

Examined
Barasat Govt. College Centre
Dept. of Geography, Barasat.

FIELD REPORT ON

APPRAISAL OF PHYSICAL AND SOCIO ECONOMIC CHARACTERISTICS OF LAVA IN KALIMPONG DISTRICT, WEST BENGAL



GPS Map Camera

Lava, West Bengal, India
3MP6+GVG, Lava Rd, Lava, Kolbong Forest, West Bengal 734319, India
Lat 27.086166°
Long 88.662086°
07/06/24 11:35 AM GMT +05:30

Google

WEST BENGAL STATE UNIVERSITY



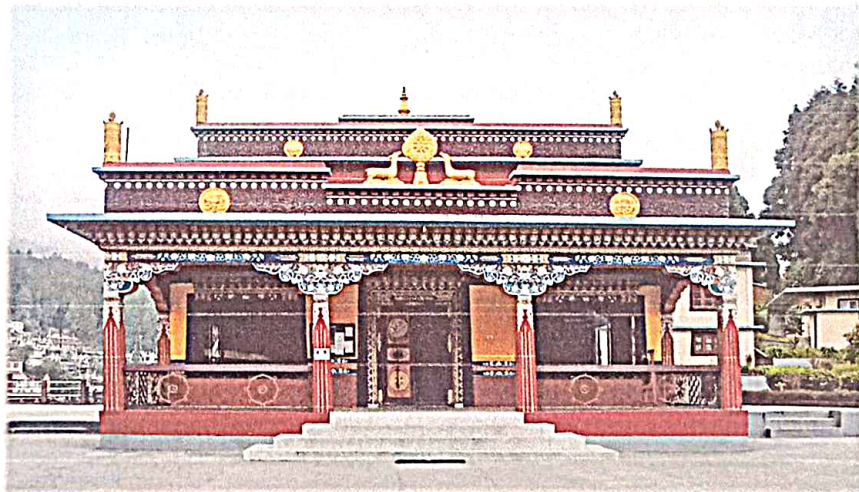
NAHATA J.N.M.S. MAHAVIDYALAYA

FIELD REPORT - 2024-25

SEMESTER - V (HONOURS)

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FIELD WORK AND RESEARCH METHODOLOGY



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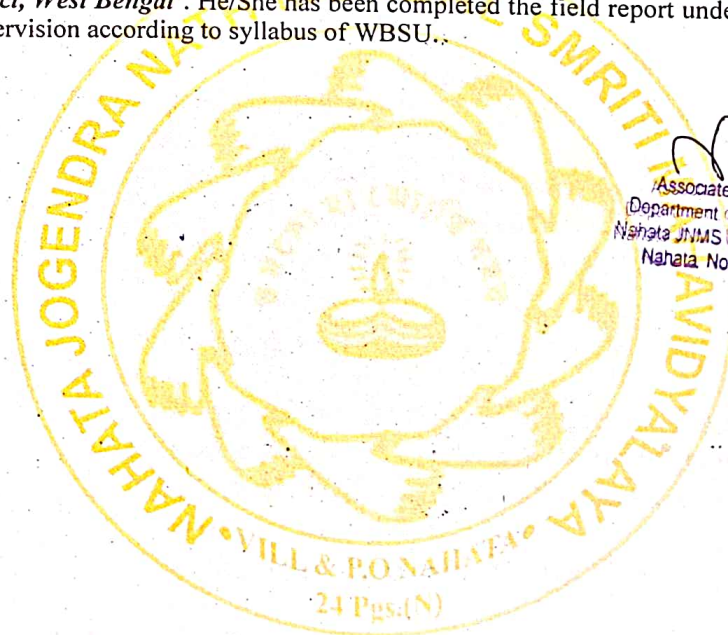
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Ref. No.....

Date.....

TO WHOM IT MAY CONCERN

This is to certify that Sri/Smt/Miss... *Nilam Sarkar*Registration/
Roll No/.....*1272221100526*.....is a student of B.A./B.Sc.Semester-V
(H) in Geography of this institution. He /She went in the Lava in Kalimpong district for
the field work on '*Appraisal of physical and socio-economic characteristics of lava in
Kalimpong District, West Bengal*'. He/She has been completed the field report under my
guidance and supervision according to syllabus of WBSU..



27/01/2025
Associate Professor
Department of Geography
Nahata JNMS Mahavidyalaya
Nahata North 24 Pgs

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ACKNOWLEDGEMENT

While preparing the field report, first of all I wish to express my sincere thanks to our Prof. Biswajit Mondal and respected madam, smt. Pinki Paul, (Nahata J.N.M. S Mahavidyalaya) and their guidance during our field survey and the preparation of the report. We are also thankful to our HOD Dr. Thantu Saradar for his thoughtful assistance during prepared this report.

Lastly, express our gratitude to the local people for their kind cooperation during the data collection and survey.

Nileam Sarikari
Signature of the student

PREFACE

Field report is an important topic in semester V Geography (Hons) graduate syllabus of west Bengal state university.

In a narrow sense, the field report deals with an intensive field study of a particular locality on a particular theme. In this concern our theme is prepare "Physico-cultural Aspect of LARA, Kalimpong."

To deal with the theme we have discussed thoroughly physical aspect socio economic aspect and over all the status and preparation of the environmental consciousness of the concerning place. In this connection we have started first the study with introduction.

As the report has started with introduction, "here we discussed about the necessity of the field study, its objects, methodology, location map and Route map applied to the discussed and making purpose.

The Next section concerned with the Physical aspect deals with the environment, thus physical aspects are very important like Topography, relief, drainage, geology - soil, natural vegetation, climate.

Next discussion is followed by the demographic structure and socio-cultural status and market of the local people and their environmental condition. Its holds most important part in our topic.

Tourism industry is the fourth chapter deal with the primary data of LARA.

last chapter about conclusion and Appendix and Bibliography.



GROUP PHOTO

CHAPTER-I

INTRODUCTION

Geography is essentially a field science. it deals with the study of spatial patterns of different human activities according to their environment. Though man and environment both are interdependent to each other environment takes or plays the dominant role. Geography always considers man as an element of environment side by side. It also discusses the human activities, how it influences the nature. To understand the man Environment Relationship in Geography, field survey or excursion always takes a vital role as intensive study.

Geography is also considered as observational science to generalise the physical and social factors and feature. The interaction of man and Environment can be different according to their location. So, field study can be always helpful to understand the geographic factors which create these dissimilarities. In micro level after finding these factors, we can generalise the interaction (Man-Environment) of some type of geographical area or region. For example, after the field study of area and its surrounding, now we can understand the geographical setting and functions of urban area Rural areas of hilly Himalayan region. Therefore, a field study is most important part to establish Geography as spatial and earth science with its social relevance.

OBJECTIVE

Main objective of the field study is Man-Environment relationship of area and its surrounding. But it is important to declare that on intensive study, it is not possible due to lack of time and infrastructural problem. To conduct a field study a geographer has to collect primary and secondary data.

Then they usually observe analysis and manipulate the data for tabulation it as a form of master table. so it is important to be careful and sincere at every step of data accumulating and processing.

The objective of the field report are as follows :

This report is problem oriented and related to environment degradation due to development processes of this Rural/urban service centre.

The objective are -

- To study the geographic location of the study area.
- To study the Physical environment of the study area.
- To study the Socio-economic condition of the local inhabitant.
- To study the local market and its influence on the life style of inhabitants.
- To study the prospect of Hotel and availabilities of present facilities.
- To study the transport network and accessibility of the place.
- To evaluate the level of environmental consciousness of local people etc.

And finally to propose the development schemes for Lara and its surroundings which would lead the area sustainable and eco friendly development.

METHODOLOGY

The field report is based on primary data which accumulated from household survey, market survey, Tourism industry and traffic survey.

After accumulation of Primary data, we tabulated all the data in masters tables according to their subject matters. Then we have represented all the data by the help of some cartographic techniques such as bar graph, pie diagram, composite bar graph, pyramid diagram etc.

STUDY AREA AND ITS SELECTION PROCESSES

We have selected the Lara because panoramic greenery, interesting mountain. The sun and clouds hidden in the sky and lifestyle of the local people. The environmental aspects such as deforestation, conflicts of human beings and wild life due to development processes are the key area in our field study.

Some of us had never seen forest and mountain region so interested to visit neara valley national park and the life of the hill people. Overall, our teacher considered our enthusiasm and took the joyful decision with the concern of our guardian and student.

BACK GROUND OF FIELD STUDY

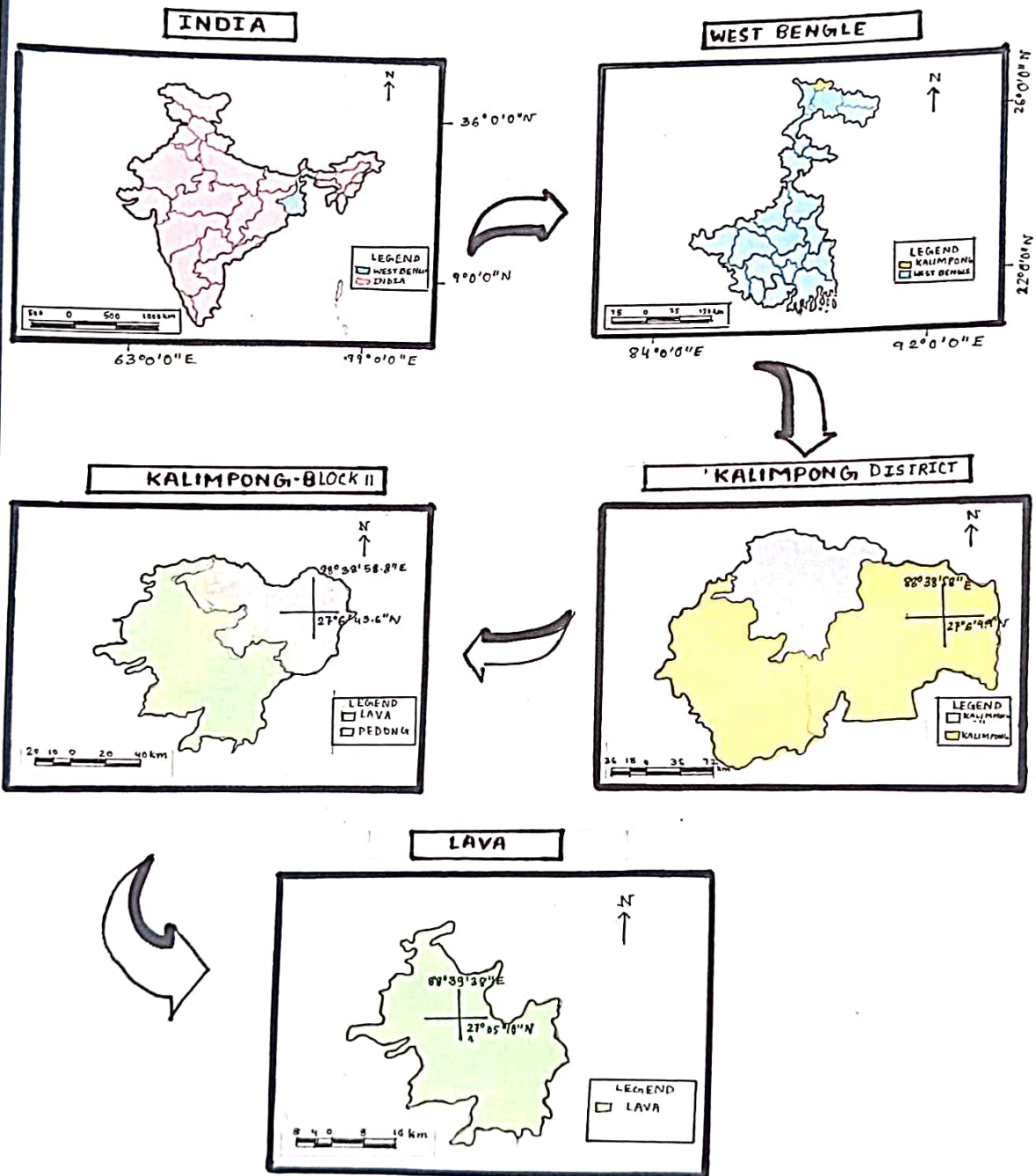
College classes actually give students the theoretical base exemplified by some theory or models. But, the local factors also can play the major role; broad generalisation of the facts is not enough for stratification, so a careful study is required to investigate to micro order adjustment to the people with the physical environment.

In this aspect we have selected Lara village in Kalimpong district for socio-economic study. Geographical studies our prime concern has been given to physico-cultural status of the place. Thus, we have tried to analyse the physical environment and its impact on socio-economic condition.

Lara is a rural service centre, located in Kalimpong district of India state West Bengal. The village is located outside the Neora Valley National Park. Lara is 103 km away from Siliguri and 60 km from New Mal, junction commonly known as NMZ.

