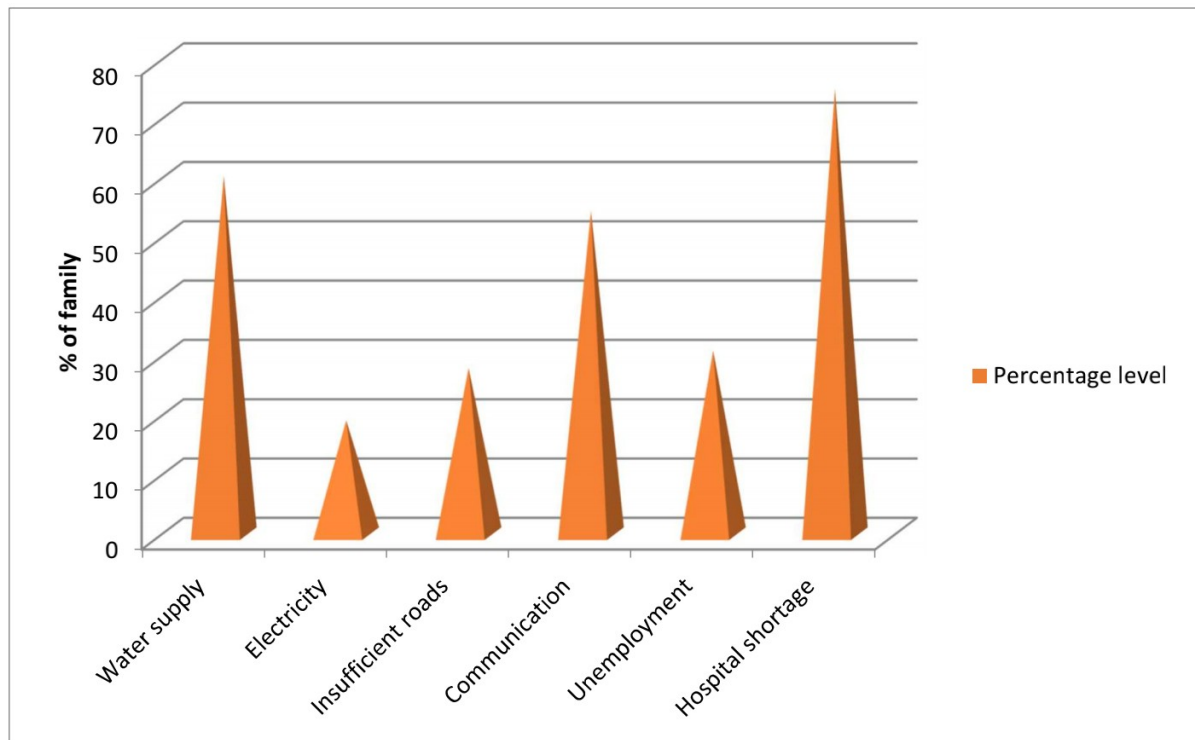


Figure 5.1: major problems of the surveyed families

5.3: Remedial measures:

Following steps can be taken to solve the above-mentioned problems in the above.

5.3.1: For Water Problem:

i) To collect rainwater for drinking and other purpose by adopting roof top rainwater harvesting on all the public, private buildings in the village.

ii) To construct storage tanks in the hill areas of villages.

iii) To improve impounding of water in existing structure through measures such as desalting and deepening of tanks/wells, check dams.

5.3.2: For Electricity Problem: To propagate non-conventional and renewable sources of energy like solar panels.

5.3.3: For Road Problem:

- i) Construction of small foot bridges for connecting remote villages
- ii) Maintain the roads properly in regular interval

5.3.4: For Communication Problem: by the cooperation of the local construct more mobile tower in the Takdah village.

5.3.5: For Unemployment Problem:

- i) Number of the cottage industries and small-scale industries has to be increased
- ii) Focus on ecotourism and government should help in the development of eco tourism in Takdah village.

5.3.6 For Hospital Problem: To fix the situation, the primary health centre should hire a permanent doctor and support staff.