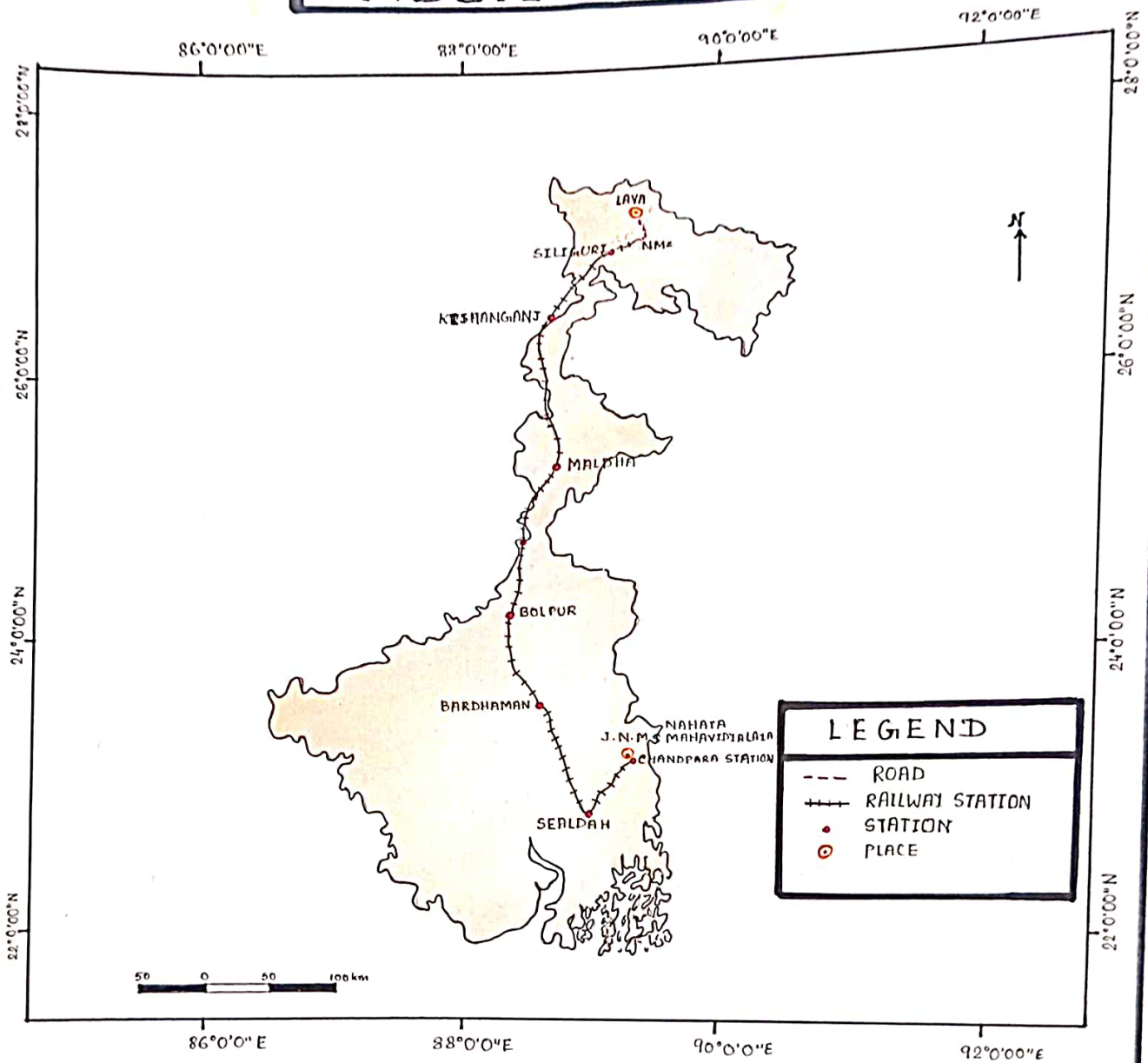
In this place, we have found a close relationship between man and environment and impact to human activities on nature. When the study was conducted, found environment degradation is occurring due to over tourism and extension plane of settlements.

LOCATION MAP



Source: Atlas of India

ROUTE MAP

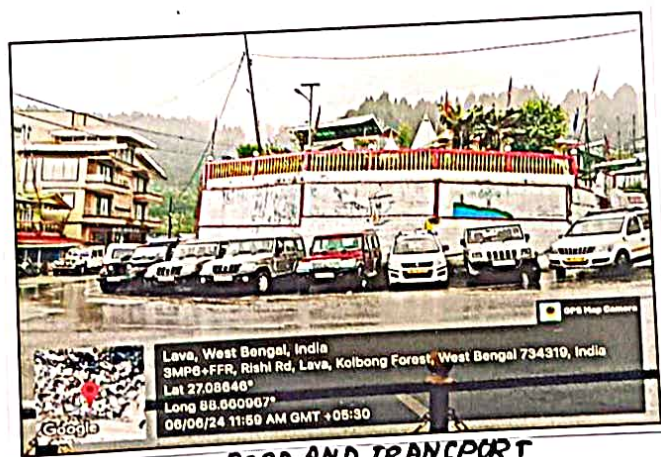


Source: Secondary data

CHAPTER-11



VEGETATION

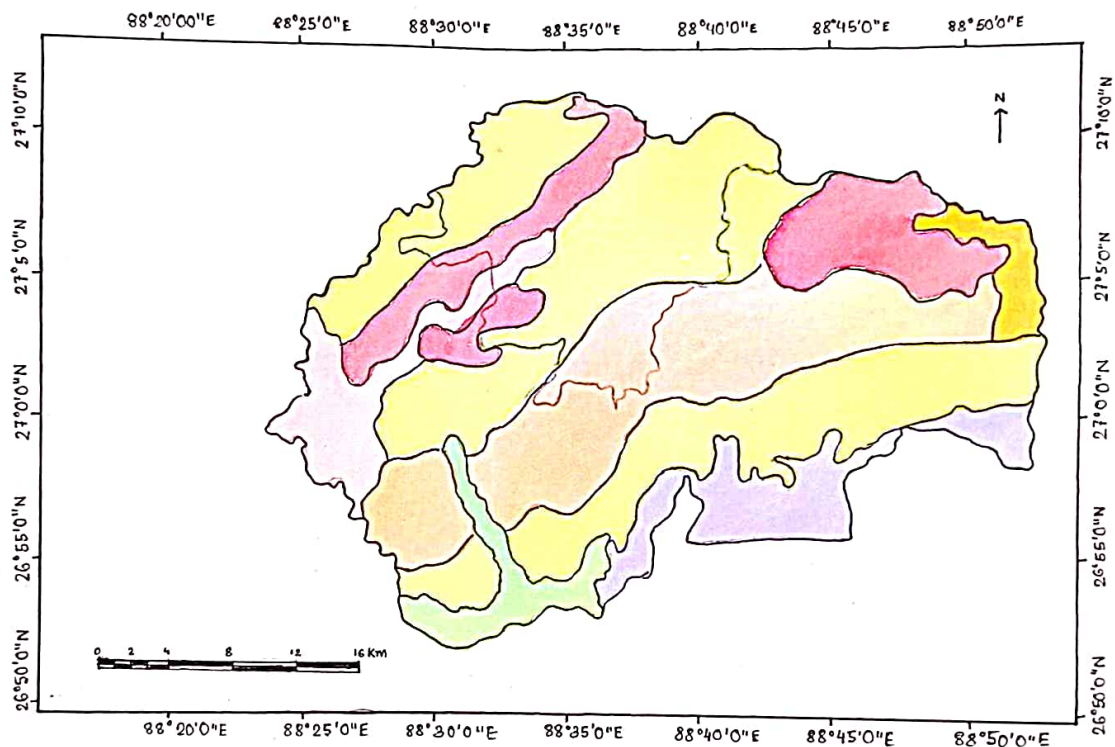


ROAD AND TRANSPORT



SOIL

SOIL MAP OF KALIMPONG DISTRICT



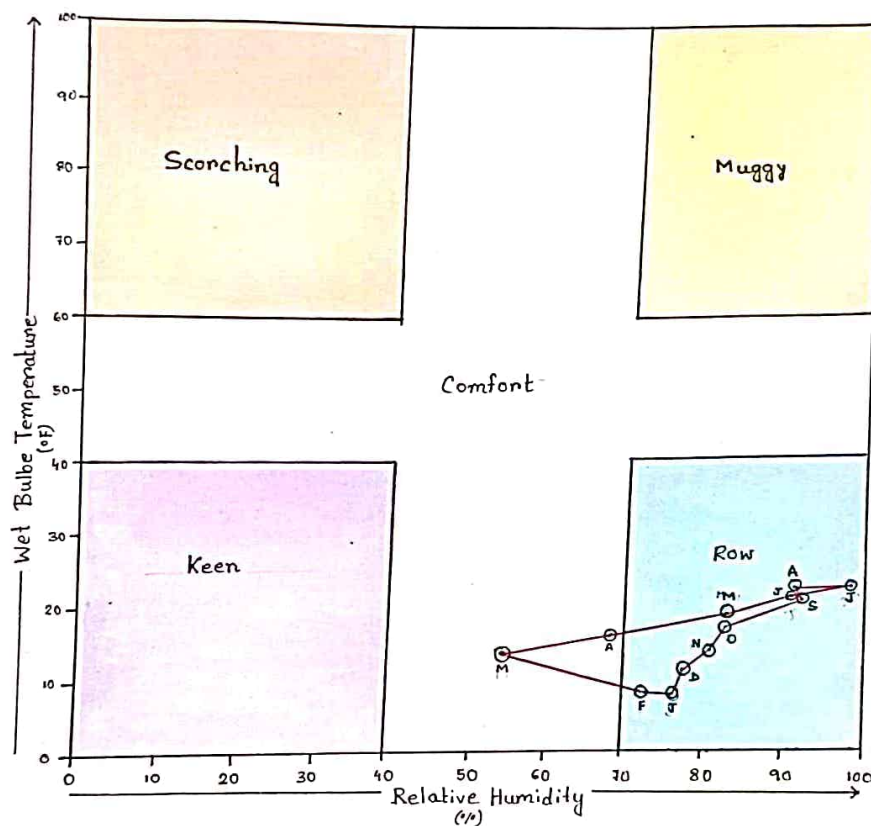
	LOAMY SKELATED
	COARSE LOAMY, TYPIC UDORTHENTS
	FINE LOAMY, TYPIC UDORTHENT
	LOAMY SKELATED
	COARSE LOAMY, UDORTHEIS
	FINE LOAMY, FLUVONTIE
	COARSE LOAMY, HAPLAQUENTS

Source: District Survey Report (2022)

CLIMOGRAPH (after Talyon)

SHOWING
THE RELATIONSHIP BETWEEN RELATIVE HUMIDITY AND WET BULB TEMPERATURE

LAVR, 2022



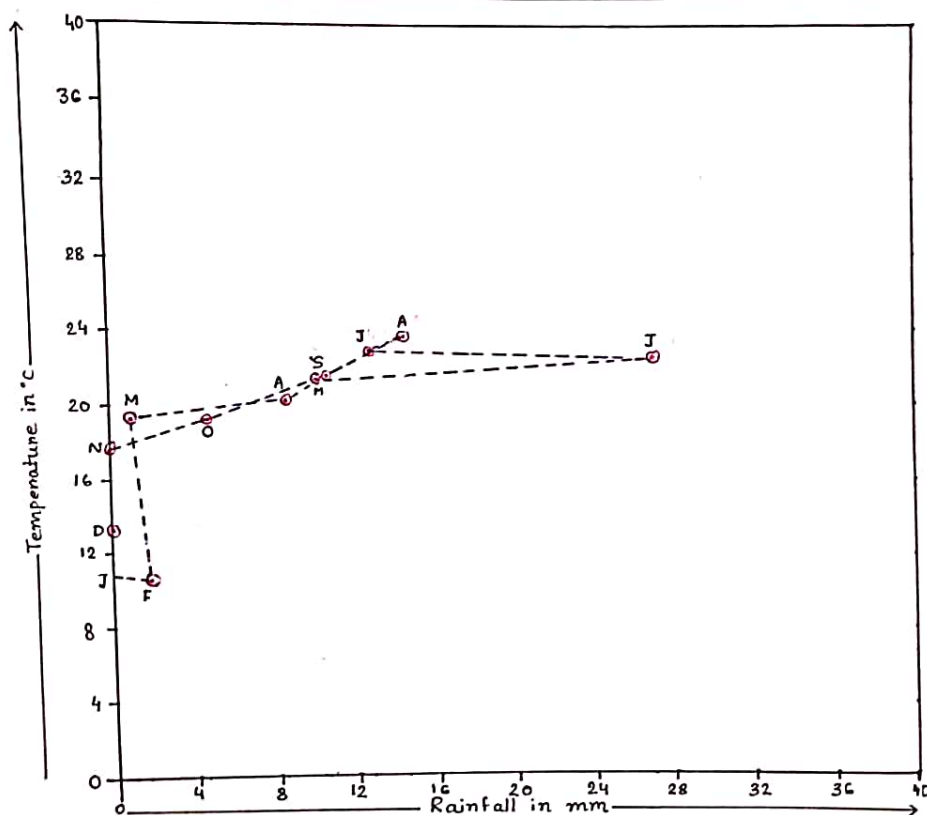
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Source: NASA POWER (www.power.larc.nasa.gov/data-access-viewer/)

HYTHERGRAPH

SHOWING
THE RELATIONSHIP BETWEEN RAINFALL AND TEM-
PERATURE OF KALIMPONG, LAVA 2022

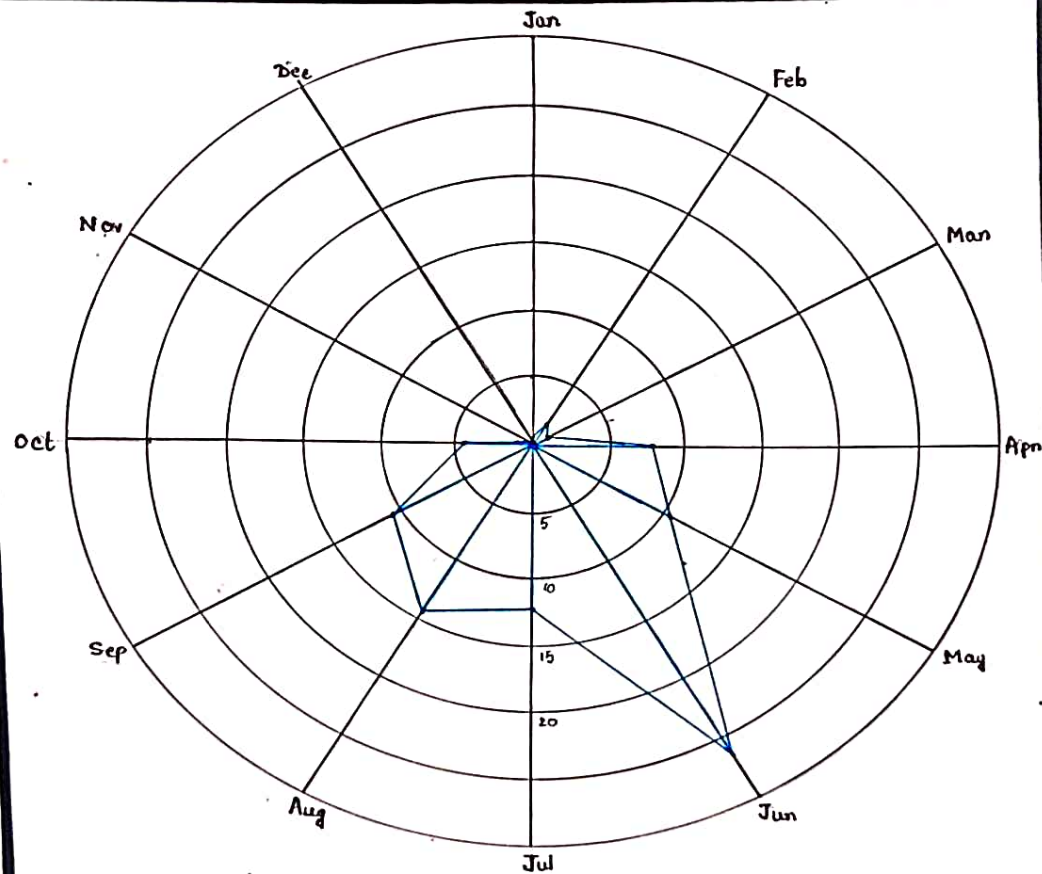


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Barasat Govt. College Centre
Dept. Of Geography, Barasat

Source: NASA POWER (www.power.larc.nasa.gov/data-access/viewer/)

STAR DIAGRAM

SHOWING
DISTRIBUTION OF RAINFALL, LAVA, 2022

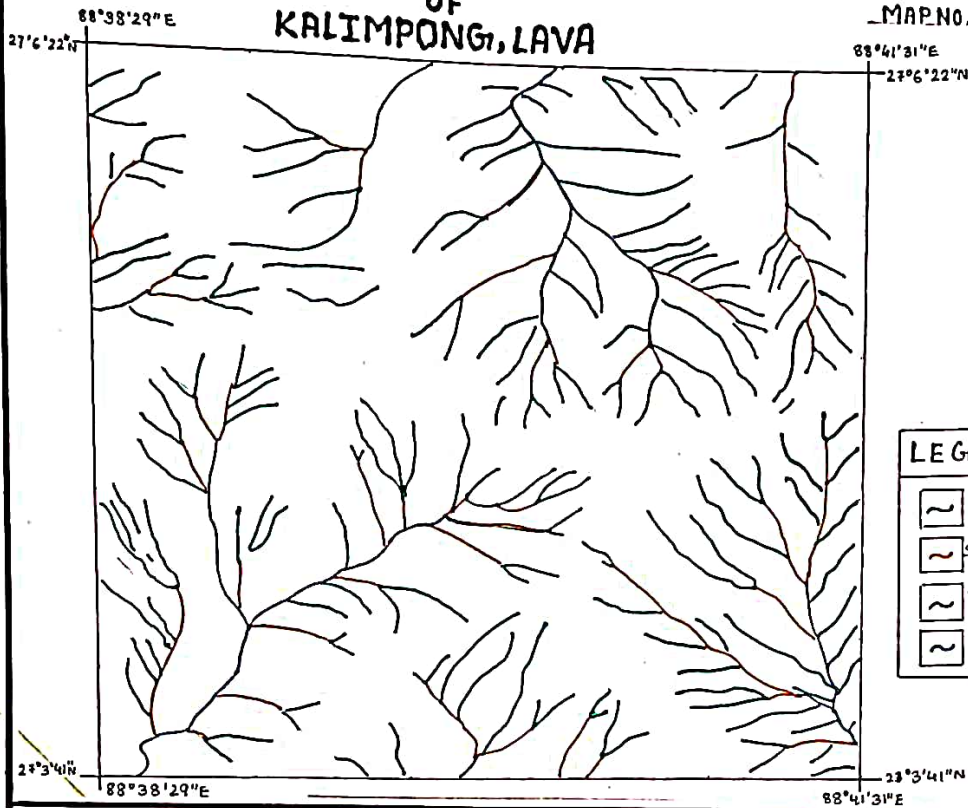


Scale: 1 cm to 5 mm

Source: NASA POWER (www.power.lane.nasa.gov/data-access-viewer/)

DRAINAGE NETWORK OF KALIMPONG, LAVA

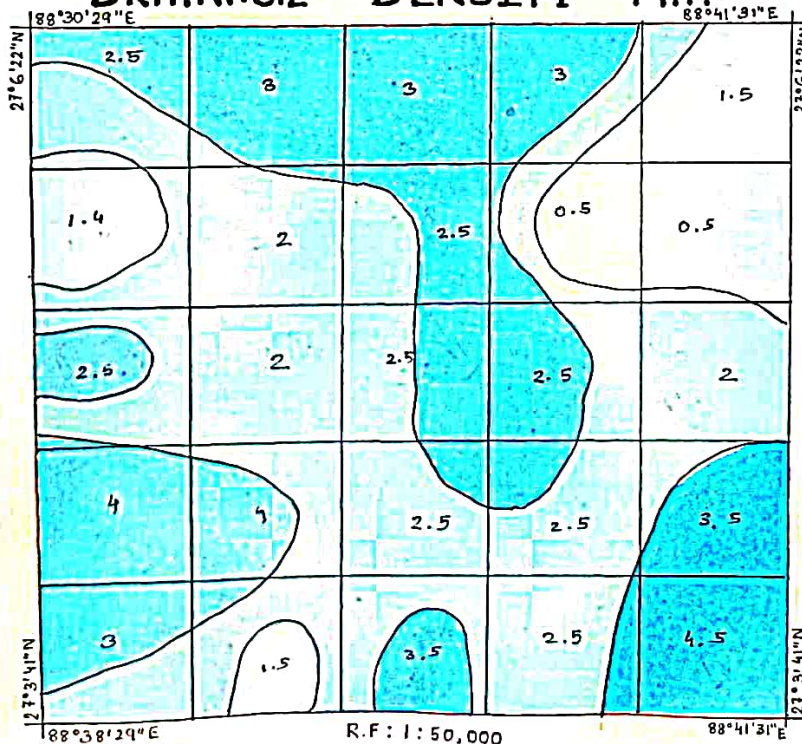
MAP NO. G45E12



LEGEND	
	First Order streams
	Second Order streams
	Third Order streams
	Fourth Order streams

DRAINAGE DENSITY MAP

MAP NO. G45E12



R.F : 1 : 50,000

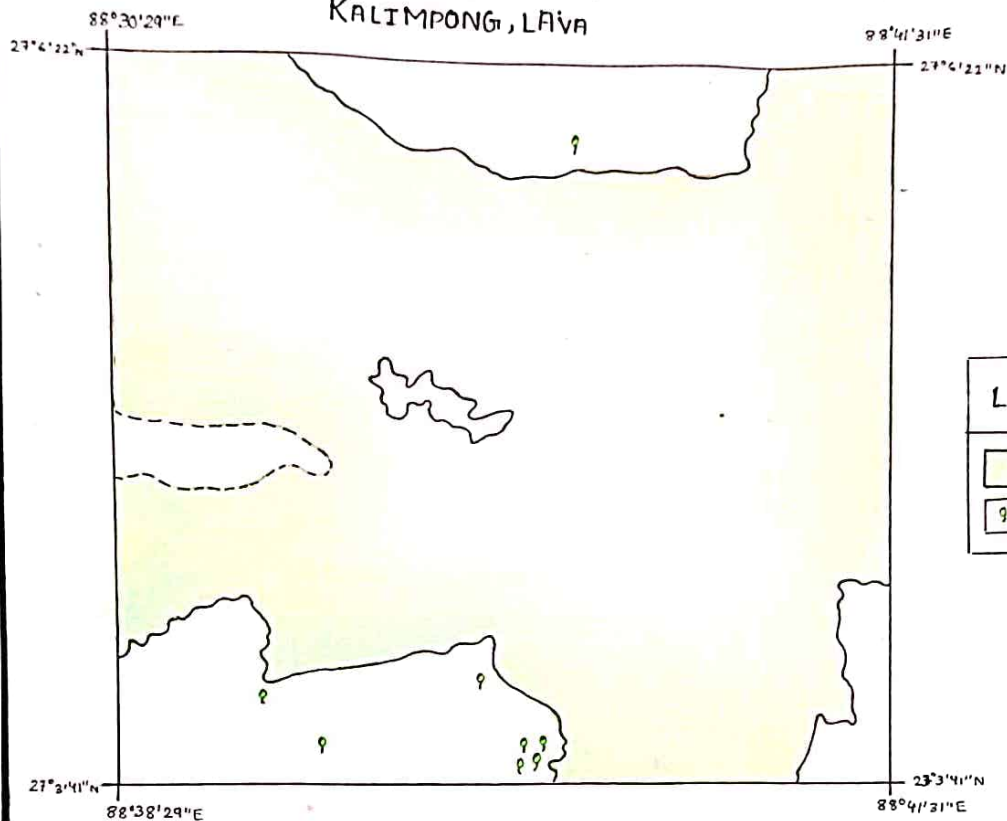
INDEX	
Density km/km ²	
	3.5
	2.5
	1.5

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Source : 501 Toposheet

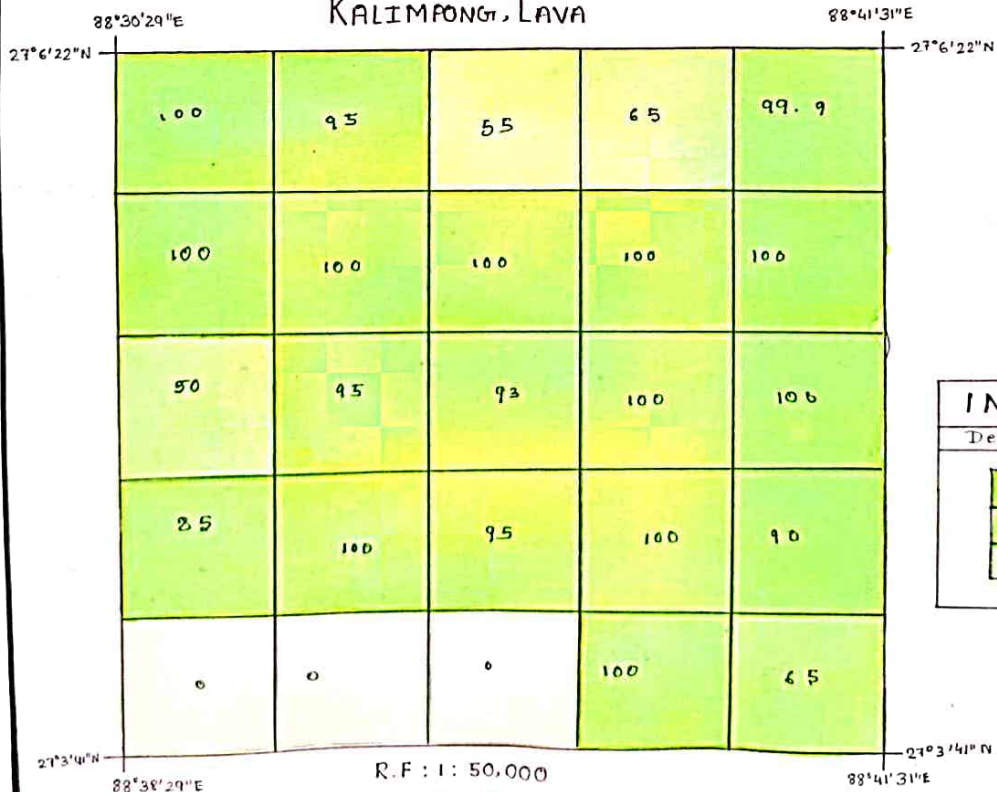
VEGETATION COVER MAP OF KALIMPONG, LAVA

MAP NO. G45E12



VEGETATION PERCENTAGE MAP OF KALIMPONG, LAVA

MAP NO. G45E12



Source : SOI Toposheet

GEOLOGY

Geology of LARA, KALIMpong: LARA and KALIMpong should in the Darjeeling Himalayas of west Bengal India and regions of immense of geological significance. The area provides a unique window into the formation and evolution of the Himalayan mountain range one of the Himalayan mountain is most spectacular and complex orogenic system on Earth.