Chapter 6.0

Summery and Conclusion

The male population in this location outnumbers the female population in the studied population. The age group 15-64 years accounts for the majority of the population (78.06%). The dependency of young and old persons on adults is observed to be lower. There is a sex disparity in the age composition. In the area, the number of medium-sized families (4 to 6 members) is the highest. In nature, 98.52 percent of families are indigenous. About 41.49 percent of the population is married. The population of scheduled tribes is more than that of the other castes. Nepali is the primary language spoken in the region. Hinduism is the majority religion in this area. The literacy rate is acceptable. Literacy rates in the examined population are at 81.63 percent. In nature, they aren't vegetarians. The only means of transportation is by road. The majority of individuals rely on public transportation. The bulk of the inhabitants in this area are non-farmers. Agriculture employs about 57.03 percent of the working population. This neighborhood has a low-income level. The area has the biggest percentage of persons in the 10000-20000 income categories, which is 33.82 percent. The vast majority of people do not have access to any type of credit. The majority of the dwellings in this region are Pakka. The majority of the house's walls are composed of brick. The majority of home roofs are made of concrete, and the floors are metalled. The majority of the houses are single-story in design. The number of employed people is insufficient. This region's economic situation is unsatisfactory. Water scarcity, electricity shortages, insufficient roads, communication issues, unemployment, and healthcare issues are all serious issues in this region.

The preceding discussion demonstrates that, while progress has been made on socioeconomic fronts in this area, the situation remains unsatisfactory. It is therefore critical for the concerned authority to implement proper integrated and sustainable development programmes for the area

in order to further the area's development. A symmetrical and balanced economic environment will emerge in this area if the required programmes are implemented appropriately. The people's lifestyles will change. The neighbourhood will be brimming with human capital. Human resources will be used to the fullest degree possible to speed up the area's development.

Appendix-I: Questionnaire Used in the Study

QUESTIONNAIRE FOR SOCIO-ECONOMIC SURVEY

PLACE:

1. Name of the head of the family:

2. Basic information of family member:

Sl. No.	Name	Age	Sex		Literate		Occupation	Educational level						Marital status
			M	F	Yes	No		Pri.	Sec.	HS	Gra.	PG	Oth.	
1														
2														
3														
4														
5														
6														
7														
8														
9														
10														