Geological Setting: The Himalays are the result of the collision between the Indian and Eurasian tectonic plates, which began approximately 50 million years ago.

Rock Types: The geology of LARA, KALIMpong is dominated by metamorphic and igneous rocks. The metamorphic rocks include gneisses, schists and Phyllites which are the results of high pressure and high temperature transformations of ancient sedimentary and igneous rocks.

Structural Geology:

- ① The Darjeeling Shikim Himalayan Frontal Thrust with marks the boundary between the Himalayan mountain range and the Indo-Gangetic plain.
- ② The LARA, KALIMpong shear-zone a major ductile shear zone that accommodated significant crustal shortening during the Himalayan orogeny.
- ③ Fold structures, such as the LARA anticline and the KALIMpong syncline, which reflect the complex tectonic evolution of the region.

RELIEF

LARA, KALIMpong is a small village located at an elevation of 2100 meters, surrounded by virgin alpine forests and offering picturesque view of the nearby valley. The regions relief is characteristc by rolling hills, dense woods and steep slopes.

SOIL

Based on the soil profile studied the soil of LARA in KALIMpong hills are shallow to very deep in depth; dark yellowish brown to brown in colour; sandy loam to sandy clay loam texture; single grain to fine, medium subangular, blocky structure; dry semi hard; moist very friable to friable. west (from wikipedia)

The base soil types are yellow and brown forest soils allof siliceous and aluminous-type. (F

CLIMATE

Climate of Lora Kalimpong: Lora, Kalimpong nestled in the Darjeeling Himalayas of west Bengal, India, experience of unique and diverse climate. The region's geography, elevation and latitude create the microcosm of Himalayan climate zones ranging from subtropical to temperate and alpine.

Location and Geography: Lora, Kalimpong are situated between $26^{\circ}45'$ and $27^{\circ}15'$ north latitude and $88^{\circ}30'$ and $88^{\circ}50'$ east longitude the region's elevation varies from 1000 to 3000 meters above sea level.

Climate classification: The climate of Lora and Kalimpong can be classified into four main types -

- ① Subtropical climate (1000-1500 meters)
- ② Temperate climate (1500-2500 meters)
- ③ Alpine climate (2500-3000 meters)
- ④ Monsoon climate

Seasonal variations: The region experience distinct seasonal variations. ① Spring (March-May) - 20°C , ② Summer (June-August) - 25°C

③ Autumn (September-November) - 15°C , ④ Winter (December-February) - 5°C

Precipitation: Lora Kalimpong receive significant rainfall - ① Monsoon season (70%) ② Winter rainfall ③ Annual Rainfall (2000-3000 mm)

DRAINAGE

Lora, Kalimpong situated in the Darjeeling Himalayas of west Bengal India, possess a complex and fascinating drainage system.

Main Rivers: The drainage system of Lora and Kalimpong is dominated by following rivers:

Teesta River: The Teesta River, originating from the Chokhamee lake in Sikkim, flows through Kalimpong and forms the western boundary of region.

Reli River: The Reli River, rising from the Lora hills flows through the Lora valley and joins the Teesta River.

Lish River: The Lish River, originating from the Neora valley National Park, flows through Kalimpong and merges with the Teesta River.

Tributaries and Streams:

- ① Jalpa River, ② Dalan River, ③ Murde River.

Waterfalls and Rapids:

- ① Lora waterfall, ② Changay waterfalls

NATURAL VEGETATION

Lava, Kalimpong district is rich in flora and fauna with temperate climate that supports agro-horticulture. The vegetation along the route to Lavo in west Bengal India changes from tropical deciduous to wet alpine trees, including fir, pine and birch. The small village of Lavo is surrounded by virgin alpine forest.

Four vegetation types are recognised - (i) Subtropical Mixed Broadleaf forest (ii) lower temperate Evergreen forest, (iii) upper temperate Mixed Broadleaf forest and (iv) Rhododendron forest. The vegetation includes dry mixed forest, wet mixed forest, lauraceous forest, Bak oak forest, High level oak forest, coniferous forest.

upper forest: Includes *Rhododendron* spp, *Tsuga dumosa*, *Larix buccata*, *Holwingia himalaica*.

Rango forest: Includes *Tectona grandis*, *Abludens*, *Terminalia arjuna*, *Terminalia chebula*, *Trema orientalis* Blume, *Vitex heterophylla* Roxb.

FLORA AND FAUNA

Bird: Lavo and the surrounding Neora valley national park are home of many rare birds including the robust throated partridge, salgh, Tragopan, Chimson breasted, wood keeper and darjeeling woodpecker.

Mammals: The area is home to endangered species like the red panda and clouded leopard, as well as the himalayan tahr, himalayan Black Bear, and sambar.

Other animals: Other animals in the area include the king cobra, common cobra, krait, green pit viper, blind snake and many colourful insects.

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Dept. Of Geography, Bafsat

CHAPTER-III



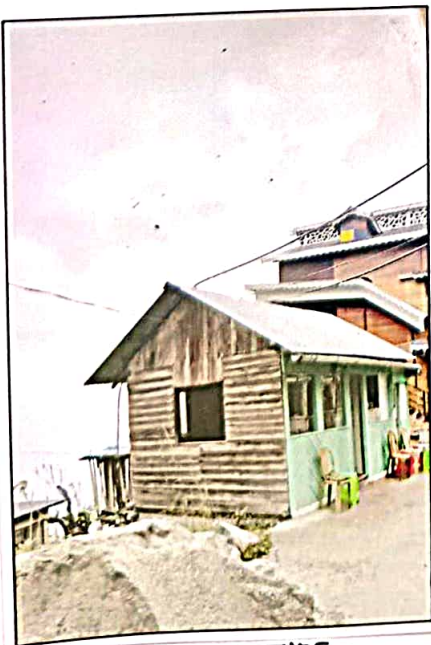
HOUSE TYPE



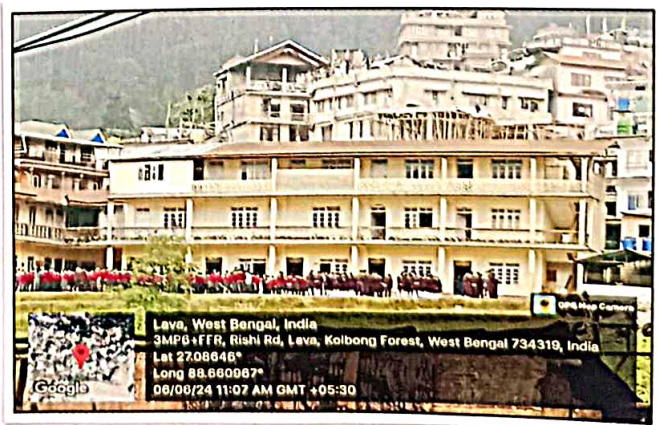
RELIGION



HOUSEHOLD SURVEY



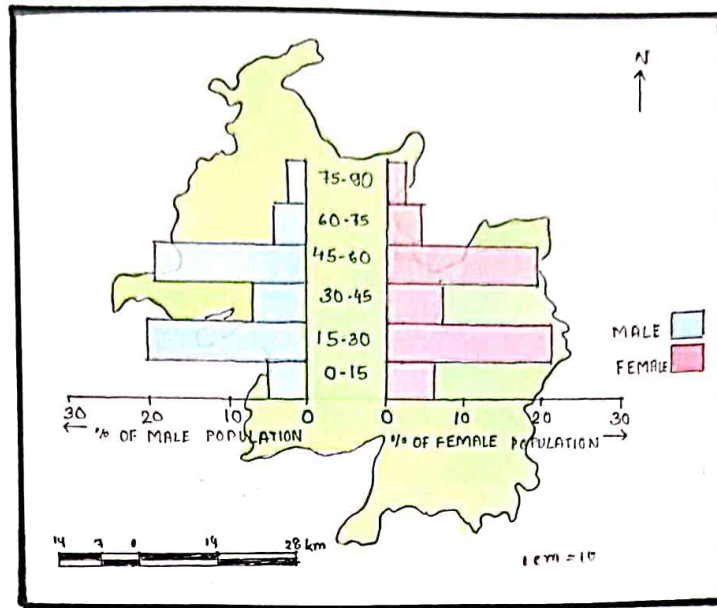
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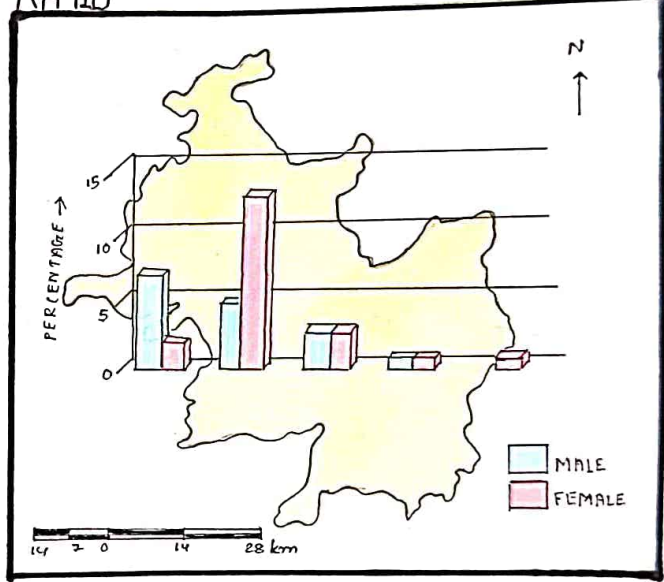
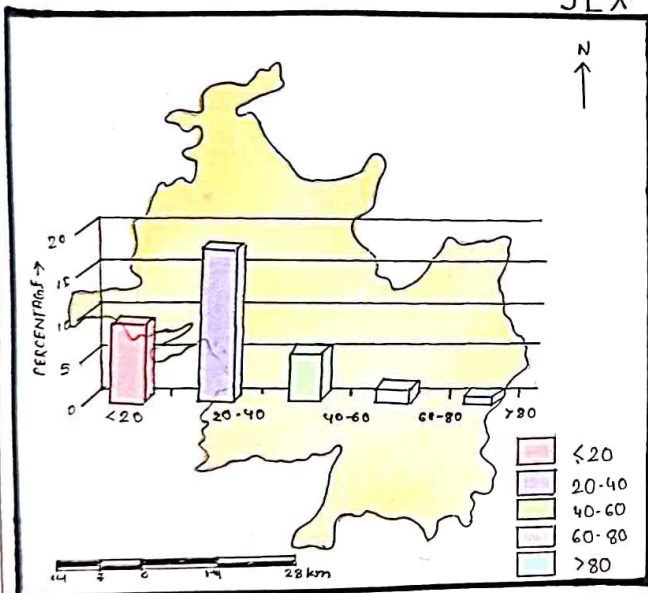
EDUCATION

HOUSEHOLD SURVEY

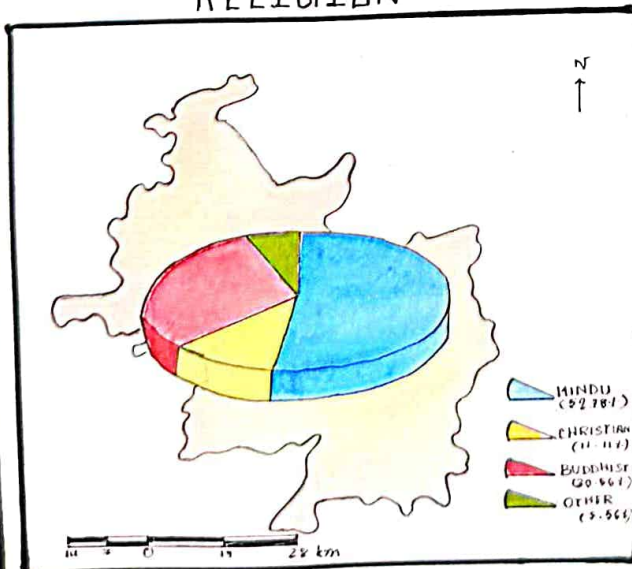
AGE SEX PYRAMID



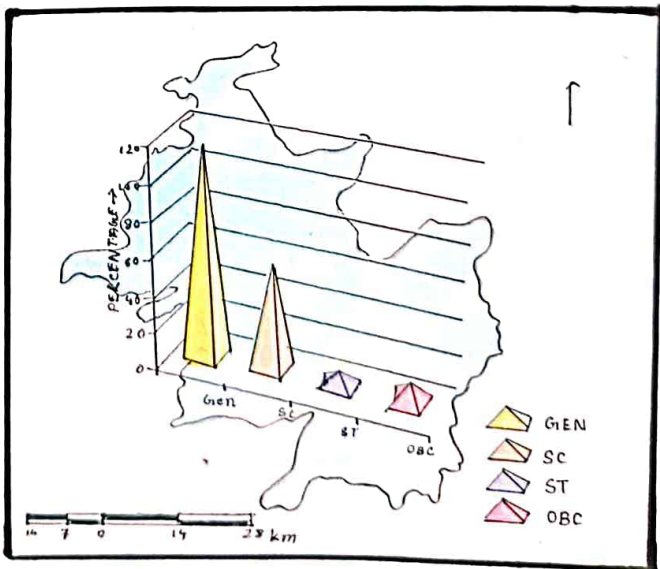
SEX RATIO



RELIGION



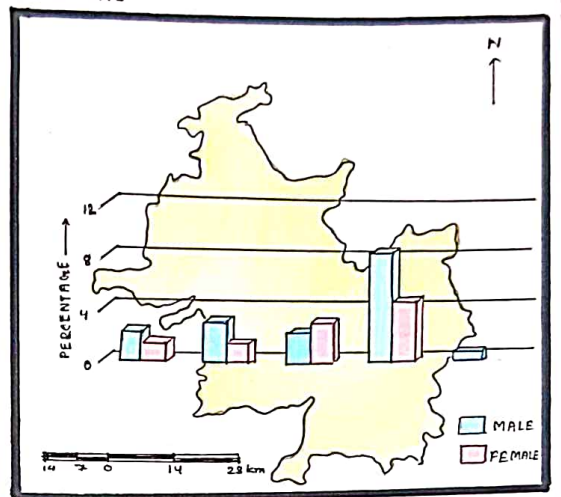
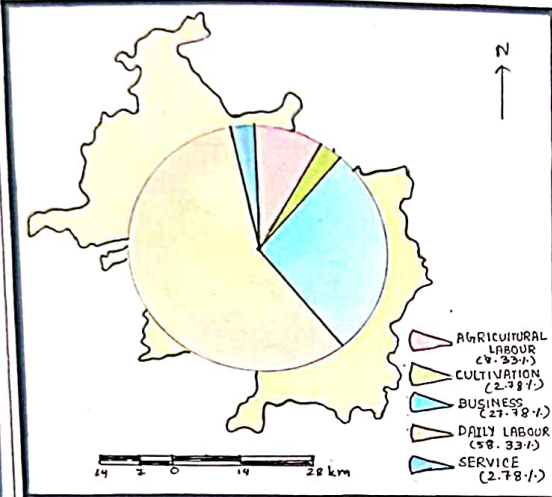
CASTE COMPOSITION



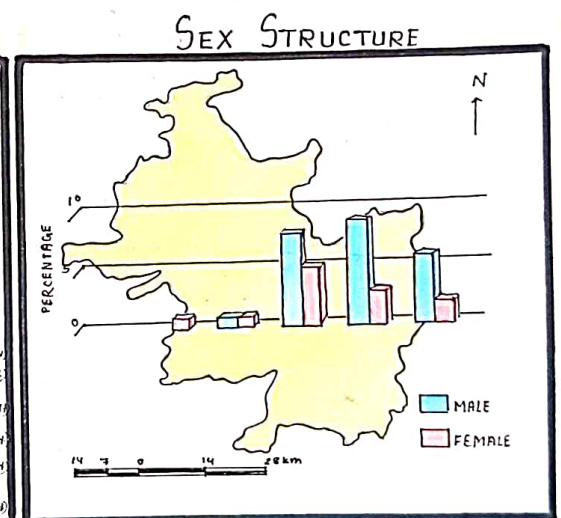
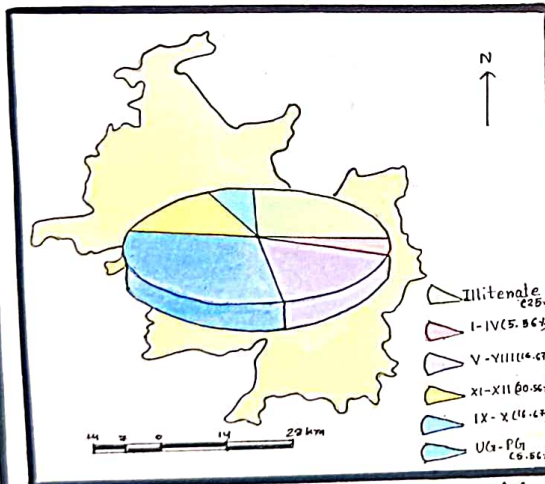
Source: Primary data, 2024

HOUSEHOLD SURVEY

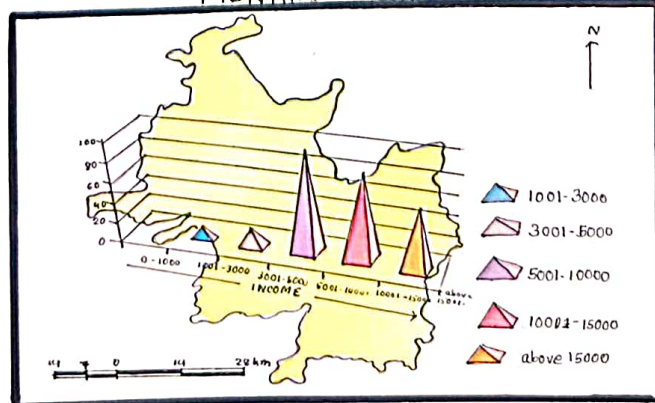
OCCUPATION STRUCTURE



LEVEL OF EDUCATION



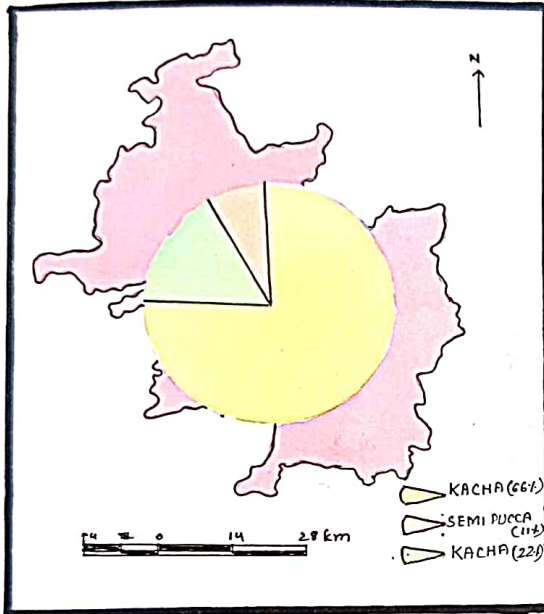
MONTHLY INCOME



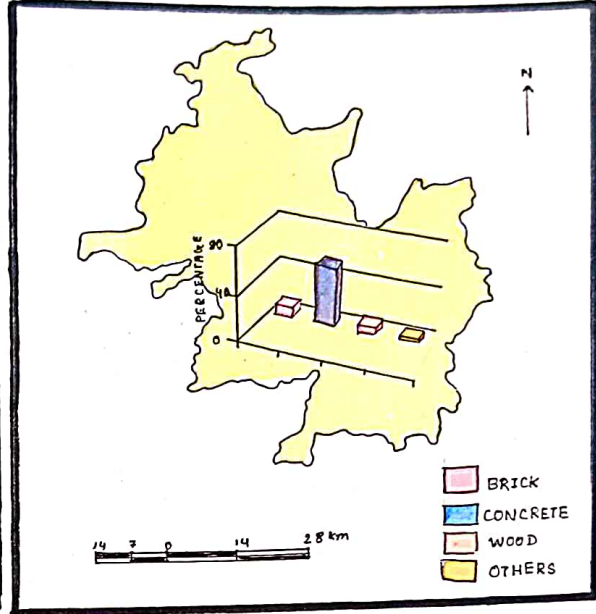
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HOUSEHOLD SURVEY