3. Religion: 4. Language.....5. Cast: General/SC/ST/OBC/Other

7. No. of workers: total: male: female:

8. Service: Govt. / Private Monthly income..... Monthly expenditure.....

9. Size of land: area under cultivation..... area not cultivated.....

10. No. of agricultural labour employed:

11. Types of crop cultivated/sold: Paddy/wheat/mustard/other oil seeds/vegetables/others

12. Type of agricultural fertilizer: organic/ inorganic

13. Approx. cost of cultivation: irrigation: yes/no

14. Source of irrigation: well/tube well/canal/Jhora/other

15. Loan taken- yes/no

16. No. of domesticated firm animal:

cow	hen	ducks	geese	lamb	others

17. Type of house: kaccha/pakka/semi pakka/wooden/others

18. Total no. of room: _____ Storied/non storied: _____

19. Roof type: straw and leaves/ tallies/tin/asbestos/concrete

20. Floor: metal/ partly metal/ unmetal

21. Wall: mud/brick/mixed

22. Source of drinking water:

23. Source of fuel: kerosene/wood/coal/gas/others

24. Food habit: veg. /non veg.

25. News paper: Yes/No

26. Magazine: Yes/No

27. Name of the nearest school: Distance.....

28. Nearest market- daily/bi-weekly/weekly/monthly distance.....

29. Medical facility-private doctor/health Centre/nursing home/hospital/dispensaries

30. Amenities in the house: Radio/T.V/telephone/mobile phone/two wheeler/ Four wheeler/others

31. Mode of transport: walking/bi-cycle/public bus/own transportation

32. Major problems;

Appendix-II: Few Moments of Data Collection









GROUP PHOTO



References

- Acton, C. E., Priestley, K., Mitra, S., & Gaur, V. K. (2010). Crustal structure of the Darjeeling-Sikkim Himalaya and Southern Tibet. *Geophysical Journal International*, 184(2), 829–852. <https://doi.org/10.1111/j.1365-246x.2010.04868.x>
- Barman, B. C. (2015). Microfinance and women empowerment: A case study of darjeelingdistrict. *PRAGATI: Journal of Indian Economy*, 2(1). <https://doi.org/10.17492/pragati.v2i1.6453>
- Bhattacharya, S., Ghosh, U. C., 2014. Socio – Environment surveys of Tinchuley and Takdah : Two emerging ecotourism hamlets of North Bengal, India. *International Letters of Natural Sciences*. Vol- 18(2014). PP. 9-26. ISSN- 2300-9675
- Bhutan and the Himalayas east of Darjeeling. (1894). *Scottish Geographical Magazine*, 10(12), 635–640. <https://doi.org/10.1080/14702549408554597>
- Cajee, L., 2014 Eco-Cultural Tourism: A Tool for Environmental, Cultural and Economic Sustainability (A case study of Takdah) SHS Web of Confidences 12,0192, published by EDO Sciences, 2014 DOI:10.1051/shsconf/2014120102
- Cajee, L., (2018). Physical Aspects of the Darjeeling Himalaya: Understanding from a Geographical Perspectiv. *OSR Journal of Humanities and Social Science (IOSR-JHSS) Volume 23, Issue 3, Ver. 1*, PP 66-79
- Chakrabarti, B. K. (2016). Darjeeling–Sikkim Himalaya. *Geology of the Himalayan Belt*, 117–132. <https://doi.org/10.1016/b978-0-12-802021-0.00007-3>
- Fukuda, Y., Nakamura, K., Takano, T., 2005. Reduced likelihood of cancer screening among women in urban areas and with low socio-economic status: A multilevel analysis in Japan, 119,875-88.
- Gautam, G., Chettri, R., 2016. Socio-Economic Implications of Self-Help Groups and Women Empowerment in Geyzing Subdivision of West District of Sikkim Vol:2, Issue:1,(June Issue),2016 ISSN:(P) 2395-4345,(O)2455-2909
- Haque, A., Telfair, J., 2000. Socioeconomic Distress and Health Status: The Urban-Rural Dichotomy of Services Utilization for People with Sickle Cell Disorders in North Carolina. *Journal of Rural Health*, 16(1): 43-55.
- Harrison, J. B. (2003). Darjeeling. *Oxford Art Online*. <https://doi.org/10.1093/gao/9781884446054.article.t021429>
- Jevons, W.S., 1871. *The Theory of Political Economy*. London: Macmillan and Co
- Li, X., Zhanga, C., Li., Weidong., Kuzovkina, Y., Weiner, D., 2015. The distribution of street greenery and its association with residents' socioeconomic conditions in Hartford, Connecticut, USA. *Urban Forestry & Urban Greening* 14, 751-759.
- Masthi, R., kulkarni, G. P., 2013. An Exploratory Study on Socio Economic Status Scales in a Rural and Urban Setting, 2(1).

Rawat,S., 2019. Sustainable Rural Tourism in Darjeeling Hills: Case studies of Takdah and Mineral Spring. International journal of Irrovative studies in Sociology and Humanities, vol - 4(6), pp. 49-68. ISSN- 2456-4931.

Ray, M., Rahaman, M., 2017. Disparity of Socio-economic Development in Cooch Behar District, West Bengal, India: A CD Block Level Appraisal. Indian Journal of Spatial Sciy, 8(2),45-51.

Ray, N., Saha, M., Das,D,K., Ghosh, S., 2012. Rural tourism and its impact on socioeconomic condition: evidence from West Bengal, India GLOBAL JOURNAL OF BUSINESS RESEARCH • VOLUME 6 • NUMBER 2

Ricardo, D., 1817. On the Principles of Political Economy and Taxation. London: John Murray, Albemarle Street

Singh, B, N., 2016, Socio-Economic Conditions of Slum Dwellers: A Theoretical Study. KIJAHS/JU L, V OL-3/ISS-3/A2 ISSN:2348-4349

Smith, A., 1776. An Inquiry into the Nature and Causes of Wealth of Nations. London: Methuen & Co., Ltd

Tamang,K,L., Thapa, S,D., Bhuwan Chhetri,B., 2016. Role of self-help groups in empowering women: a case study on selected shgs in gyalshing of Takdah. Casirij volume 7 issue 3 [year – 2016] issn 2919-9202

Yonzon, G. S., & Chatterjee, S. K. (1986). Cultivation of medicinal plants in Darjeeling district: Its future potentialities. *Acta Horticulturae*, (188), 187–192. <https://doi.org/10.17660/actahortic.1986.188.22>