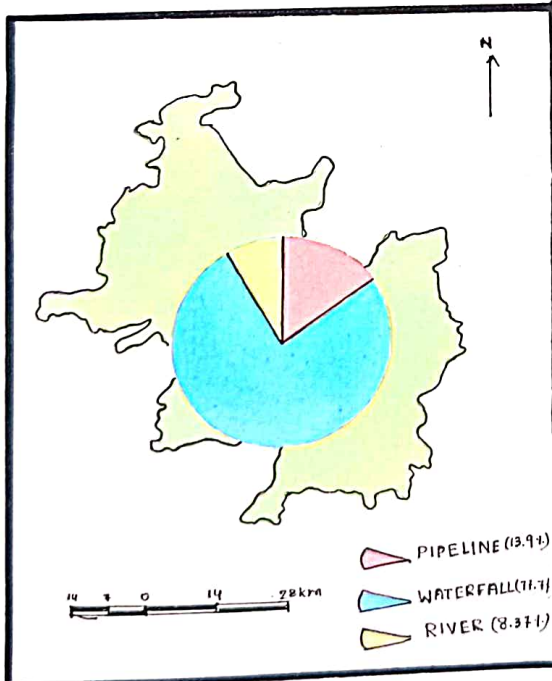
HOUSE TYPE



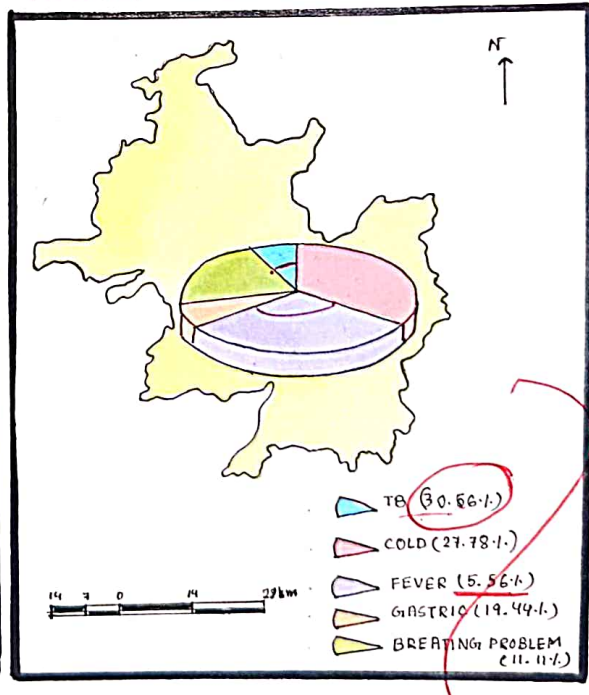
ROOF TYPE



SOURCE OF DRINKING WATER

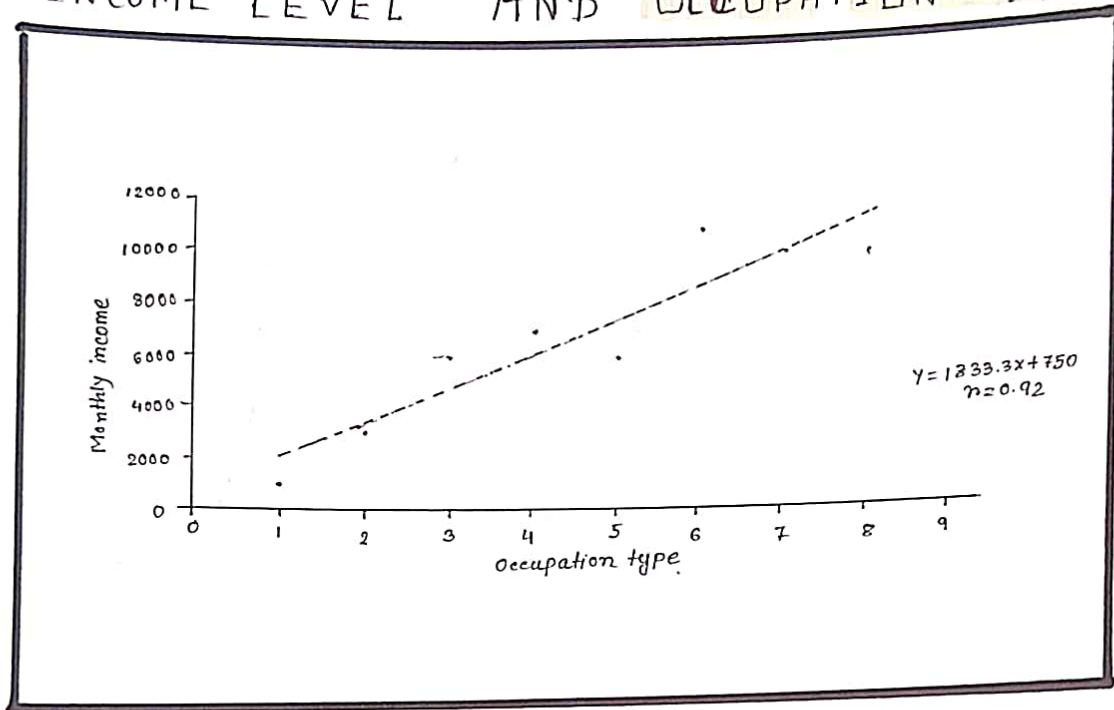


HEALTH CONDITION AND DISEASES

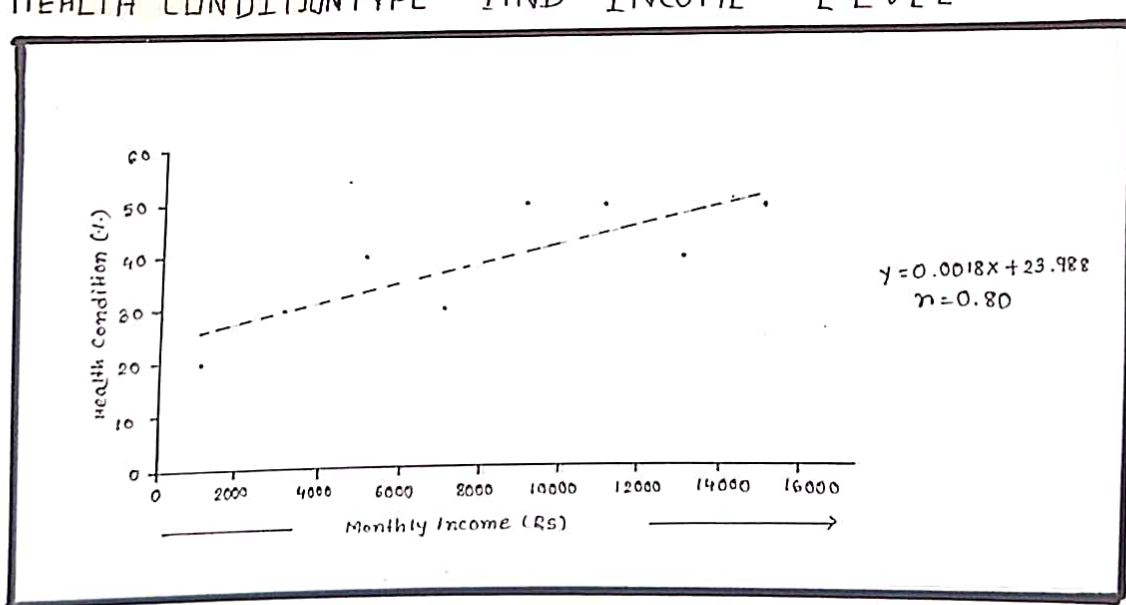


Source : Primary data, 2024

RELATIONSHIP BETWEEN INCOME LEVEL AND OCCUPATION



RELATIONSHIP BETWEEN HEALTH CONDITION TYPE AND INCOME LEVEL



AGE-SEX PYRAMID

The study the socio-economic condition of Lava, Kalimpong, we have surveyed 36 household consisting of 117 population. we found 59 (50.42%) Female and 58 (49.57%) male population. here 0-15 years female and male population percentages is 10% and 8.62%, 15-30 years female and male population percentage is 35% and 34.18%, 30-45 years female and male population is 11.86% and 22.41%, 45-60 years old female and male population is 32.20% and 24.13%, 60-75 years old female and male percentages are 6.77% and 6.78%, another 75-90 year old female and male percentages are 3.38% and 3.44%.

SEX RATIO

According to the 2011 census the sex ratio in Lava Bazar DIF was 49% female and 51% male.

But in the study area >20 population 25%, 20-40 population 50%, 40-60 population 16.66% and 60-80 population are 5.55% and above 80 population percentage are 2.77%.

RELIGION

In Lava village out of total population we surveyed 36 household. Hinduism is 52.78% the majority religion in Lava with 52.78% followers. Buddhist is the second most popular religion with 30.56% and 11.11% of the population belonging to the Christian community. The rest of the religious population is 5.56%.

CASTE COMPOSITION

In Lava Bazar D.I.F village most of the village population is from schedule tribe (ST). Schedule Tribe (ST) constitutes 47.22%. While schedule caste (SC) were 4.68% of total population in Lava Bazar D.I.F village.

In the study area most of population is from General (58%) schedule caste (SC) 92%. Schedule Tribe (ST) were 4% and 6% of the people belong to OBC.

Examined

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Geography, Barasat

OCCUPATION STRUCTURE

In Lara village out of a total population, 1836 were engaged in work activities 42.57%. cultivations, another side 19.37% are agricultural labourer. other worker 37%. Lara is a popular destination for nature lovers and its known for bird watching so there 1.05% are engaged household industries.

But in the study area 8.3% of males and 5.55% of females person are engaged in. Agriculture labourer 11.11% of males and 5.55% of females person are engaged in cultivation, 8.33% of male and 11.11% of female person are Business, 30.55% of males and 16.66% of females person are engaged in Daily labour, at the last 2.77% of males are engaged in service. service.

LEVEL OF EDUCATION

Government pre primary, private pre primary, Govt primary, Govt Middle and Govt Secondary Schools are available in this village. Nearest Govt Disabled School, Govt arts and science Degree college and private MBA college are in Kalimpong. Nearest Govt polytechnic college is in Kurseong. Nearest Govt Engineering college and Govt Medical college are in Siliguri. Nearest Govt senior secondary school is a Algarah. Nearest Govt ITI college is in Tunga. Another side Lara higher secondary school was established in the year 1985. It is located in the Kalimpong Algarah Block-II of the Kalimpong District of west Bengal.

MONTHLY INCOME

In Lara Bazar D.I. Village out total population 639 were engaged in work activities 71.36%. of worker describe their work as main work (Employment of Earning more than 6 months) while 28.64% were involved in Marginal activity providing livelihood for less than 6 months of 639 workers engaged in main work, 3 were cultivators (owner or co-owner) while 1 were agricultural labourer.

But in the study area 2.77% of male person are engaged income level 3001-5000 percentage is 22.22% of males and 13.88% of female person are engaged income level 5001-10000, 25% of males and 8.33% of female person are engaged income level 10001-15000 16.66% of males and 5.55% of females person are engaged income level above 15000.

HOUSE TYPE

In the area, house type household to household. Roofs, wall are also varied in this area. Three type of houses exist in this area such as pucca houses, kacha and semi pucca houses. The maximum percentage of the house is kacha (66%) that is made by that is made of wood. 16% of the houses are pucca which is made of brick, stone and concrete 8% of houses are semi-pucca. Most of the houses in Laxa have pored floors, which are made of sand, stone and cement. The clay floor is seen also here. The walls of the houses could be made of chitra, ekra with mud plaster, ekra with cement plaster, wooden planks, stone bricks etc, while the roof could be made of plastic sheet, bambo, drum sheet, wooden planks Gal sheet, Ree etc.

SOURCE OF DRINKING WATER

The main source of drinking water in Laxa, is main source of is the Neera River. The district of Kalimpong West Bengal also has many sources of drinking water. There are many perennial spring in the district with discharge ranging from 0.60 to 8.33 liters per second. The discharge of spring increases by 50-70% during the monsoon season. In the study area every families source of drinking water is spring water with pipeline system.

Examined

Barakat Govt. College Centre
Dept. Of Geography, Kharasat

RELATIONSHIP BETWEEN OCCUPATIONAL TYPE AND INCOME LEVEL

The relationship between occupational type and income level is positively correlated ($r = 0.92$) and it is significant at 5% level with 7 degrees of freedom (calculated 't' value 2.77 and tabulated 't' value 2.36). The income level of respondents in higher occupations is higher. Therefore income level depends on higher occupation.

RELATIONSHIP BETWEEN INCOME LEVEL AND HEALTH CONDITION

The relationship between income level and health condition is positively correlated ($r = 0.80$) and significant at the 5% level with 7 degrees of freedom (calculated 't' value 2.98 and tabulated 't' value 2.36). Respondents in the higher income group consume adequate nutritious food and are aware of their health status. Therefore their health improves when income increases.



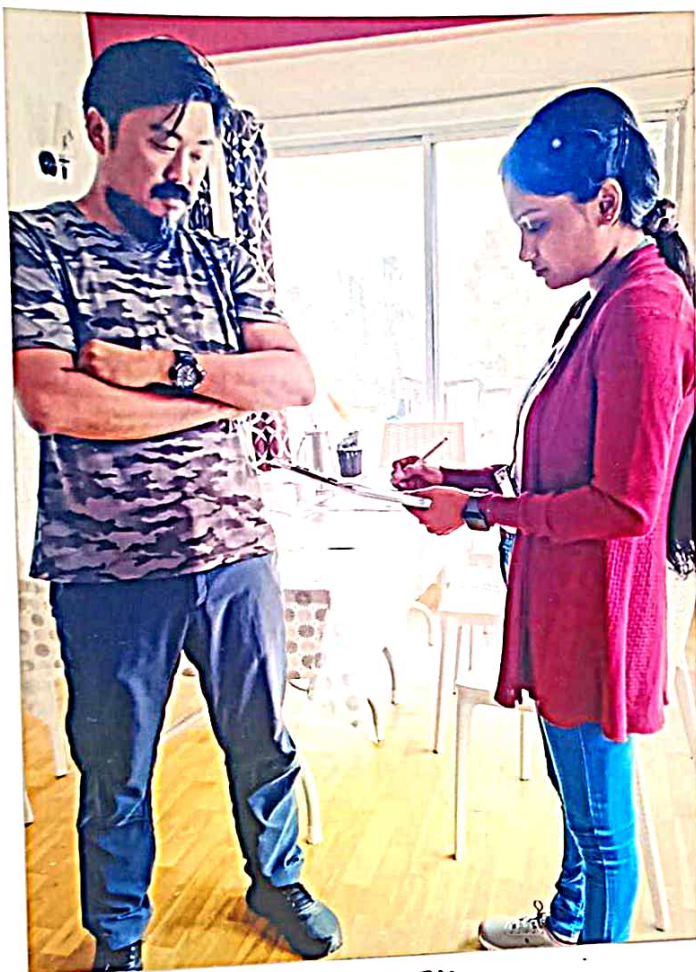
MARKET SURVEY



Examined
 Barisal Govt. College Centre
 Dept. of Geography, Barisal.



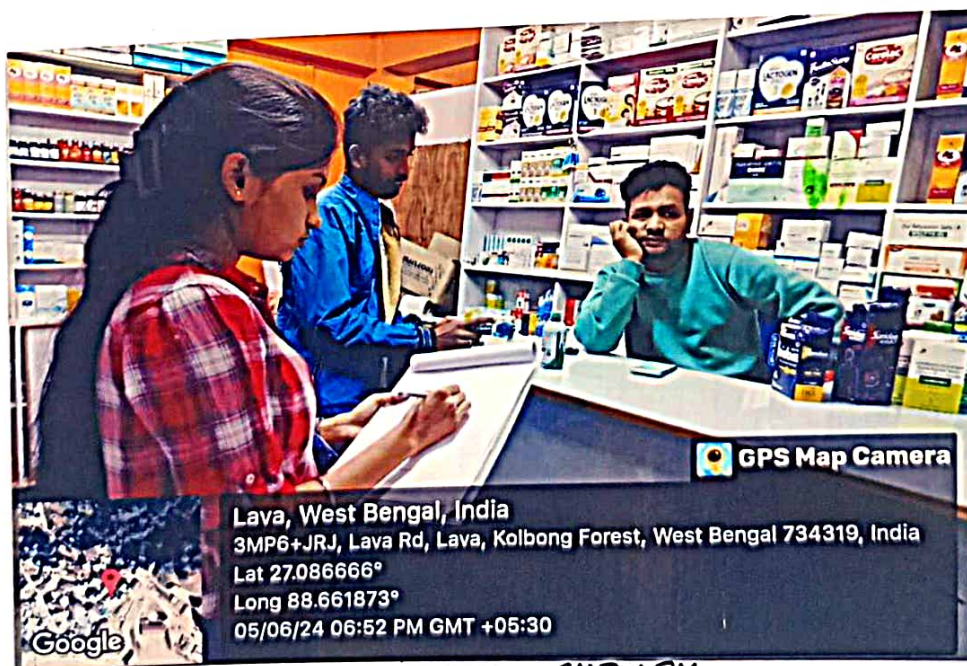
CHAPTER-IV



HOTEL SURVEY



HOTEL



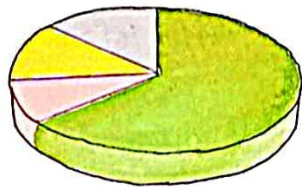
Lava, West Bengal, India
3MP6+JRJ, Lava Rd, Lava, Kolbong Forest, West Bengal 734319, India
Lat 27.086666°
Long 88.661873°
05/06/24 06:52 PM GMT +05:30

Google

MARKET SURVEY

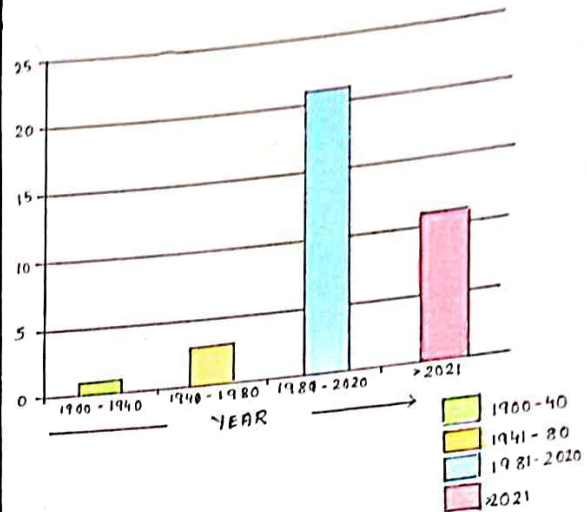
MARKET SURVEY

ORIGIN OF GOODS



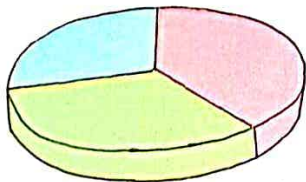
SILIGURI (66%)
 NEPAL (8.3%)
 BHUTAN (8.3%)
 KALIMPONG (13.9%)

YEAR OF ESTABLISHMENT OF SHOP



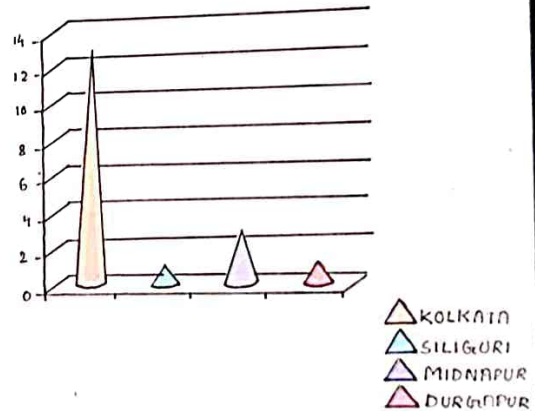
HOTEL SURVEY

ROOM PRICE

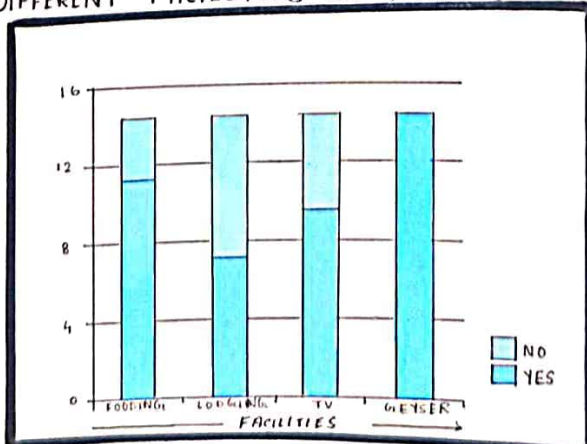


900-1200 (38.9%)
 1300-1600 (33.2%)
 1700-2000 (27.8%)

ORIGIN OF THE TOURIST



DIFFERENT FACILITIES OF HOTELS



Source: Primary data, 2024

ORIGIN OF GOODS

Shopkeepers have informed us that they bring their goods mainly from Siliguri 55.6%, Kalimpong 13.9%, Bhutan 8.3%, Nepal 8.3%. But they have some other source like local agencies. Essential commodities are mainly brought from Malbazar and local agencies also support it.

ESTABLISHMENT OF SHOP

We have been informed during market survey, among the shops 1981-2020 years under 58.3% and 1941-1980 years under 8.3%. Other shops 1900-1940 years under 2.8% establish the shop.

ROOM PRICE

Hotels in LARA are charged per night 900-1200 Rs are taken in about 7 hotels, the percentage of the 38.7% more than that 1300-1600 Rs. are charge in about 5 hotel with a percentage of 33.3% and less than nearly 5 hotels charges Rs 1700-2000 per night, with a percentage of 25.40%.

ORIGIN OF GOOD

About 13 families to from Calcutta visit LARA every year for sight-seeing and 72.2% from and about families from Medinipur with percentage 16.6% and about 1 each from Siliguri and Durgapur with 5.64%.

DIFFERENT FACILITIES OF HOTELS

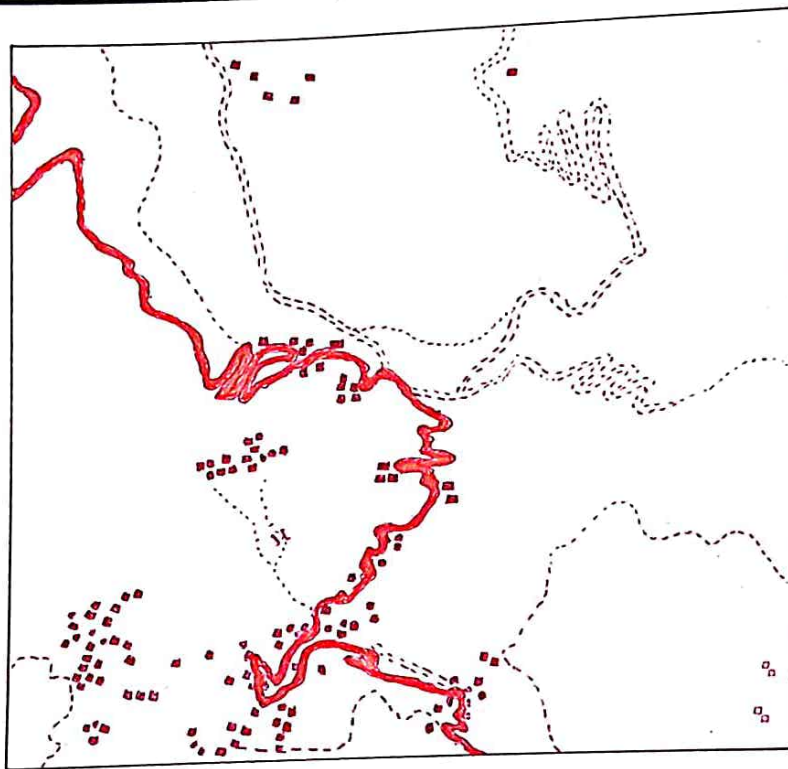
Almost all LARA hotels have different facilities some hotels have it and some hotels don't. All type of food are available in 14 hotels and not available in 4 hotels, which are 77.8% and 22.2% respectively.

Lodging: Lodging arrangements are available in 7 hotels are not in 7 hotels. In hotels their percentage in 50% and 50%.

TV: 12 hotels have TV facility and 6 hotels do not their percentage in 66.71% and 33.3%.

Geysers: Geysers are available in all hotels. Because, LARA is very sensitive to cold climate. That means 18 hotels have Geysers base their percentage in 100%.

TRANSPORT & COMMUNICATION



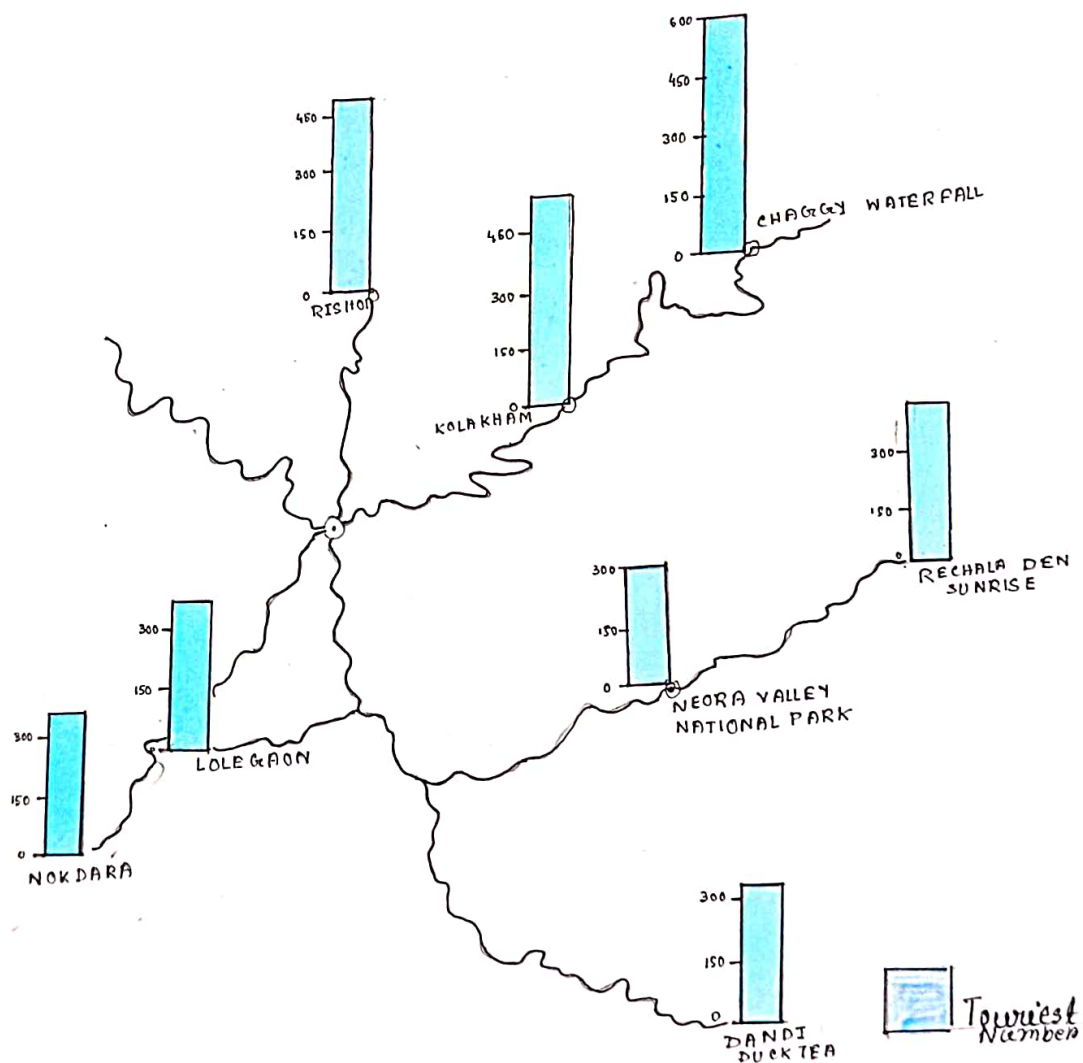
R.F: 1:50,000

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|  | METALLED ROAD |
|  | UNMETALLED ROAD |
|  | FOOT PATH |
|  | PERMANENT SETTLEMENT |
|  | TEMPORARY SETTLEMENT |

Source: SOI Toposheet

TOURIST INFLOW FROM LAVA



NOT TO SCALE

Source: Tourist Information centre

TOURIST ATTRACTIONS IN LAVA, KALIMPONG, WEST BENGAL

Various tourist interest places attract the tourists in lava. These are-

1. **Chaggy Waterfall**: Located about 6 km from lava, Chaggy waterfall is a breathtaking natural wonder that attracts tourists from all over. The waterfall cascades down a rocky slope creating a misty veil that surrounds the area. The trek to the waterfall is an adventure in itself, taking you through dense forests and picturesque villages. March to September is the best time to visit this place.
2. **Rishop**: Rishop is a picturesque village located about 8 km from lava. Perched on a hilltop, Rishop offers panoramic views of the Himalayas, including the majestic Kanchenjunga peak. The village is surrounded by dense forests, and the air is filled with the sweet scent of rhododendrons. Rishop is an ideal destination for nature lovers and those seeking a peaceful retreat. October to December and February to April are the best time to visit this area.
3. **Neora Valley National Park**: Neora valley National Park is a protected area located near lava, covering an area of 88 km². The park is home to a diverse range of flora and fauna, including the endangered red panda, golden cat etc. The park offers trekking trails, birdwatching, and wildlife spotting opportunities. October to December and February to April are the best season to visit this area.
4. **Kolakham**: Kolakham is a scenic hamlet located about 8 km from lava. Perched on a hilltop, Kolakham offers breathtaking views of the surrounding mountains and valleys. Kolakham is an ideal destination for nature lovers and those seeking a peaceful retreat. October to December and February to April are the best time to visit.
5. **Lolegaon**: Lolegaon also known as Kaffen, is a tranquil destination located about 24 km from lava. The village is famous for its canopy walk which offers a bird's eye view of the forest. Lolegaon is surrounded by dense forests. October to December and February to April are the best time to visit.

Nok Dara: Nok dara is a scenic viewpoint located near Lara. The viewpoint offers stunning views of the surrounding landscape, including the majestic Himalayas. Nok Dara is an ideal destination for nature lovers and photography enthusiasts. October to December and February to April are the best time to visit.

Dandi Duck Tea: Dandi Duck Tea is a unique tea garden located near Lara. The tea garden offers tea tastings and tours, when visitors can learn about tea production and indulge in the local flavours.

Rechela Pea Sunrise Point: Rechela pea sunrise point is a breathtaking viewpoint located near Lara. The viewpoint offers stunning sunrise views amidst serene surroundings. Rechela pea sunrise point is an ideal destination for nature lovers and photography enthusiasts. October to December and February to April are the best season to visit.

PROBLEMS OF TOURISM IN LAVA

Tourism in Lava, a serene hill station in Kalimpong, West Bengal has grown significantly due to its picturesque landscape, proximity to Neora Valley National Park, and peaceful ambience.

1. Environmental Degradation:

Deforestation: Increased construction of hotels and resorts leads to deforestation, affecting the biodiversity in and around Lava.

Waste management issues: Improper disposal of plastic and non-biodegradable waste by tourists affect the natural beauty and ecology.

Pressure on Resources: Overuse of natural resources like water and firewood creates environmental stress.

2. Overcrowding:

Peak season Rush: During peak tourist seasons, the small town becomes overcrowding, reducing its charm and causing inconvenience to local and visitors.

Traffic Congestion: The narrow roads in Lava struggle to accommodate the growing number of vehicles, especially during holidays.

3. Disturbance to wildlife:

Proximity to Neora Valley National Park makes Lava a sensitive zone. Noise, littering and human interference disturb wildlife threatening endangered species like the red panda.

POSSIBLE SOLUTIONS

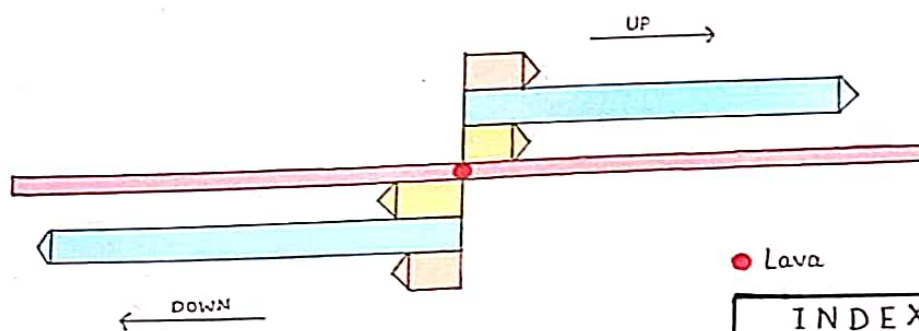
Sustainable Tourism practices: Promote eco-friendly tourism such as banning plastic and encouraging.

Improved waste management: Set up proper waste disposal and recycling systems.

Wildlife Protection Measures: Upgrade roads, parking spaces, and basic amenities while maintaining

Community Involvement: Implement strict regulations to minimize the impact on the Neora Valley ecosystem.

TRAFFIC FLOW DIAGRAM OF LAVA



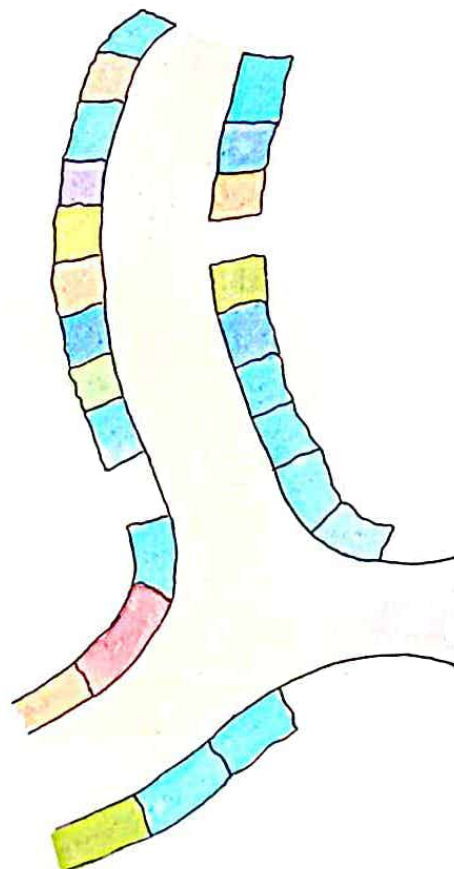
● Lava

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	MOTORCYCLE
	CAR (4W)
	BUS/LORRY

SCALE 1 CM $\approx$ 10 VEHICLES

MARKET MORPHOLOGY



LEGEND

- | | |
|-------------|------------|
| Cyan | GARMENT |
| Orange | GIFT HOUSE |
| Purple | FAST FOOD |
| Yellow | SWEET |
| Light Green | VEGETABLE |
| Pink | MEDICINE |
| Light Blue | GROCERY |
| Dark Blue | STATIONERY |

NOT TO SCALE

SOURCE: PRIMARY SURVEY 2024

Source: Primary data 2024

CHAPTER-V

CONCLUSION

Our study area Lava is a small village in Kalimpong district, India. It is known for its natural view. This village is located in Kalimpong region which enhances the significance of this village. It is also a popular destination for bird watchers and butterflies. Because of cold climate in the town and nearby areas, it is a perfect destination for tourists during summer season.

- (i) There is only one school in the area.
- (ii) As the university is far away they get admission in Siliguri university.
- (iii) Disasters are more common.
- (iv) Plastic usage is comparatively high.

MAJOR FINDINGS

The major findings of the study area are -

- (1) Our study area Lava, in Kalimpong district, India. It is the part of the Kalimpong District. It has an average Elevation of 2200 m (7200) ft.
- (2) The climate of Lava is temperate due to its location in the Kalimpong. The average temperature is 17 and Rainfall is 5%.

APPENDIX

HOUSEHOLD SURVEY

AGE- SEX PYRAMID						
AGE	MALE		FEMALE		TOTAL	
	AB NO	%	AB NO.	%	ABNO	%
0-15	5	8.62%	6	10%	11	9.40%
15-30	20	34.48%	21	35%	41	35.04%
30-45	13	22.41%	7	12.86%	20	17.09%
45-60	14	24.13%	19	32.20%	33	28.46%
60-75	4	6.71%	4	6.77%	8	3.91%
75-90	2	3.44%	2	3.38%	2	1.71%
TOTAL	58	49.57%	59	50.21%	117	100%

SI NO	SEX RATIO	SEX RATIO	
		TOTAL (n=36)	PERCENTAGE (%)
1	<20	9	25%
2	20-40	18	50%
3	40-60	6	16.66%
4	60-80	2	5.55%
5	>80	1	2.77%
TOTAL		36	100%

SI NO	SEX RATIO				
1	SEX RATIO	Male	%	Female	%
2	<20	7	19.44	2	5.55
3	20-40	5	13.88	13	36.11
4	40-60	3	8.33	3	8.33
5	60-80	1	2.77	1	2.77
6	>80	0	0	1	2.77
TOTAL		16	44.42	20	55.53

RELIGION			
SI NO	Religion	Total (n=36)	%
1	Hindu	19	52.78%
2	Christian	4	11.11%
3	Buddhist	11	30.56%
4	Other	2	5.56%

CASTE COMPOSITION			
SI NO	Caste	Total (n=36)	%
1	Men	22	61.11%
2	SC	10	27.78%
3	ST	2	5.56%
4	OBC	3	8.33%

LEVEL OF MONTHLY INCOME			
SI NO	Income (2/Month)	Total (n=36)	%
1	0-1000	0	0%
2	1001-3000	1	2.78%
3	3001-5000	2	5.56%
4	5001-10000	13	36.11%
5	10001-150000	12	33.33%
6	above 150000	8	22.22%

OCCUPATION			
SI NO	Occupation	Total (n=36)	Total (%)
1	Agricultural	3	8.33%
2	Cultivation	1	2.78%
3	Business	10	27.78%
4	Daily labour	21	58.33%
5	Service	1	2.78%
TOTAL		36	100%

HOUSE TYPE			
SI NO	House Type	Total (n=36)	Total (%)
1	Kaacha	24	66.66%
2	Semi-pucca	8	22.22%
3	Pucca	4	11.11%

MONTHLY INCOME (SEX STRUCTURE)					
SI NO	Total Income	Male	%	Female	%
1	0-1000	0	0%	0	0%
2	10001-3000	0	0%	1	2.77%
3	3001-5000	1	2.77%	1	2.77%
4	5001-10000	8	22.22%	5	13.89%
5	10001-15000	9	25%	3	8.33%
6	above 150000	6	16.66%	2	5.55%

LEVEL OF EDUCATION			
SI NO	Education	Total (n=36)	%
1	Literate	9	25%
2	I-V	2	5.56%
3	V-VIII	6	16.67%
4	IX-X	11	30.56%
5	XI-XII	6	16.67%
6	Un-Ed	2	5.56%

ROOF TYPE			
SI NO	Roof type	Total (n=36)	%
1	Brick	5	13.89%
2	Concrete	24	66.67%
3	Wood	4	11.11%
4	Other	3	8.33%

SOURCE OF DRINKING WATER		
Source	Total	Percentage
Pipeline	5	13.9%
Waterfall	28	77.7%
River	3	8.33%
Others	0	0%

HEALTH CONDITION AND DISEASES			
SI NO	Disease	total (n=36)	%
1	cold/cough	11	30.56%
2	Fever	10	27.78%
3	Gastric	2	5.56%
4	Breathing Problem	7	19.44%
5	r.B	2	5.56%
6	Other	4	11.11%

MARKET & TOURISM INDUSTRY

ORIGIN OF GOODS		
Source	Total	%
Siliguri	25	69.6%
Bhuban	3	8.3%
Nepal	3	8.3%
KALIMPONG	5	13.9%

ESTABLISHMENT OF SHOP		
1900-1940	1	2.8%
1941-1980	3	8.3%
1981-2020	21	58.3%
> 2021	11	30.6%

ROOM PRICE		
900-1200	7	38.9%
1300-1600	6	33.3%
1700-2000	5	27.8%

ORIGIN OF THE TOURIST		
Kolkata	13	72.2%
Siliguri	1	5.6%
Midnapur	3	16.6%
Durgapur	1	5.6%

DIFFERENT FACILITIES OF HOTEL				
	Facility of hotel			
	Yes	%	No	%
Fooding	41	77.8%	4	22.2%
Lodging	9	50%	9	50%
TV	12	66.7%	6	33.3%
GREYER	18	100%	0	0%

CLIMATE DATA

CLIMOGRAPH				
Months	Wet Bulb temperature (°C)	Scale 10m = 10	Relative humidity (%)	Scale 10m = 10
Jan	8.53	-85	76.12	7.6
Feb	8.1	-81	72.44	7.2
Mar	13.89	-13	54.44	5.4
Apr	16.76	-16	68.56	6.8
May	19.49	-19	82.5	8.2
Jun	21.49	-21	91.39	9.1
Jul	22.24	-22	90.94	9.0
Aug	22.27	-22	91.12	9.1
Sep	21.13	-21	92.06	9.2
Oct	17.19	-17	83.56	8.3
Nov	14.21	-14	80.12	8.0
Dec	11.12	-11	77.19	7.7

HYTHROGRAPH				
Month	Temperature (°C)	Scale	Rainfall	Scale
Jan	10.84	2.71	0.25	0.05
Feb	10.77	2.6	1.64	0.41
Mar	19.64	4.8	1.19	0.29
Apr	20.17	5.04	2.23	0.55
May	21.28	5.32	10.35	2.58
Jun	22.37	5.59	26.96	6.74
July	23.15	5.78	12.74	3.18
Aug	23.16	5.79	14.46	3.6
Sep	21.92	5.48	10.37	2.5
Oct	19.59	4.89	4.55	1.1
Nov	16.15	4.04	0.62	0.15
Dec	13.26	3.3	0.04	0.01

REFERENCES

1. Atlas of India
2. Climate data from NASA POWER (www.power.larc.nasa.gov/data-access-viewer)
3. District Survey Report (2022)
4. Tourist information Centre Laro, 2023
5. [en.wikipedia.org/wiki/kalimpong](https://en.wikipedia.org/wiki/Kalimpong).

Household survey questionnaire

1. Name of the respondent:
2. Age:
3. Sex:
4. Caste:
5. Religion:
6. Language:
7. Village name:
8. Panchayat name/Municipality name:
9. Block Name:
10. Migrated: yes/no
11. If yes, origin:
12. Reason for migration:

13. Demographic structure of the household:

Sl no.	Name	Sex	Age	Literacy	Marital Status	Occupation	Main/Marginal
1.							
2.							
3.							
4.							

14. Life expectancy (last 5 years):

Age group	Number of Deaths	Sex	Cause of death
0-6 yrs			
7-15 yrs			
16-59 yrs			
60 yrs and above			

15. Educational institution:

Type of educational institution	Distance	Road type	Mode of transport	Completed up to	Drinking water	Toilet	Electricity	MDM	Classroom condition	No of teachers	Medium of study
Anganwadi											
Primary											
Upper Primary											
Secondary											
H.S.											
College											
Other											

16. Health & Nutrition:

Age group	Number of meals/day (Time)	Main components of diet (quantity)	Cost	Fuel type	Source of fuel	Cost of fuel/day	Source of drinking water (Distance)	Water treatment if any	Sanitation type (community/personal/none)
0-6 yrs									
7-15 yrs (M)									
7-15 yrs (F)									
16-59 yrs. (M)									
16-59 yrs. (F)									
60 yrs and above									

17. Maternal health:

Sl No.	Age of marriage	Age at first pregnancy	Number of children	Age of second pregnancy	Institutional delivery	Other health care	Govt. assistance

18. Economic Condition:

Income	Expenditure	Savings	Land holding (Agricultural)	Land holding (Non-Agricultural)	Financial institution (name)	Distance

19. Occupational details:

Type of crop	Production of crop	Tools required	Other infrastructure	Expenditure	Market price	Distance	Other occupational activities

[illegible][illegible][illegible]

23. Role of local administration:

Surveyed by

Respondents signature

Examined
Mun

30.01.25

Examined
Barasat Govt. College Centre
Dept. of Geography, Barasat.